Estonia

Sustainable Biomass Program (SBP)

Revised Regional Risk Assessment for Estonia

Version 2.0

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

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Abbreviations

BISE	Biodiversity Information System for Europe
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DDS	Due diligence system
EAKL	Eesti Ametiühingute Keskliit (Estonian Trade Union Confederation)
EELIS	Eesti Looduse Infosüsteem (Estonian Nature Information System)
EIA	Environmental impact assessment
ELRA	European Land Registry Association
ELF	Eestimaa Looduse Fond (Estonian Fund for Nature)
EMA	Eesti Metsatöötajate Ametiühing (Estonian Forestry Workers' Union)
ENGO	Environmental non-governmental organisation
ETCB	Estonian Tax and Customs Board
ETUI	European Trade Union Institute
EU	European Union
EUR	Euro
EUTR	European Union Timber Regulation
FM	Forest management
FMU	Forest management unit
FSC	Forest Stewardship Council
GDP	Gross domestic product
GIS	Geographical information system
GM	Genetically modified
GMO	Genetically modified organism
HCV	High conservation value
HWP	Harvested wood products
ID	Identity
ILO	International Labour Organisation
IPM	Integrated pest management
KESE	Keskkonnaseire Infosüsteem (Environmental Monitoring Information System)
LIFE	L'Instrument Financier pour l'Environnement (The Financial Instrument for the Environment)
LULUCF	Land use, land change and forestry
NECP	National energy and climate plan
NFI	National forest inventory
NGO	Non-governmental organisation
OHAS	Occupational health and safety
OHCHR	Office of the High Commissioner for Human Rights
PEFC	Programme for the Endorsement of Forest Certification
RED	Renewable Energy Directive
RMK	Riigimetsa Majandamise Keskus (State Forest Management Centre)
RRA	Regional risk assessment
SBP	Sustainable Biomass Program
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
VAT	Value added tax
WAM	With additional measures
WEM	With existing measures
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 Estonia (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 Estonia 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 Estonia.

This report describes the revision of the first SBP-endorsed Regional Risk Assessment (RRA) for Estonia published as v1.0 in April 2016 and, with minor updates, as v1.1 in October 2021. The current round of updating was conducted in accordance with the recently updated SBP Regional Risk Assessment Procedure (v1.2) and draws on criteria and indicators set out in Standard 1: Feedstock Compliance (v2.0) and by taking into account Standard 2: Feedstock Verification (v2.0) (March 2023).

The revision covers all indicators in the new Standard 1 many of which are new or revised. The data sources for other indicators are also reviewed and updated.

The revision draws on many sources of information, including applicable legislation, reports from state authorities and other stakeholders, various databases as well as 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 independent expert on Estonian forestry hired by Indufor.

2 Regional background and statement of scope

2.1 Regional background

The territory of Estonia (Figure 2.1) forms part of the boreal region in the European biogeographical region classification. The Ministry of the Environment and the Estonian Environment Agency carry out reporting related to Natura 2000 conservation areas to the EU Commission on this biogeographical region.

According to the Estonian National Forest Inventory (NFI) of 2020 conducted by the Estonian Environment Agency, the area of forest land in the country is 2.32 million ha. About 49% of Estonia's forest area is dominated by coniferous trees and 51% by broadleaved trees (Sirkas & Valgepea 2022). About 4% of forest land is temporarily unstocked, 17% consists of seedling stands, 40% consists of thinning stands, and 28% are mature stands. In all, managed forests make up approximately 85% of the forest land (Sirkas & Valgepea 2022). Strictly protected forests accounted for 14.9% of the total forest area in 2020 (Sirkas & Valgepea 2022) and the area spiked in 2021, reaching 17.2% (Statistical Office (Statistikaamet): "Forest").

The Forest Act (2006) defines three main forest categories: commercial forest, limited-management forests, and protected forests. Ownership of the forests is divided between private forests, municipality forests and state-owned forests as follows: state forests account for 47%, private forests for 28%, and legal entities such as congregations for 21% of forest area. Other state and municipal owners account for 5%, and unknown owners for 0.3% of the forest area (Sirkas & Valgepea 2022).

State-owned forests are managed by the State Forest Management Centre (RMK) and are certified to the FSC and PEFC standards. A significant proportion of private forest in Estonia is also certified so these forests comply with the respective requirements for responsible forest management. In private and municipal forests, works are carried out by private professional contractors which is also the case in state forests. In state forests, the control over different activities is generally better than in private forests and in case of any non-conformities or violation of regulations, the corrective actions are taken more promptly and as appropriate.

For logging, an operator shall have a valid forest inventory or forest management plan together with a felling permit issued by the Environmental Board. According to the Forest Act, it is permissible to cut up to 20 m^3 of timber annually per forest management unit (FMU) without a felling permit. All felling permits and forest inventory data are available in the public forest registry online database.

The total area of strictly protected forests is 346,000 ha, limited management zones 277,600 ha, and commercial forests 1,701,700 ha (Sirkas & Valgepea 2022).

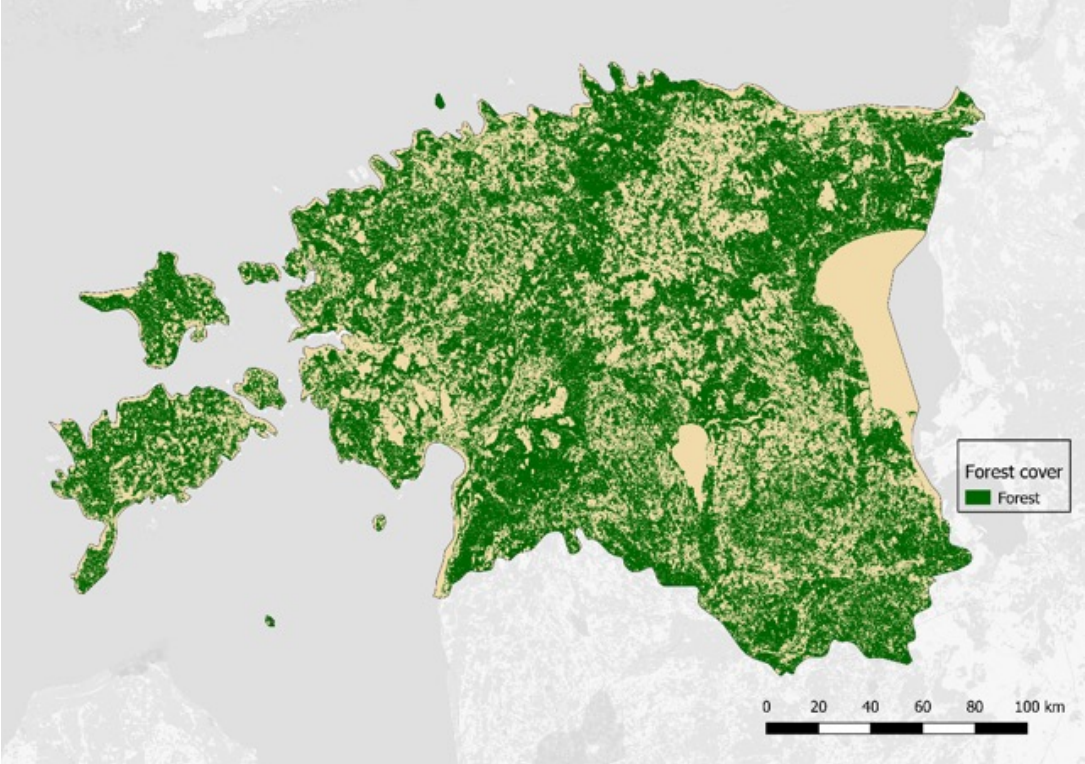
Estonia's protected areas are divided into three zones based on the existing operating restrictions: strict nature reserve, conservation zone, and limited-management zone (Loodusveeb: "Protected areas").

Economic activity is prohibited in the strict nature reserves and conservation zones whereas in limited-management zones, economic activities are permitted, taking into account the restrictions defined in the Nature Conservation Act (Loodusveeb: "Protected areas").

In 2020, the Estonian Natura 2000 network included 66 bird sites and 541 nature sites, with a total area of 14,859 km2 (Sirel & Pulk 2020). Economic activity is allowed in the Natura 2000 areas if it does not adversely affect the nature values of the site (Nature Conservation Act). Compensatory measures must be put in place if the proposed activity is justified by overriding public reasons due to the lack of alternative solutions; these include social or economic reasons (Nature Conservation Act, Article 70).

Within the context set out above, Estonia is considered as homogenous regarding SBP risks, and the RRA assessment does not require further sub-scoping. Where differences related to forest ownership are identified these are explicitly mentioned under the findings of the relevant indicators in Annex 1 of this RRA revision.

Figure 2.1 Map of Estonia [1]



1 Forest cover: © ESA WorldCover project [2021] / Contains modified Copernicus Sentinel data ([2021]) processed by ESA WorldCover consortium; Administrative boundaries: made with Natural Earth; Base map: Map tiles by CartoDB, under CC BY 3.0. Data by OpenStreetMap, under ODbL.

2.2 Statement of scope

The geographical scope of this Revision covers the entire territory of the Republic of Estonia.

As in the previous RRA update (2021) and the original RRA (2016), this revision covers wood-based primary feedstock[2] from forests including forest residues[3]. Processing residues[4] that have been produced from wood (i.e. raw materials) harvested in Estonia are also covered. Imported feedstock and processing residues from raw materials that originate outside Estonia are not covered by this RRA.

This revision covers only the land defined as forest by the Forest Act (2006). According to the Act, forest land is a plot of land that is 'entered in the cadastral register as a forest land parcel or is a plot of land with an area of at least 0.1 hectares and woody plants with the height of at least 1.3 metres and with the canopy density of at least 30 per cent grow there'.

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

3 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'.

4 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.

As per SBP's guidance, trees outside forests are excluded from the scope of this RRA. According to SBP's Glossary of Terms and Definitions v2.0 (2023), trees outside forests are defined as the 'trees on land not defined as forest under national legislation. This may include agricultural land, including meadows and pasture, built-on land (including settlements and infrastructure), parks and recreational areas and barren land (including sand dunes and rocky outcroppings)'.

2.3 Overview of the local biomass sector

The total annual wood harvest in Estonian forests generally ranges from 7 to 11 million m^3. According to the latest forest yearbook, the total harvested volume was 10.7 million m^3 in 2020 (Sirkas & Valgepea 2023). A substantial share of energy production is based on wood: in 2022, 34.7% of all energy was produced using wood chips and waste and the total volume of wood used for energy was 2.8 million m^3 (Statistikaamet: "KE033").

Estonia has long been a net exporter of fuel wood: during the 2010s and 2020s, the country exported on average 1.7 million tonnes annually and imported on average 0.14 million tonnes of fuelwood, sawdust, and waste wood (Sirkas & Valgepea 2023).

Most of the harvested domestic wood is used by the wood processing industry (e.g. sawmilling). The demand for domestic energy biomass has increased because of the Russian invasion of Ukraine.

Support for renewable energy is available in the form of subsidies. In practice, all Estonian end-consumers pay a "renewable energy charge" i.e. a fee proportional to their energy consumption (Elering: "Renewable energy charge"). The charges are used for financing the subsidies for energy producers: e.g. combined heat and power (CHP) plants can get payments per one kWh of electricity produced from renewable sources such as biomass (Pelkmans 2021). According to the Electricity Market Act, the Ministry of Climate regulates the issuance of the charges and subsidies, and the charges are set and subsidies are paid by the main grid operator Elering (Electricity Market Act 2003).

Despite the increase in the use of renewables in recent years, the main raw material for energy production in Estonia is still oil shale (Elering: "Elektrituru käsiraamat"). Wood and biomass are mostly used in district heating and co-generation of electricity and heat. There are nine larger wood-consuming CHP plants along with about 10 smaller ones plus a dozen larger wood-consuming district heating plants and close to 300 small wood-consuming boilers. In the larger plants, the annual wood consumption ranges from about 20,000 m^3 to over 500,000 m^3 and the production capacity from tens of MW to about 100 MW. The plants are relatively evenly distributed across Estonia with the largest ones being in Tallinn, Narva, Pärnu, and Tartu.

3 Methodology

3.1 Data collection

Necessary data for this RRA revision is collected mainly through desktop research from a range of sources. The sources include applicable Estonian and EU legislation and regulations, reports and articles from relevant Estonian ministries and state authorities, NGO and industry bodies, various databases as well as technical and scientific reports. Notable Estonian ministries and state authorities from where data is collected include the Riigiportal, the Ministry of the Environment, the Environmental Board, the State Forest Management Centre (RMK), the Environment Agency, and the Private Forest Centre. The Estonian Private Forest Association is also a key non-state organisation for data collection. Notable sources of data related to labour and social issues include the websites and publications of the Ministry of Social Affairs, the Labour Inspectorate, the International Labour Organisation as well as various NGOs.

Officially translated versions of all relevant Estonian legislation can be obtained from Riigi Teataja (www.riigiteataja.ee/en). Support from the Estonian Forestry and Certification Expert was taken for identifying the data sources, collecting the data as well as verifying information. The data used in this RRA revision is validated by cross-checking them with multiple sources wherever possible. Support from the Estonian Forestry and Certification Expert was 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 Estonian RRA (2017) was necessary.

The three levels of update are categorised as follows:

- **New addition:** For the new indicators in Standard 1 (v2.0) detailed analysis is conducted, evidence is compiled, and conclusions are made.
- **Major update:** For the revised indicators in Standard 1 (v2.0) that were partially aligned with the indicators assessed in the original Estonian RRA (2021), a new SBE assessment has been made including an information review, analysis and updated risk classification.
- **Minor update:** For the revised indicators in Standard 1 (v2.0) that almost fully matched indicators from the updated Estonian RRA (2021), the information in the detailed findings of the SBE assessments is updated. Originally assigned risk classes are reviewed and changed when necessary.

The level of update for each indicator is shown in Tables 3.1 to 3.4.

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 Estonia (October 2021)	Level of update
1.1.1: Operations related to feedstock sourcing and biomass production shall comply with all applicable and existing 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.	Major
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. 1.5.1: Feedstock is supplied in compliance with the requirements of CITES.	Major
1.1.4: Payments for harvest rights and feedstocks, 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 Estonia (October 2021)	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 Estonia (October 2021)	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) peatlands, (c) wetlands and (d) highly biodiverse grassland.	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: The removal of harvest residues and stumps 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 Estonia (October 2021)	Level of update
3.1.1: LULUCF emissions shall be accounted for through one of the following routes: Route A: Feedstocks 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: Feedstocks may be sourced from a country of origin which is party to the Paris Agreement and 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, or Route C: Feedstocks may be sourced from a supply base where an assessment demonstrates that both the carbon stocks 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 Estonia (October 2021)	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 otherwise lost or assist regeneration.	None.	New addition
3.2.2: Primary feedstock shall not be sourced from forest areas where site productivity is low 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 Estonia (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.	None.	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 Estonia (October 2021)	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.	Major
4.1.2: Forced or compulsory labour shall not be used.	2.7.2: Feedstock is not supplied using any form of compulsory labour.	Major
4.1.3: Child labour shall not be used.	2.7.3: Feedstock is not supplied using child labour.	Major
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.	Major
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.	Major
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 Estonia (October 2021)	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.	Major
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 people 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.	Major
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.	Major
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

Based on collected information (evidence), a thorough analysis, was undertaken for each indicator and either a low or specified risk class was assigned. 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, a riskconclusion 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, no sub-scoping was used. This is because for most indicators the risk classes or situations are similar in the private and public forests, and for an overwhelming majority of indicators the same risk class can be assigned.

4 Stakeholder consultation

The draft RRA revision was shared with a total of 16 stakeholders in Estonia (see Annex 4) by email on 6 April 2023. The stakeholders were selected in such a way that all the interest groups[5] 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 6 May 2023. A reminder was sent to stakeholders on 27 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.

A total of six stakeholders out of the 16 initially contacted responded to the request to provide feedback. Five stakeholders made comment and one stakeholder provided no comment. Three stakeholders – including two that did not comment on the draft – gave follow-up comments on the revised draft RRA. This means that the overall response rate was nearly 50%. The detailed breakdown of stakeholder responses is given in Table 4.1.

5 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)	8	4	50
Regulator (social and environmental interest)	2	0	0
Civil society (social and environmental interest)	2	1	50
Certification body (social and environmental interest)	2	2	100
Academia and research	2	1	50
Total / overall	**16**	**8**	**50**

The revised draft RRA revision for Estonia 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. This final draft is prepared by addressing the follow-up comments given on the revised draft RRA Revision.

5 Conclusions

Based on the analysis carried out and the findings related to the indicators presented in Annex 1, it can be concluded that Estonia is generally a low-risk country in terms of wood-based feedstock sourcing for biomass production.

Out of the total of 42 indicators, 38 are assessed to be in a low-risk class and the remaining four to be in a specified risk class. Table 5.1 lists the risk classifications proposed in this draft RRA revision report.

In this final draft, the risk class of six indicators was changed in light of the stakeholder comments received on the earlier draft and the Working Body's gathering of further evidence. The risk classes of four indicators (3.1.1, 3.2.1, 3.2.2 and 3.3.1) are changed from specified to low and for two indicators (2.1.2 and 3.2.3) from low to specified.

Please see Annex 5 for the detailed justification for the change.

Table 5.1: Assigned risk classes for the indicators.

Indicator	Assigned risk class	
	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 Forest Act (2006) of Estonia covers all state and privately-owned forests that are 'entered in the cadastral register as a forest land parcel' or are on a plot of land with 'an area of at least 0.1 hectares and woody plants with the height of at least 1.3 metres and with the canopy density of at least 30 per cent grow there'. The assessment covers all legally defined forests in Estonia. **Analysis** *National law and regulations concerning feedstock sourcing and biomass production* The Forest Act of Estonia provides the main legislative framework for forestry and forest harvesting in the country. The Act neither has any provision directly related to forest-based feedstock sourcing and biomass production nor restricts the use of wood, primary forest biomass and processing residues for bioenergy purposes. The decision on the use of wood is made by the forest owners and directed by the quality and price of wood. In order to carry out forest management activities and forest harvesting (i.e., clearcutting), each forest estate must have a forest management plan containing inventory data that is registered in the national forest register. It is mandatory to obtain a prior harvesting notice from the Environmental Board for regeneration felling, sanitary cuttings, and commercial thinnings to ensure that planned activities are in line with all rules and regulations (Ministry of the Environment 2023). There is no evidence that conventional harvesting rules and regulations are violated in Estonia on any notable scale. With the above pieces of evidence, it can be concluded that the forest-based feedstock used for producing pellets in the country is sourced in compliance with the Forest Act. *Implementation of EU Renewable Energy Directive (REDII) in Estonia* The EU REDII imposes several requirements concerning the sustainability of forest biomass to be used for energy generation. The requirements concern: (i) the legality of harvesting operations (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. Estonia has formally adopted REDII by enacting the Energy Organisation Act (2023). Stakeholder consultation suggests that legislation supporting the implementation of the Act is currently being prepared.

1.1.1 continued
Findings continued

For fulfilling sustainability criteria related to forest biomass sourcing, Article 32 of the Energy Organisation Act refers to the relevant requirements specified by the Forest Act (concerning forest management and conservation) and the Nature Conservation Act (protected areas). The Forest Act (2006), Nature Conservation Act and conventional forest management and harvesting practices fully address the above requirements.

Concerning requirement (i), as concluded in the above section, the forest-based primary feedstock and processing residues used for producing biomass for energy in the country are sourced in compliance with the Forest Act and conventional harvesting rules and regulations. This means the harvesting operations in the country comply with the legal and regulatory requirements.

Concerning requirement (ii), according to Articles 24 and 25 of the Forest Act, a forest owner must regenerate a regular harvested site – through artificial, natural or a combination of both means – within two to five years and in case of a special site like peatland forests[6] within 10 years after harvesting. A forest owner can be fined up to EUR 1,300 per ha of harvested area for not complying with the above rule. The Environmental Board enforces the above rule and imposes fines for non-compliance. There is no evidence that the above rule is violated in Estonia on any notable scale.

Regarding requirements (iii) and (iv), about 17.6% of the total forest land in Estonia is strictly protected (Statistics Estonia 2023). Article 23 of the Forest Act lays out specific provisions for the protection of these areas (key habitats and nature protection areas) by restricting those uses that may cause damage to these areas. Article 33 of the Act prohibits actions in harvesting operations that may cause damage to soil and biodiversity and Article 67 has provisions for imposing fines if such damages occur. The Nature Protection Act has provisions for protecting protected areas, limited conservation areas and species protection sites. The draft Estonian Forestry Development Plan until 2030 – which the Forest Act mandates to be prepared and which sets out the objectives of forestry development and describes the measures and means necessary for the achievement of the objectives in Estonia – also emphasises the protection of biodiversity, key habitats, nature protection areas and soil. There is no evidence of violation of the above articles in Estonia on any notable scale.

Regarding requirement (v), forest management practices in Estonia involve all stages of forest growth including sustainable harvesting ensuring prevention of damage to habitats of flora and fauna and especially endangered species (Ministry of the Environment 2023).

The forest harvesting level in the country remains far below annual growth and thus standing stock is growing. According to Statistics Estonia (2023), less than 70% of the annual increment in forest land is harvested since 2012. This means harvesting maintains or improves the long-term production capacity and carbon stock of the forests. Generally, the use of biomass for energy generation is regulated by the biomass sustainability criteria of the EU REDII (EU 2018/2001) and the waste hierarchy in Estonia (Ministry of the Environment 2023). The above discussion implies that there is no risk of non-compliance concerning feedstock sourcing with the EU REDII requirements.

Enforcement

The Estonian Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. As the Energy Organisation Act refers to the relevant requirements of the Forest Act for forest biomass sustainability, the sustainability criteria are in effect enforced by the Environmental Board.

Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive and stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement is effective.

6 Peatland forests include swamp forests (with moving or stagnant water), transitional mire forests, bog forests and drained peatland forests (minerotrophic or ombrotrophic).

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.1 continued *Findings continued*	**Risk conclusion and justification** Woody feedstock sourcing and biomass production for energy generation in Estonia – 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. Therefore, it is concluded that the risk rating for Indicator 1.1.1 is 'low risk'.
Means of verification	– Relevant web pages of the Environmental Board and Ministry of the Environment – Statistics Estonia – Relevant Estonian national and EU acts, laws and regulations
Evidence reviewed	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/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) – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Ministry of the Environment: Estonian Forestry Development Plan until 2030. https://envir.ee/MAK2030 – Statistical Office (Statistikaamet) (2023): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – Energy Sector Organisation Act (16.06.2016). https://www.riigiteataja.ee/en/eli/517032023002/consolide – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium
Risk rating	**Low risk** Specified risk
1.1.2	**Legal ownership of land and resource use rights shall be respected.**
Findings	**Scale of assessment** The scale of assessment covers all legally defined forests in Estonia. **Analysis** In Estonia, the registration process of property concerning forests is regulated by the Forest Act (2006) as well as the Restrictions on Acquisition of Immovables Act (2012) and the Land Cadastre Act (1994). Chapters 1 (General Provisions), 2 (Direction of Forestry) and 4 (Forest Management) of the Forest Act provide specific provisions for forest land ownership including the responsibilities of the owners.

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.2 continued *Findings continued*	Likewise, Chapters 1 (General Provisions), 2 (Restrictions on Acquisition of Immovables Used as Profit Yielding Land) and 3 (Restrictions on Acquisition of Immovables Arising from National Defence Reasons) of the Restrictions on Acquisition of Immovables Act have provisions for general land ownership including forest land in Estonia. The Land Cadastre Act provides the basis for maintaining land cadastre in the country. The objective of the land cadastre maintenance is 'to register information in the cadastre reflecting the boundaries and spatial extent of the immovable value of land, the natural status of land and the use of land, and to ensure the quality of such information and that it is preserved and made available to the public'. Tenure rights can be registered in the land registry only if the natural person or legal entity of any form provides relevant documents confirming the legal rights to the land concerned. This includes identification documents (passport, ID card, company registration documents), sales-purchase agreements, court decisions or other documents proving a legal right to own real property. There is no evidence in Estonia that land rights have been issued in violation of prevailing regulations and that corruption has been involved in the process of issuing land tenure and management rights. The corruption perception index score for Estonia in 2021 was 74 out of 100 (ranked 14th least corrupt country in the world) (Transparency International 2023). Therefore, corruption is not considered a key factor negatively influencing this indicator. **Enforcement and monitoring** The Estonian Ministry of the Environment with the support of the Environmental Board and Land Board enforces the relevant Acts. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. No shortcomings in the enforcement of the above legislation are reported. **Risk conclusion and justification** Based on the available information, the risk for this Indicator has been assessed as low.
Means of verification	– Documents demonstrating that the Biomass Producer is a legally defined entity – Documents showing legal ownership, lease, history of land tenure and the actual legal use – In situations where customary rights govern use and access, these rights are clearly identifiable – Relevant laws and regulations
Evidence reviewed	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Land Cadastre Act (12.04.1994). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/521032022003/consolide – Restrictions on Acquisition of Immovables Act (08.02.2012). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/506102021003/consolide – Transparency International. (2023). "Corruption Perceptions Index Estonia". https://www.transparency.org/en/countries/estonia
Risk rating	**Low risk** Specified 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** The scale of the assessment covers all legally defined forests in Estonia. **Analysis** Woody feedstock harvesting, production and sourcing in Estonia 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. As discussed in relation to Indicator 1.1.1 in Annex 1, woody feedstock harvesting, supply and production are fully compliant with the applicable legislation in Estonia. Detailed and strict legislation covering the process of issuing felling permits exists in the country. The felling permits are issued and the fulfilment of the requirements is controlled by the Environmental Board. Harvesting operations are usually done based on the requirements of the forest management plan and issued felling permits. However, there are some specific types of logging where felling permits are not needed such as pre-commercial thinning and if the harvested timber volume is less than 20m^3 from a forest management unit (FMU). The Forest Act defines the minimum age of forest trees to be cut, which depends on tree species and forest categories. It is required by the law that the owner of roundwood must be able to prove the origin of that material. Forest owners are required to follow the Forest Act and related acts and prescriptions from the Environmental Board. They must have a valid forest inventory or forest management plan, a felling permit and fill a waybill when they are sending the timber away from the forest. Saving the related documents for 7 years is also required by the law. All due diligence system (DDS) requirements are covered by the Forest Act (articles 37, 38 and 42). According to Statistics Estonia, forestry-related offences in the country are few and have declined in the past 10 years. The corruption perception index score for Estonia in 2021 was 74 out of 100 (ranked 14th least corrupt country in the world) (Transparency International 2023). Therefore, corruption is not considered a key factor influencing the possibility to obtain harvesting permits for areas and species that could not be harvested according to the legislation. In Estonia, no CITES tree species are growing and according to the information from the Ministry of the Environment, there have been no licences issued for wood products of such species in Estonia. CITES species are also not used in biomass production in Estonia. **Enforcement and monitoring** The Estonian the Ministry of Climate with the support of the Environmental Board enforces the Forest Act. The Ministry of the Environment is responsible for issuing CITES licences. The Estonian Tax and Customs Board and Environmental Board are responsible for controlling these licences. Regular monitoring of enforcement is conducted and reported by the concerned agencies. Low and declining level of forestry offences in the country is an indication that relevant legislation is enforced effectively. **Risk conclusion and justification** As the feedstock harvesting, production and sourcing in Estonia are fully compliant with the applicable domestic legislation and the EUTR, the risk class for this indicator is assessed as low.

1.1.3 continued *Means of verification*	– Existing legislation – Level of enforcement – Reference to sources of information in guidance notes – List of species purchased from the Environmental Board – Records of field inspections – Assessment of risk that CITES species may be mixed with non-CITES species, in the supply chain – Interviews demonstrate that the CITES requirements are understood – CITES species are known and identified – Where relevant, the operation possesses permits for harvest and trade in any CITES species
Evidence reviewed	– CITES (Loodusliku loomastiku ja taimestiku ohustatud liikidega rahvusvahelise kaubanduse konventsioon) 1973: https://www.riigiteataja.ee/akt/12813058 – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Riigi Teataja (State Gazette): "Avaleht". www.riigiteataja.ee – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – Transparency International. (2023). "Corruption Perceptions Index Estonia". https://www.transparency.org/en/countries/estonia
Risk rating	**Low risk** Specified 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** The scale of assessment covers the land tax, value-added tax (VAT) and income tax applicable to timber and feedstock harvesting from all legally defined forests in Estonia. **Analysis** In Estonia, there are no forest harvesting-specific fees such as royalties, stumpage fees and other volume-based fees. There are also no fees based on quantities, qualities, and species.

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.4 continued *Findings continued*	An important tax related to owning (forest) land in Estonia is a land tax (maamaks). The land value assessment process that the fees are based on was renewed in 2022, which in some cases raised the land value up to 20 times. This is, however, applied gradually – the land tax in each case rises no more than 10% per year. VAT in Estonia is paid by all persons (natural and legal) having annual turnover from their business activities higher than EUR 40,000 since 2018. The Estonian Tax and Customs Board is responsible for the collection of VAT. It is compulsory for round wood sellers and round wood buyers to register all the amounts and sums in a database so that the Estonian Tax and Customs Board has an overview of the transactions. The companies must register all invoices that are higher than EUR 1,000 to the state database. While there are sporadic reports of non-payment of VAT by some private forestry companies, according to the Ministry of Finance the total tax loss due to this is very low compared with other sectors. The Taxation Act and Income Tax Act specify the rights, obligations and liabilities of tax authorities and taxable persons, the procedure for tax proceedings and the procedure for the resolution of tax disputes. The Income Tax Act also specifies requirements for taxing forest material. Anybody receiving income from selling services or products must declare their income by the end of March each year and this can be done digitally or in the office of the Estonian Tax and Customs Board. From 1 July 2014 it is obligatory to register all the workers in the Estonian Tax and Customs Board database. This means that it is not possible to work without any kind of contract or registration. This is regulated by the Taxation Act. In the case of the State Forest Management Centre (RMK) that manages the forest owned by the state, the risk of non-compliance with VAT and tax payment is also low as they are audited by the State Control according to the internal accounting audit programme required by the law. All the information related to their management activities is public and, according to the information available, there has not been any tax fraud by them. **Enforcement and monitoring** The Estonian Tax and Customs Board is responsible for controlling tax payments which is a constant process. The Environmental Board together with the Estonian Tax and Customs Board conduct regular inspections of forest operations in different counties of Estonia to control the fulfilment of VAT, tax, and other related regulations. **Risk conclusion and justification** The risk of non-payment of VAT, income tax and non-compliance with related legislation is low for both the private sector and state forestry enterprises in Estonia.
Means of verification	– Records of payments and correspondence with revenue authorities show payments are correct – Krediidinfo database – Inquiry to the Estonian Tax and Customs Board
Evidence reviewed	– Environmental Board: “Home page | Keskkonnaamet”. https://keskkonnaamet.ee/en – Estonian Tax and Customs Board: “Private client | Estonian Tax and Customs Board”. https://www.emta.ee/en – Income Tax Act (15.12.1999). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/503012023004/consolide

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.4 continued *Evidence reviewed continued*	– Ministry of Finance: "Avaleht | Rahandusministeerium". https://www.fin.ee/en – Taxation Act (20.02.2002). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/524012023004/consolide – Value-Added Tax Act (10.12.2003). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/531082022001/consolide
Risk rating	**Low risk** Specified 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** The scale of assessment covers all legally defined forests in Estonia. **Analysis** The Forest Act requires that all forest operations shall be planned and implemented in accordance with the requirements of the forest management regulation (Chapter 4 of the Act). Detailed and strict legislation covering the process of issuing felling permits exists in Estonia. The felling permits are issued, and fulfilment of the requirements is controlled by the Environmental Board. Harvesting operations are usually done based on the requirements of the forest management plan and issued felling permits. The Nature Conservation Act has specific requirements for the protection of nesting places of rare and endangered bird species, as well as requirements to leave trees and dead wood for biodiversity protection. The maintenance of buffer zones along water courses or open areas, as well as some limitation in relation to the protection of soil against erosion, is covered in the regulation on forest cuttings and the Nature Conservation Act. The Environmental Board is responsible for constantly controlling the fulfilment of the requirements of the Forest Act against all illegal and unauthorised activities. The cases of timber theft and illegal logging are handled by police. According to the data from Statistics Estonia, there are a minimal number of violations of the law. Moreover, the forest governance portal of Chatham House, UK – which monitors illegal logging globally – does not record any illegal logging activities in Estonia (Chatham House 2023). The forest protection system in Estonia functions well and there are no major risks in this area. The violations that have been detected are of small scale, for example, some soil damage or small-scale cuttings in buffer zones. There is no major difference in compliance between the state-owned and private forests. Where violations are detected in the state forest, the damage is rectified much more quickly. **Enforcement and monitoring** The Estonian Ministry of the Environment with the support of the Environmental Board enforces the Forest Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The Environmental Board conducts regular inspections of forest operations in different counties of Estonia to control the fulfilment of related regulations.

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.5 continued *Findings continued*	**Risk conclusion and justification** Based on the above analysis, it can be concluded that Estonian legislation provides sufficient protection against unauthorised and illegal activities and the forest protection system functions well in the country thus this indicator is assigned with low risk.
Means of verification	– Forest area maps – Records of Environmental Board's field inspections – Monitoring records – Interviews with staff – Publicly available information – Interview with Environmental Board – Records on violations from Statistics Estonia
Evidence reviewed	– Chatham House. (2023). "Forest Governance and Legality". https://forestgovernance.chathamhouse.org/ – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
Risk rating	**Low risk** Specified 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 legally defined forests in Estonia. **Analysis** The identification and management of key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity are mandated by the Forest Act and the Nature Conservation Act. Chapter 3 (Forest Survey) of the Forest Act has specific provisions for surveying all legally defined forests in Estonia, while Chapter 1 (General Provisions), and Chapter 4 (Forest Management) ensure their adequate maintenance. The Nature Conservation Act has specific requirements for the protection of nesting places of rare and endangered bird species as well as requirements to leave trees and dead wood for biodiversity protection. The maintenance of buffer zones along water courses or open areas, as well as some limitation in relation to the protection of soil against erosion, is covered by the Nature Conservation Act. In particular, Chapters 3, 4, 5, 6 and 8 have specific provisions for the organisation of protection, maintaining protected areas, limited-conservation areas, shores and banks, and key species. Most of the Estonian forests are well-surveyed and most key species, habitats, ecosystems, and major HCV are identified. All data about the different types of protected species, areas and objects in the surveyed forests are collected to a state-owned database called EELIS (Eesti Looduse Infosüsteem). Some of this information is available to everybody, while information deemed sensitive (i.e., about Category I and II species) is available only to people and organisations that need to know it because of their work and who have signed confidentiality agreements with the state. Forestry-related protected areas and species can be seen in the public forest registry except for the Category I and II species habitats (Environment Agency: "Metsaportaal"). For Category I protected species, landowners are notified in writing. The system allows landowners and other stakeholders to have access to the main information. Prior to issuing a felling permit, the existence of protected habitats and species is checked by the Environmental Board. The initial woodland key habitat (WKH) inventory carried out in 1999-2002 described 7,007 WKHs with a total area of 19,059 ha. It was estimated by the experts that about 50% of the areas were not identified (https://keskkonnaamet.ee/media/1198/download). Currently, there are more than 16,500 WKHs with a total area of more than 43,200 ha in the EELIS database. Thus, the official WKHs alone cover more than double the area of the initial WKH described during the first inventory. Furthermore, the database prepared by NGOs with potential WKHs contains over 24,900 more potential WKHs with a total area of more than 24,800 ha. Also, up-to-date information about all these areas is publicly available at https://register.metsad.ee/#/. It also has to be noted here that, as per stakeholder consultation – not all HCV forests are inventoried and mapped. According to the recent expert estimation – as the information obtained during the stakeholder consultation – about 3,000 ha of woodland key habitats ('vääriselupaik' in Estonian) is yet to be conclusively inventoried in the country. Moreover, Kiis et al. (2021) estimated that about 49% of the forest area under the Natura 2000 network is not covered by the forest habitat inventory.

Annex 1 Detailed findings for Supply Base Evaluation continued

2.1.1 continued *Findings continued*	**Enforcement and monitoring** The Estonian Ministry of the Environment with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. **Risk conclusion and justification** The above analysis suggests that although the key species, ecosystems, and HCVs in forests are generally identified, some WKHs and Natura 2000 forest land are not inventoried and thus this indicator is assigned a specified risk.
Means of verification	– EELIS database – Forest and protected area maps – Interviews with officials from Environmental Board – Regional, publicly available data from a credible third party – Relevant acts – Public forest registry
Evidence reviewed	– Environment Agency: "Metsaportaal" (Forest Portal). https://register.metsad.ee/#/ – Environment Agency: the EELIS (Eesti Looduse Infosüsteem) database. https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Kiis, M., Kuresoo, L., Lilleväli, U. (2021). How well are protected forests of high conservation value cared for? Estonian Fund for Nature and Estwatch. – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Statistics Estonia (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – https://ee.fsc.org/ee-et/kontrollitud-puit – https://keskkonnaamet.ee/media/1198/download – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium.
Risk rating	Low risk **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 the key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in all legally defined forests in Estonia. **Analysis** The identification and management of key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity are mandated by the Forest Act and the Nature Conservation Act. Chapter 3 (Forest Survey) of the Forest Act has specific provisions for surveying all legally defined forests in Estonia, while Chapter 1 (General Provisions), and Chapter 4 (Forest Management) ensure their adequate maintenance. The Nature Conservation Act has specific requirements for the protection of nesting places of rare and endangered bird species, as well as requirements to leave trees and dead wood for biodiversity protection. The maintenance of buffer zones along water courses or open areas, as well as some limitation in relation to the protection of soil against erosion, is covered by the Nature Conservation Act. In particular, Chapters 3, 4, 5, 6 and 8 have specific provisions for the organisation of protection, maintaining protected areas, limited-conservation areas, shores and banks, and key species. Estonian forests are well-surveyed, and all key species, habitats, ecosystems, and major HCV are identified. Woodland key habitats (WKHs) (commonly known as high-value habitats in Estonia) are forest habitats with a high probability of the current occurrence of endangered, vulnerable, or rare species. The WKH mapping tool is used to address high conservation value forest habitats in managed forests. According to Estonian legislation, the protection of WKHs is optional for private forest owners. They can choose to sign a contract with the state to protect WKHs. In such cases, the state pays compensation to the owner for the protection of the WKH. If the private forest owner does not want to protect the WKH they are allowed to cut it. However, for both state forests and private forests in the country, forest certification (FSC and PEFC) requires the protection of registered WKHs. In cases where the feedstock is sourced from the private forests, it is important to know exactly where the feedstock was cut i.e. forest management unit (FMU) and sub-compartment. Public databases can be used to determine if the material comes from a WKH. In 2017, "Woodland key habitat classification methodology, selection, protection and protection contract signing and compensation calculation detailed instruction" (Vääriselupaiga klassifikaator, valiku juhend, kaitse korraldamine ning vääriselupaiga kaitseks lepingu sõlmimine ja kasutusõiguse tasu arvutamise täpsustatud alused) was changed in a way so that before new WKHs are added to the state registry there has to be an approval from the landowner who has a vested interest. As such, potential WKHs in private forests are not always recorded on the public state registry. To protect Natura 2000 habitat types in Natura protection areas, the state has created Special Management Zones and Strict Reserve Zones so that it is possible to protect the majority and most valuable HCVs including Natura 2000 forest habitat types. In these zones commercial forest management is not allowed.

2.1.2 continued *Findings continued*	As the state has decided that it is not feasible to protect all Natura 2000 forest habitat types with such strict zones some of these habitats are covered with limited management zones where commercial felling with restrictions is allowed. It can be noted here that all felling permits in restricted management zones have been halted. No new felling permits will be issued before new inventories have been carried out (Environmental Board: "The Environmental Board suspends felling in forest habitats in the Natura area"). As a risk mitigation measure in the FSC Controlled Wood system, a map was created by stakeholders of the relevant areas and objects. It is important to note that a mapping and classification methodology has not been formally agreed between state agencies and stakeholders and, therefore, differences in interpretation remain. It also has to be noted here that, as per stakeholder consultation – not all HCV forests are inventoried and mapped. According to the recent expert estimation – as the information obtained during the stakeholder consultation – about 3,000 ha of woodland key habitats ('vääriselupaik' in Estonian) is yet to be conclusively inventoried in the country. Moreover, Kiis et al. (2021) estimated that about 49% of the forest area under the Natura 2000 network is not covered by the forest habitat inventory. Naturally, threats to and impacts on the identified key species, habitats, ecosystems, and HCV pertaining to biodiversity in the above areas are not known. **Enforcement and monitoring** The Estonian Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. Forest-related heritage values are protected by the Heritage Board for the Heritage Conservation Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. **Risk conclusion and justification** The above analysis suggests that some WKHs and Natura 2000 forest land are not inventoried and thus, threats to and impacts on the identified key species, habitats, ecosystems, and HCV pertaining to biodiversity in these areas are not known. Therefore, the risk class for this indicator is assessed to be specified.
Means of verification	– Maps from the EELIS database – Guidance provided by BPs to suppliers / forest operators, regarding threats to the identified forests and areas of high conservation values, and verification of conformance through field inspections – Regional Best Management Practices – Standard Operating Procedures – Codes of Practice – Records of Environmental Board's field inspections – Monitoring records – Interviews with staff – Public forest registry

2.1.2 continued *Evidence reviewed*	– Environment Agency: "Metsaportaal" (Forest Portal). https://register.metsad.ee/#/ – Environment Agency: the EELIS (Eesti Looduse Infosüsteem) database https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Environmental Board: "The Environmental Board suspends felling in forest habitats in the Natura area". https://keskkonnaamet.ee/en/news/environmental-board-suspends-felling-forest-habitats-natura-area – Felling permit form and requirements data on felling permit, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – FSC. (2017). Centralised National Risk Assessment for Estonia (FSC-CNRA-EE V1-0 EN). https://fsc.org/en/document-centre/documents/resource/309 – Heritage Conservation Act (20.02.2019). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/513122020003/consolide – Kiis, M., Kuresoo, L., Lilleväli, U. (2021). How well are protected forests of high conservation value cared for? Estonian Fund for Nature and Estwatch. – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004) https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – Statistics about felling permit issued in WKH from Environmental Agency – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium.
Risk rating	Low risk **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 the key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in all legally defined forests in Estonia. **Analysis** The identification and management of key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity are mandated by the Forest Act and the Nature Conservation Act. Chapter 3 (Forest Survey) of the Forest Act has specific provisions for surveying all legally defined forests in Estonia, while Chapter 1 (General Provisions), and Chapter 4 (Forest Management) ensure their adequate maintenance.

2.1.3 continued *Findings continued*	The Nature Conservation Act has specific requirements for the protection of nesting places of rare and endangered bird species, as well as requirements to leave trees and dead wood for biodiversity protection. The maintenance of buffer zones along water courses or open areas, as well as some limitation in relation to the protection of soil against erosion, is covered by the Nature Conservation Act. In particular, Chapters 3, 4, 5, 6 and 8 have specific provisions for the organisation of protection, maintaining protected areas, limited-conservation areas, shores and banks, and key species. Most of the Estonian forests are well-surveyed and most key species, habitats, ecosystems, and major HCVs within them are identified. As explained in Indicators 2.1.1 and 2.1.2, about 3,000 ha of WKHs and over half of the Natura 2000 forest land (Kiis et al. 2021) are not inventoried and mapped, and thus, threats to and impacts on the identified key species, habitats, ecosystems, and HCV pertaining to biodiversity in these areas are not known. Naturally, their maintenance and enhancement cannot be guaranteed without knowing the threats and impacts. In addition, according to Estonian legislation, the protection of WKHs is optional for private forest owners. They can choose to sign a contract with the state to protect WKHs. In such cases, the State pays compensation to the owner for the protection of the WKH. If the private forest owner does not want to protect the WKH they are allowed to cut it. Therefore, the protection of all WKHs in Estonia is not guaranteed and thus key species, habitats, ecosystems, and areas of HCV pertaining to biodiversity in these may not be maintained or enhanced. **Enforcement and monitoring** The Estonian the Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. Forest-related heritage values are protected by the Heritage Board for the Heritage Conservation Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. **Risk conclusion and justification** As the above analysis suggests, the enhancement and maintenance of key species, habitats, ecosystems, and HCVs pertaining to biodiversity in some WKHs and Natura 2000 forest land cannot be guaranteed. Therefore, the level of risk for this indicator is assessed as “specified”.
Means of verification	– Maps from the EELIS database – Regional Best Management Practices – Standard Operating Procedures – Records of Environmental Board’s field inspections – Monitoring records – Public forest registry

Evidence reviewed	– Environment Agency: "Metsaportaal" (Forest Portal). https://register.metsad.ee/#/ – Environment Agency: the EELIS (Eesti Looduse Infosüsteem) database. https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permit, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – FSC. (2017). Centralised National Risk Assessment for Estonia (FSC-CNRA-EE V1-0 EN). https://fsc.org/en/document-centre/documents/resource/309 – Heritage Conservation Act (20.02.2019). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/513122020003/consolide – Kiis, M., Kuresoo, L., Lilleväli, U. (2021). How well are protected forests of high conservation value cared for? Estonian Fund for Nature and Estwatch. – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium.
Risk rating	Low risk **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	**Sale of assessment** The scale of assessment covers all legally defined forest land in Estonia. **Analysis** Conversion is regulated by the Forest Act and several other acts as discussed below. Conversion is defined as the cutting that is done to enable the use of land for purposes other than silviculture. Conversion may be carried out in Estonia on the basis of building design documentation conforming to the provisions of the Building Act or Land Improvement Act, or on the basis of an operational plan for electrical installations conforming to the provisions of the Electrical Safety Act if the preparation of a detailed plan is not mandatory or on the basis of other valid design documentation, maintenance schedule or document arising from legislation which serves as the basis for the use of land for purposes other than forest management.

2.2.1 continued *Findings continued*	Permission for conversion is issued and controlled by the Environmental Board. The decision is made by the local government (i.e. municipality) which must check that the conversion is not in conflict with the general plan (üldplaneering) or detailed plan (detailplaneering). They must also consider the local people's opinions. According to Articles 24 and 25 of the Forest Act, a forest owner must regenerate a regular harvested site – through artificial, natural or a combination of both means – within two to five years and in the case of a special site like pristine or drained peatland forest within 10 years after harvesting. A forest owner can be fined up to EUR 1,300 per ha of harvested area for not complying with the above rule. The Environmental Board enforces the above rule and imposes fines for non-compliance. There is no evidence that the above rule is violated in Estonia on any notable scale. Overall, there is no report of large-scale conversion of forest lands in Estonia and large-scale conversions are not possible due to different legislation. There are no cases known where the forest has been converted to productive plantations. The forest plantations have rather been established on agricultural land. According to Statistics Estonia, forest areas increased in the country from just over 2.08 million ha in 2008 to 2.12 million ha in 2020. **Enforcement and monitoring** The Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act as provisions related to conversion in other acts. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. Neither the EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive or the stakeholder consultation pointed to any shortcomings in the enforcement of the above legislation. **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 in Estonia. Therefore, it is concluded that the risk class for this indicator is low.
Means of verification	– Relevant legislation – Forest inventory records – Historical maps and consultation with stakeholders. – Regional, publicly available data from a credible third party
Evidence reviewed	– Building Act (15.05.2002). https://www.riigiteataja.ee/en/eli/513122013003/consolide – Environment Agency: The EELIS (Eesti Looduse Infosüsteem) database. https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Equipment Safety Act (18.02.2015). https://www.riigiteataja.ee/en/eli/ee/510042019003/consolide – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009

2.2.1 continued *Evidence reviewed continued*	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Land Improvement Act (16.05.2018). https://www.riigiteataja.ee/en/eli/ee/516122020009/consolide/current – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium.
Risk rating	**Low risk** Specified 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 ecosystem health, vitality, functions, and services in all legally defined forests in Estonia. **Analysis** The maintenance and management of key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity are mandated by the Forest Act and the Nature Conservation Act. Chapter 3 (Forest Survey) of the Forest Act has specific provisions for surveying all legally defined forests in Estonia, while Chapter 1 (General Provisions), and Chapter 4 (Forest Management) ensure their adequate maintenance. The Nature Conservation Act has specific requirements for the protection of nesting places of rare and endangered bird species, as well as requirements to leave trees and dead wood for biodiversity protection. The maintenance of buffer zones along water courses or open areas, as well as some limitation in relation to the protection of soil against erosion, is covered by the Nature Conservation Act. In particular, Chapters 3, 4, 5, 6 and 8 have specific provisions for the organisation of protection, maintaining protected areas, limited-conservation areas, shores and banks, and key species. Estonian Forests are well surveyed and forest ecosystems, and their health, vitality, functions, and services are well managed in Estonia. According to Articles 24 and 25 of the Forest Act, a forest owner must regenerate a regular harvested site – through artificial, natural or a combination of both means – within two to five years and in the case of a special site like the marsh, mesotrophic mire, drained peatland, bog, and marsh within 10 years after harvesting. A forest owner can be fined up to EUR 1,300 per ha of harvested area for not complying with the above rule. The Environmental Board enforces the above rule and imposes fines for non-compliance. There is no evidence that the above rule is violated in Estonia on any notable scale. Regeneration of harvested areas supports the maintenance and enhancement of ecosystems, their health, vitality, functions and services in Estonian forests. According to Statistics Estonia, 17.6% of the country's forest land is strictly protected (i.e. no management activities allowed) and over 11% of forest area is categorised as limited management zones. This means over 28.6% of the forest land in Estonia is under some kind of protection regime. Overall, all the important ecosystems are under some kind of protection, protection regime or classified under WKH.

2.2.2 continued *Findings continued*	According to the Environmental Board, there are no major violations of applicable legislation concerning the protected areas. It should be noted here that according to an audit report published by the Estonian Audit Office (2023), the Environmental Board has issued cutting permits in protected areas without identifying the impact of harvesting on the natural values and conservation objectives of the protected area. The report, however, highlighted that the analysis of the impacts of forest cutting is not adequately integrated into the relevant protection regulations, management plans, or the national environmental monitoring system. The management of forests in Estonia concerning the maintenance or enhancement of ecosystem health, vitality, functions and services is done according to the existing legislative and regulatory framework. Ecosystem health, vitality, functions and services can well be maintained in sustainably managed forests, where harvesting is done, so 'no harvesting' is not a precondition for fulfilling the requirements. While permits are issued for harvesting in protected areas, related regulations – based on sustainability principles – are not violated. **Enforcement and monitoring** The Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act as provisions related to conversion in other acts. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU report (2021) and stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. **Risk conclusion and justification** Based on the above discussion, it can be concluded that the management of forests in Estonia concerning the maintenance or enhancement of ecosystem health, vitality, functions and services is done according to the existing legislative and regulatory framework. Thus, this indicator is classified as 'low risk'. However, any negative impacts of harvesting of protected areas on nature values and services should be carefully assessed and necessary mitigation measures should be taken.
Means of verification	– Relevant legislation – Maps from the EELIS database – Guidance provided by the Environmental Board to suppliers/forest operators, regarding threats to the identified forests and areas of high conservation values, and verification of conformance through field inspections – Regional Best Management Practices – Standard Operating Procedures – Codes of Practice – Records of Environmental Directorate's field inspections
Evidence reviewed	– Environment Agency: "Metsaportaal" (Forest Portal). https://register.metsad.ee/#/ – Environment Agency: the EELIS (Eesti Looduse Infosüsteem) database. https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est – Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide

2.2.2 continued *Evidence reviewed continued*	– Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – National Audit Office of Estonia. (2023). Loodusväärtuste kaitse ja raied kaitstavates metsades Kas kaitstavatel aladel metsa raiudes jäävad kaitstavad loodusväärtused alles? Tallinn. https://www.riigikontroll.ee/tabid/206/Audit/2550/language/et-EE/Default.aspx – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium.
Risk rating	**Low risk** 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 legally defined forests in Estonia. **Analysis** Article 33 of the Forest Act prohibits actions in harvesting operations that may cause damage to soil and biodiversity and Article 67 has provisions for imposing fines if such damages occur. Moreover, Chapter 5 of the Forest Act (Forest Protection) stipulates that soil must not be damaged during forest management operations. The draft Estonian Forestry Development Plan until 2030 – which is prepared under the mandate given in the Forest Act and which sets out the objectives of forestry development and describes the measures and means necessary for the achievement of the objectives in Estonia – also emphasises the protection of soil.
	According to the Act, all forest operations shall be planned and implemented in accordance with the requirements concerning forest management. The forest management regulations cover the protection of soil against erosion. They put restrictions on dealing with more sensitive forest soil types such as no soil preparation is allowed during regeneration. The allowable limits of soil destruction and the timeline for forest owners to repair the damage done to forest soil are also mentioned. In protection areas, additional measures to protect soil are usually described in protection acts. Most commonly, additional measures foresee that forwarding material from the cutting site shall be done on frozen soil or with dry soil. There is currently no evidence of the violation of the above articles in Estonia on any notable scale. **Enforcement and monitoring** The Environmental Board is responsible for constantly controlling the fulfilment of related regulations. It carries out regular field inspections. Stakeholder consultation does not point to any shortcomings in the inspections. Any such shortcomings are not also publicly reported. **Risk conclusion and justification** Based on the above discussion, it can be concluded that soil quality in the legally defined forests of Estonia is maintained or enhanced. Therefore, the level of risk for this indicator is considered low.

2.2.3 continued *Means of verification*	– Regional Best Management Practices – Supply contracts – Records of Environmental Board's field inspections – Monitoring records – Publicly available information on the protection of soil – Level of enforcement of relevant legislation
Evidence reviewed	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
Risk rating	**Low risk** Specified 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 the removal of harvest residues and stumps from all legally defined forests in Estonia. **Analysis** All forest operations should be planned and implemented in accordance with the requirements set up in the forest management regulations of the Forest Act. The Act specifies the ways and time limits for cleaning the residues from the felling sites. There are different ways to do it but, in all cases, it must be done in a way that does not damage remaining trees (including natural regeneration). In the Forest Act, it is also mentioned that the residues need to be cleaned from the felling sites after the final felling and there is a provision for a fine (Article 67 (9)) in case the felling site is not cleaned. It must be mentioned that in case the residue removal is planned after the final felling there is always some amount that is not removed because these are used for soil protection while taking the material out from the forest. Studies suggest that harvesting the residues affects the composition of insects, fungi, and plant species in the forests. Stump removal has the biggest impact. However, stump removal is not a common practice in Estonia.

2.2.4 continued *Findings continued*	**Enforcement and monitoring** The Ministry of the Environment enforces the Forest Act through the Environmental Board. The Environmental Board is responsible for constantly controlling the fulfilment of related regulations. It carries out regular field inspections. Stakeholder consultation does not point to any shortcomings in the inspections. Any such shortcomings are not also publicly reported. **Risk conclusion and justification** Based on the above discussion, it can be concluded that the removal of harvest residues and stumps does not lead to irreversible negative impacts to the ecosystem in Estonia. Therefore, the level of risk for this indicator is considered low.
Means of verification	– Regional Best Management Practices – Supply contracts – Records of Environmental Board's field inspections – Monitoring records – Level of enforcement of relevant legislation
Evidence reviewed	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
Risk rating	**Low risk** Specified risk

Annex 1 Detailed findings for Supply Base Evaluation continued

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 the quality and quantity of ground water, surface water and water downstream connected to all legally defined forests in Estonia. **Analysis** The Water Act regulates the protection and monitoring of water resources (including water courses in forests) in Estonia. Moreover, the Nature Conservation Act specifies restrictions related to activities in different water protection zones. The special management regime is set in forest management plans or management documents of protected areas where these forests are located in order to protect water bodies from damage and pollution. All the maps of water protection zones are usually included in forest management plans. Forest harvesting is allowed depending on the management and protection regime assigned which is based on the forest group. Using residues to build temporary bridges over ditches and springs is allowed, but cleaning the residuals after finishing the work is a requirement. There are no reported major negative impacts of forestry activities on the quality and quantity of groundwater, surface water and water downstream connected to legally defined forests in Estonia. **Enforcement and monitoring** The Ministry of the Environment enforces the Forest Act, Water Act and Nature Conservation Act through the Environmental Board. The Environmental Board is responsible for constantly controlling the fulfilment of related regulations. It carries out regular field inspections. Stakeholder consultation does not point to any shortcomings in the inspections. Any such shortcomings are not also publicly reported. **Risk conclusion and justification** Based on the above discussion, it can be concluded that forest activities do not lead to any major negative impacts on the quality and quantity of groundwater, surface water and water downstream connected to legally defined forests in Estonia. Therefore, the level of risk for this indicator is considered low. Nevertheless, the impacts of forest management on water should be regularly assessed and monitored, and measures should be taken to mitigate any negative impacts as evidence of negative impacts on water caused by forest management occur in other countries.
Means of verification	– Regional Best Management Practices – Supply contracts – Records of Environmental Board's field inspections – Monitoring records – Level of enforcement of relevant legislation

2.2.5 continued *Evidence reviewed*	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Felling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – Water Act (30.01.2019). https://www.riigiteataja.ee/en/eli/527122019007/consolide
Risk rating	**Low risk** Specified 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 scale of assessment covers the air emissions from forestry activities in all legally defined forests in Estonia. **Analysis** The General Part of the Environmental Code Act regulates the protection, management, and monitoring of ambient air pollution. There is no indication of any negative impact on air quality due to forest operations including those that involve using machines in Estonia. Usually, forest operations take place in remote places and do not affect the air quality. The air quality is impacted by biomass users, who burn biomass in power plants, households or other facilities which are not related to feedstock sourcing. The biomass users are outside the scope of this RRA. **Enforcement and monitoring** The Ministry of the Environment enforces the General Part of the Environmental Code Act through the Environmental Board. The Environmental Board is responsible for constantly controlling the fulfilment of related regulations. It carries out regular field inspections. Stakeholder consultation does not point to any shortcomings in the inspections. Any such shortcomings are not also publicly reported. **Risk conclusion and justification** Based on the above discussion, it can be concluded that air emissions from forestry activities in legally defined forests are insignificant in Estonia. Therefore, the level of risk for this indicator is considered low.

2.2.6 continued *Means of verification*	– Monitoring data about air quality – Regional Best Management Practices – Supply contracts – Records of Environmental Board's field inspections – Level of enforcement of relevant legislation. – Regional, publicly available data from a credible third party
Evidence reviewed	– General Part of the Environmental Code Act (16.02.2011). https://www.riigiteataja.ee/en/eli/517062022003/consolide – Environmental monitoring information system KESE (Keskkonnaseire infosüsteem KESE): https://kese.envir.ee/kese/welcome.action
Risk rating	**Low risk** Specified 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 the application of all pesticides in forestry operations connected to feedstock sourcing from all legally defined forests in Estonia. **Analysis** The forest management regulations of the Forest Act regulate the use of pesticides in legally defined forests in Estonia. It is allowed to use pesticides in forests only to prevent damages from e.g. pests and diseases. In case of using any pesticides, the requirements of the Plant Protection Act must also be followed. In the case of pesticide use in plantations the same requirements from the Plant Protection Act must be followed. In state forests, the pesticides are used only in special cases. There have been no such cases in recent years (information from FSC FM audits). During the FSC FM audits in state forests, the requirements related to the use of chemicals are evaluated annually. The use of chemicals in private forests is not very common in Estonia. The use of any kind of pesticides must be recorded by the forest owners. **Enforcement and monitoring** The use of chemicals is controlled by Environmental Board under the Ministry of the Environment. Stakeholder consultation does not point to any shortcomings in the controlling process. Any such shortcomings are not also publicly reported. **Risk conclusion and justification** Pesticide use in Estonian forests is very limited and cases of overuse are very rare. Therefore, this indicator is given a low-risk class.

2.2.7 continued *Means of verification*	– Existing legislation – Level of enforcement – Regional Best Management Practices – Supply contracts – Records of Environmental Board's field inspections – Assessment at an operational level of measures designed to minimise impacts on the values identified – Monitoring records – Request to Environment Board – Interview with Environmental Board officials – FSC FM Audits
Evidence reviewed	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Plant Protection Act (21.04.2004). https://www.riigiteataja.ee/en/eli/505092014004/consolide – Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide
Risk rating	**Low risk** Specified 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 from all legally defined forests in Estonia. **Analysis** The Waste Act defines the requirements for waste disposal in Estonia. The management, functions of responsible institutions, monitoring, storage and other waste management procedures are defined in this Act. The Forest Act has provisions for fines for leaving waste in the forests. The impact of forest-based wastes on the environment is reported to be insignificant in Estonia. It is a prevailing practice in the state forest enterprises to check the harvested and other areas where the forest activities are foreseen before and after the work is done to ensure that no waste is disposed of and that all legal requirements and good practices are followed. In addition, the State Forest Service periodically controls how forest operations in harvested areas are being or have been implemented according to existing legislation.

2.2.8 continued *Findings continued*	The situation is similar in the private forest. It is a common practice that contracts with logging companies include the requirement of cleaning the forest of the waste caused by the forest management work. The waste problem, however, exists in the forests nearby cities and recreational areas, which are frequently visited by people for tourism and recreational purposes. Such wastes are not connected to feedstock sourcing and thus are outside the scope of this RRA. **Enforcement and monitoring** The control of waste disposal is done by the Environmental Board under the Ministry of the Environment. Stakeholder consultation does not point to any shortcomings in the controlling process. Any such shortcomings are not also publicly reported. **Risk conclusion and justification** The disposal of waste generated by forestry operations in Estonian forests is not at all a major issue. Therefore, this indicator is given a 'low risk' class.
Means of verification	– Relevant legislation – Regional Best Management Practices – Supply contracts – Operational Assessment of potential impacts and of measures to minimise the impact – Monitoring results
Evidence reviewed	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide – Waste Act (28.01.2004). https://www.riigiteataja.ee/en/eli/ee/511012023001/consolide/current
Risk rating	**Low risk** Specified 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 all legally defined forests in Estonia. **Analysis** According to the Forest Yearbook 2020 (2022), less than 70% of the annual increment in managed forest land is harvested since 2012. According to the National Forest Inventory record, in 2019 out of a total annual increment in all Estonian forests of 16.7 million m^3, about 11.35 million m^3 of wood (7.35 million m^3 from private forests and about 4 million m^3 from state forests) was harvested.

2.2.9 continued *Findings continued*	According to the Forestry Development Plan 2012-2020 (Ministry of the Environment 2011), the total annual wood harvesting in Estonian forests ranged from 7 to 11 million m^3 in most years while the annual increment was consistently above 14 million m^3. The amount was in line with sustainable development principles, i.e. the harvesting rate did not exceed the annual increment and thus gave the potential to meet the long-term economic, social, and environmental needs. According to the Forestry Development Plan 2012–2020, the sustainable cutting rate was 12-15 million m^3 per year. The Forestry Development Plan until 2030 (Ministry of the Environment 2023) is also proposing a sustainable wood harvesting rate that will further decrease. **Enforcement and monitoring** The main planning document, where the assessment of inventory data and subsequent planning, implementation and monitoring are defined for forest owners, is the Forest Management Plan. Forest management plans are prepared for a period of ten years and include forest inventory analyses, monitoring results and a description of the management impact of the previous period. During the preparation process of a new management plan, all relevant data are collected and together with analyses of previous management cycles, shall be fed back into new management planning and consequently into operational practice. Forest Management Plans are developed according to the Forest Act which is enforced by the Ministry of the Environment through the Environmental Board. **Risk conclusion and justification** As the above analysis suggests, annual wood harvesting levels in Estonia stay below annual increment and thus this indicator is given a low-risk class.
Means of verification	– Harvesting records, inventory and growth data and yield calculations – Operational Practice – Inventory data – Relevant legislation
Evidence reviewed	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2011). Forestry Development Plan 2012-2020 http://www.envir.ee/sites/default/files/elfinder/article_files/mak2020vastuvoetud.pdf – Ministry of the Environment. (2023a). Forestry Development Plan until 2030. Tallinn, Estonia. – Sirkas, F. & Valgepea, M. (ed.). (2022). Forest Yearbook 2020. The Environment Agency, 2022. – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
Risk rating	**Low risk** Specified risk

2.2.10	**Harvested areas shall be regenerated.**
Findings	**Scale of assessment** The scale of assessment covers the regeneration of all harvested areas in all legally defined forests in Estonia. **Analysis** Concerning requirement (ii), according to Articles 24 and 25 of the Forest Act, a forest owner must regenerate a regular harvested site – through artificial, natural or a combination of both means – within two to five years and in case of a special site like pristine or drained peatland forest within 10 years after harvesting. A forest owner can be fined up to EUR 1,300 per ha of harvested area for not complying with the above rule. The Environmental Board enforces the above rule and imposes fines for non-compliance. There is no evidence that the above rule is violated in Estonia on any notable scale. **Enforcement and monitoring** The Ministry of Climate with the support of the Environmental Board and State Forest Management Centre enforces the Forest Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement is effective. **Risk conclusion and justification** There is appropriate legislation in place in Estonia to ensure the regeneration of areas harvested for sourcing feedstock for biomass production as the above analysis suggests. Regular monitoring of such legislation is conducted and reported by designated authorities. Therefore, it is concluded that the risk rating for this Indicator is 'low risk'.
Means of verification	– Relevant web pages of the Environmental Board and Ministry of the Environment – Statistics Estonia – Relevant Estonian national acts, laws, and regulations
Evidence reviewed	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278 – Ministry of the Environment: Estonian Forestry Development Plan until 2030. https://envir.ee/MAK2030 – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
Risk rating	**Low risk** 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 legally defined forests in Estonia. **Analysis** The Forest Act and Fire Safety Act define the general requirements for the establishment of anti-fire lines in forests. These Acts also set the procedures for the organisation of fire extinguishing systems in the state and private forests. According to the legislation, forest fires must be put out. In some special cases (to imitate natural processes) it is allowed to burn down the forest stands, but this is done in controlled conditions. Estonian forests are divided into five categories according to the burning classes: very low, low, medium, high, and very high threat of fire. Forest management of the state and private forests is done based on the forest management plans where the procedures and measures to verify that natural processes, fires, pests, and diseases are managed appropriately are defined. Every forest management plan as the main planning document includes the measures for forest protection against pests, diseases, natural calamities etc. Preventive measures to be used by forest owners are as follows: monitoring and regular check-up and forecast of possible diseases and pests, the establishment of the damage level for diseases and pests according to environmental impact assessment, operational, mechanical, and chemical measures, the analyses of the effectiveness of preventive measures, biological and chemical products, sanitation cuttings, trees for insect traps and quarantine. In Estonia, the fire prevention and monitoring system covers all forests. According to the Forest Yearbook 2020, there were 24 forest fire incidents causing damage to 86 ha of forests and all of these were caused by human activities (80% were caused by careless forest visitors). Historically, the number of incidents related to fire, pests and disease and resultant forest damage (in terms of area) have been low in Estonia (Sirkas & Valgepea 2022). **Enforcement and monitoring** Forest management plans are developed according to the Forest Act and related acts which are enforced by the Ministry of the Environment through the Environmental Board. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation and regulations in Estonia. This suggests the enforcement is effective. **Risk conclusion and justification** As the above analysis suggests the impacts of natural processes such as fires, pests and disease are limited and well-managed in Estonia and thus this indicator is given a low-risk class.
Means of verification	– Regional Best Management Practices – Supply contracts – Inventory data – Relevant legislation – Monitoring results

2.2.11 continued *Evidence reviewed*	– Fire Safety Act (05.05.2010). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/511012023006/consolide – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Sirkas, F. & Valgepea, M. (ed.). (2022). Forest Yearbook 2020. The Environment Agency, 2022. – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
Risk rating	**Low risk** Specified risk
2.2.12	**Genetically modified (GM) trees shall not be used.**
Findings	**Scale of assessment** The scale of assessment covers the use of genetically modified (GM) trees for feedstock sourcing. **Analysis** There is no commercial use of GM trees in Estonia. According to Environmental Board and other public sources, there are no permissions given for using GMOs in Estonian forests. The EU Council Directive 1999/105/EC on the marketing of forest reproductive material regulates the marketing and production for marketing purposes of forest reproductive material within the community including Estonia. The directive prohibits placing genetically modified forest reproductive material on the market unless it is safe for human health and the environment. There are several requirements included in the directive, including a risk assessment that must be fulfilled before placing any GMO on the European market. All approved GMO species within the EU 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. There are no reports of the illegal use of GMO species in Estonian forestry. The Release into Environment of Genetically Modified Organisms Act applies to all types of organisms including forest regeneration material in Estonia. There are rules and conditions for taking GMOs to the environment. However, the Forest Act eliminates the chance of using GMOs for forest regeneration since no GMOs are included in the list of appropriate regeneration materials. **Enforcement and monitoring** The Estonian the Ministry of Climate with the support of the Environmental Board and State Forest Management Centre enforces the Forest Act and other relevant acts. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement is effective. **Risk conclusion and justification** As there is no evidence of the use of GM trees in Estonia, the risk for this indicator has been assessed as low.

2.2.12 continued *Means of verification*	– Reference sources, interviews, and records – Public reports – EU and national legislation – EU Register of Authorised GMOs
Evidence reviewed	– Categories of regeneration material and quality requirements for the regeneration material. (Kultiveerimismaterjali kategooriad, kultiveerimismaterjali algmaterjalilening kultiveerimismaterjali kvaliteedile esitatavad nõuded) (2006): https://www.riigiteataja.ee/akt/1048227?leiaKehtiv – EU Directive 1999/105/EU 22. December 1999, about marketing of forest regeneration material (NÕUKOGU DIREKTIIV 1999/105/EÜ, 22. Detsember 1999, metsapaljundusmaterjali turustamise kohta) – EU register of authorised GMO: http://ec.europa.eu/food/dyna/gm_register/index_en.cfm – EUR-Lex: "Regulating GM crops: EU countries' rights". https://eur-lex.europa.eu/EN/legal-content/summary/regulating-gm-crops-eu-countries-rights.html – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Law on the release of genetically modified organisms into the environment (Geneetiliselt muundatud organismide keskkonda viimise seadus) (2004): https://www.riigiteataja.ee/akt/108072014010?leiaKehtiv – Release into Environment of Genetically Modified Organisms Act (14.04.2004). https://www.riigiteataja.ee/en/eli/503122020004/consolide – The regions for forest regeneration material allowed to use in Estonia (Eestis metsa kultiveerimisel kasutada lubatud kultiveerimismaterjali algmaterjali päritolupiirkonnad) (13.12.2006). https://www.riigiteataja.ee/akt/115042011002
Risk rating	**Low risk** Specified 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.
Findings	**Scale of assessment** The assessment covers all legally defined forests in Estonia in connection to the country's participation in the Paris Agreement. Route A is applied. **Analysis** Estonia ratified the Paris Climate Agreement in 2016 (UNFCCC: "Estonia") and has submitted a Nationally Determined Contribution (NDC) as an EU member state to the UNFCCC covering carbon emissions and removals from land use, land use change, and forestry (LULUCF), ensuring 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). Estonia submitted its eighth national communication and fifth biennial report under the UNFCCC in 2022 (Pärn et al. 2022, Iital et al. 2022). For the base year 1990, the historical emissions / removals for the LULUCF sector were -3.2 million tonnes of CO_2 equivalents (Pärn et al. 2022). As a member of the EU, Estonia's climate policy is guided by the EU 2020 climate and energy package and 2030 climate framework, being also based on the UNFCCC, Kyoto Protocol, and the Paris Agreement requirements. Common policies of the EU play a major role in the implementation of international agreements (Iital et al. 2022). The national emission reduction targets are presented in Estonia's National Energy and Climate Plan 2030 (NECP 2030). For the whole LULUCF sector, Estonia's target is that emissions must not be greater than capture in 2030 (NECP 2030). However, it is pointed out during the stakeholder consultation that the plan does not present a means to accomplish the target. **Enforcement and monitoring** Estonia has thus far done all the required reporting and review related to the Paris Agreement. The reporting is subject to multilateral assessment.

3.1.1 continued *Findings continued*	**Risk conclusion** Based on the evidence provided above, the risk for non-conformance with this indicator is classified as 'low'.
Means of verification	– UNFCCC website and NDC registry – UNFCCC national communications and biennial reports – National plans
Evidence reviewed	– Estonia's 2030 National Energy and Climate Plan (NECP 2030). Estonia's Communication to the European Commission under Article 3(1) of Regulation (EU) No 2012/2018. Final version 19 December 2019. – 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 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Iital, A., Kaasik, A., Pärn, C-T., Kupri, H-L., Miilvee, I., Banyasz, I., Meltz, K., Joa, K., Joon, K., Puusepp, K., Ristkok, K., Maasikmets, M., Kaasik, M., Jakobi, R., Meriküll, S-A., Stõkov, S. (2022). Estonia's Eighth National Communication under the United Nations Framework Convention on Climate Change. Prepared by the Estonian Environmental Research Centre, Ministry of the Environment, and University of Tartu. – Pärn, C-T., Meriküll, S-A., Kupri, H-L., Maasikmets, M., Štõkov, S., Puusepp, K., Sepp, A., Joa, K., Karu, H. & Suursalu, E. (2022). Estonia's fifth biennial report under the United Nations Framework Convention on Climate Change. Prepared by the Estonian Environmental Research Centre and the Estonian Environment Agency. – UNFCCC: "Estonia". https://unfccc.int/node/61061
Risk rating	**Low risk** Specified 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.

3.2.1 continued

Findings

Scale of assessment

The assessment covers all legally defined forests in Estonia. The Estonian National Forest Inventory (NFI) conducted by the Estonian Environment Agency includes the assessment of forest carbon stocks and sinks. The Estonian national GHG emissions reporting made under the UNFCCC and the Kyoto Protocol includes the reporting of current and projected GHG removals and emissions.

Analysis

The latest NFI-based forest statistics including forest land-use change, forest cover, forest conversion and other related information are available from the Forest Yearbook 2020 (Sirkas & Valgepea 2022). The monitoring data and forest inventory indicate that up until 2017 the total forest and other wooded land area was increasing but in recent years it has first stabilised and then decreased between 2019 and 2020 (the Statistical Office: "Forest"). Similarly, the total standing stock peaked in 2017 and has stabilised since (Sirkas & Valgepea 2022).

In 2020, the total standing stock of Estonian forests was 472 million m^3, with annual growth of 16 million m^3 and an estimated total felling volume of 13.2 million m^3 (Sirkas & Valgepea 2022). Despite the stabilisation and eventual slight decline in the forest area and the standing stock, the annual increment has been higher than the annual felling volume (The Statistical Office: "Forest"). The data from previous NFIs suggest that carbon storage in wooden biomass on forest land peaked in 2017 and has stabilised since along with the total standing stock (Sirkas & Valgepea 2022; The Statistical Office: "Forest").

According to Estonia's latest national inventory report to the UNFCCC (Ministry of the Environment, 2023b), the forest land category of the LULUCF sector was a net emission sink between 1990 and 2017 but in 2018 it became a net emitter having been that also in 2020 and 2021 (Ministry of Environment, 2023b). According to the report, this is mostly due to the higher proportion of mature and near-mature stands and thus overall slower increment and the decreased capacity of carbon sequestration in biomass (Ministry of Environment, 2023b). The slower rate of afforestation also plays a significant role (Ministry of Environment, 2023b). However, the annual felling volumes have also been rapidly increasing since 2009 (Sirkas & Valgepea 2022) which most likely plays a significant role in the issue. Data for 2021 and 2022 shows that forest land category became a net emission sink again due to slightly lower cutting rate compared to previous couple of years (Ministry of Climate, 2024).

Different studies and reports have been done that suggest varying potential paths for the future development of Estonian forest carbon stocks depending on the forest management scheme, mainly the annual felling level, applied. A 2020 report, "Forest and Climate Change", analysed five scenarios with different felling levels (one with no felling, four with varying felling levels, the scenario with the highest felling level being a "maturity felling scenario" where all mature stands in the commercial forests would be felled within 10 years after reaching maturity).

In two scenarios, maturity felling and the felling based on 10-year reference, the forest growing stock would decrease in the coming decades recovering slowly, remaining under the current level until 2080-2090 (Forest and Climate Change, Figure 9 (Joonis 9)). In the uniform felling scenario, the forest growing stock would steadily increase throughout the period. The highest growing stock throughout the whole period would be in the no-fellings scenario.

Pärn et al. (2022) analysed two scenarios related to forest management in Estonia's fifth biennial report to the UNFCCC and found that in the with existing measures (WEM) scenario (business-as-usual, total annual felling volume 11.5 million m^3), total forest growing stock would be approximately 11% lower in 2050 than it is now.

In the with additional measures (WAM) scenario, with the total annual felling volume being 9.4-9.8 million m^3, the forest growing stock would remain stable until 2041 and slightly increase until 2050.

The data and the projections suggest that the current level of felling will be unsustainable in the future if the current level of forest growing stock and thus forest carbon stock is desired to be maintained. The new draft of Forestry Development Plan 2030 aims for a more sustainable felling practice, and the projections based on that practice estimate that the forest carbon stocks should remain stable in the long run.

3.2.1 continued *Findings continued*	**Enforcement and monitoring** The status and development of Estonian forests are monitored yearly in the NFI organised by the Environmental Agency under the Ministry of Climate. The Forest Act regulates the directing of forestry, forest survey and management and the compensation for the damage caused to the environment within its definitions and provides for liability for the violations (Forest Act 2022). The Ministry of the Environment together with the Environmental Board organises forestry policy, the implementation of development plans in the field and the corresponding programmes. In addition, the Environmental Board checks the compliance of forest owners' planned forestry activities with the applicable legislation. A forestry development plan is prepared every 10 years and sets out the objectives of forestry development and describes the measures and means necessary for the achievement of the objectives. Reports on the implementation of the development plan must be delivered by the Estonian government at least every other year. The government has the right to impose restrictions on the size of a regeneration cutting area if there is reason to believe that the prescribed cut may exceed the increment of the managed forest. **Risk conclusion and justification** Based on the evidence reviewed, the risk for non-compliance with this indicator is concluded to be low: despite the developments, the forest carbon stock is still stable. However, as the growth of forest carbon stock has stopped and a slight decrease has been observed in recent years, the situation must be closely monitored, and this indicator should be given special consideration in the next update. Especially, if the current felling levels are maintained in the future despite the new Forestry Development Plan, the risk for this indicator must be reassessed accordingly.
Means of verification	– National forest inventory data and published results – Statistical data – Public reports and plans – Applicable legislation
Evidence reviewed	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Iital, A., Kaasik, A., Pärn, C-T., Kupri, H-L., Miilvee, I., Banyasz, I., Meltz, K., Joa, K., Joon, K., Puusepp, K., Ristkok, K., Maasikmets, M., Kaasik, M., Jakobi, R., Meriküll, S-A., Stõkov, S. (2022). Estonia's Eighth National Communication under the United Nations Framework Convention on Climate Change. Prepared by the Estonian Environmental Research Centre, Ministry of the Environment, and University of Tartu. – Ministry of the Environment: Estonian Forestry Development Plan until 2030. https://envir.ee/MAK2030 – Pärn, C-T., Meriküll, S-A., Kupri, H-L., Maasikmets, M., Štõkov, S., Puusepp, K., Sepp, A., Joa, K., Karu, H. & Suursalu, E. (2022). Estonia's fifth biennial report under the United Nations Framework Convention on Climate Change. Prepared by the Estonian Environmental Research Centre and the Estonian Environment Agency. – Sirkas, F. & Valgepea, M. (ed.). (2022). Forest Yearbook 2020. The Environment Agency, 2022. – Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest – Greenhouse Gas Emissions in Estonia 1990-2022 National inventory document submission to the European Commission https://kliimaministeerium.ee/sites/default/files/documents/2024-03/NID_EST_1990-2022_15.03.pdf
Risk rating	**Low risk** Specified 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 Estonia, there are several distinguishable forest types categorised based on e.g. species composition and site productivity. The assessment will focus on analysing whether the low-productivity types are addressed in Estonian legislation and regulations. **Analysis** Estonian forests are divided into five classes based on the classification of Estonian vegetation site types compiled by Jaanus Paal: dry and fresh forests on mineral soils, floodplain forests and shrublands, paludified forests (peat layer < 30cm), peatland forests (peat layer > 30cm), and drained peatland forests (Paal 1997). The Estonianforest typology follows the Finnish approach where forest site type is the central classification unit: site types are defined by the ground vegetation of mature or stable stands and communities having a similar undergrowth composition are merged into one type (Paal 2002). The five classes are divided into eutrophic, mesotrophic, and oligotrophic type groups based on nutrient richness, and the type groups are further classified based on characteristic ground vegetation species on mineral soils and mire types on peatlands. In addition, the forest site types are divided into forest types according to the dominating tree species. Site indexes (SI) are often used to describe the species-specific measure of forest productivity with the height of a stand at a particular age; the first ones were developed as early as the 1800s (Kędziora et al., 2020). When using the site index, productivity is usually classified from I-V with best-productivity sites in class I and lowest-productivity sites in class V (or lower). Forest productivity can be described in other ways, too: a common benchmark for low production in the boreal region is < 1 m^3 per ha per year (e.g., Hämäläinen et al., 2018, Hämäläinen et al. 2019). The definition is widely used in the region e.g. in Finnish forestry to categorise land under forest management as productive forest land ('metsämaa': forest growth >1 m^3/ ha / year), low-productive land ('kitumaa': forest growth 0.1-1 m^3/ ha / year), and non-productive land ('joutomaa': forest growth <0.1 m^3/ ha / year). According to a discussion with a local expert, outside of protected areas and areas classified as "valuable habitat types" there is no legislation or regulation explicitly prohibiting the sourcing of biomass from low-productive forest areas or areas where forest regeneration is difficult. A review of relevant Estonian legislation (Forest Act and Nature Conservation Act) confirmed the expert opinion. Those low-productive forest areas that are protected, cannot be used for primary feedstock sourcing. The stakeholder consultation suggests that only areas in which the growth is > 1 m^3/ ha / year are classified as managed forests, and forestry and primary feedstock sourcing only takes place in these managed forest areas. Moreover, the Estonian Forest Yearbook gives statistics for site quality classes 1a to 5a which are registered as forest land – classes below 5a are not registered as such. **Enforcement and monitoring** The Forest Act regulates the directing of forestry, forest survey and management and compensation for the damage caused to the environment within its definitions and provides for liability for the violations (Forest Act 2022). The Nature Conservation Act's purpose is to protect the natural environment by promoting the preservation of biodiversity through ensuring the natural habitats and the populations of species of wild fauna, flora and fungi are at a favourable conservation status, preserving natural environments of cultural or aesthetical value, or elements thereof, and promote the sustainable use of natural resources.

3.2.2 continued *Findings continued*	The Forest Act and the Nature Conservation Act are applied under the Ministry of Climate and enforced by the Estonian Environmental Board. The Forest Department of the Environmental Board organises forestry policy, the implementation of development plans in the field and the corresponding programmes. In addition, the Environmental Board checks the compliance of forest owners' planned forestry activities with the applicable legislation. **Risk conclusion and justification** Based on the evidence reviewed, the risk for non-compliance with this indicator is concluded to be low.
Means of verification	– Consultation of a local expert – Literature on Estonian forest typology – Scientific literature – Applicable legislation
Evidence reviewed	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Hämäläinen, A, Strengbom, J, Ranius, T. (2019). Low-productivity boreal forests have high conservation value for lichens. J Appl Ecol. 2020; 57: 43– 54. https://doi.org/10.1111/1365-2664.13509 – Hämäläinen, A., Strengbom, J., Ranius, T. (2018). Conservation value of low-productivity forests measured as the amount and diversity of dead wood and saproxylic beetles. Ecol Appl, 28: 1011-1019. https://doi.org/10.1002/eap.1705 – Kędziora, W., Tomusiak, R., Bore, T. (2020). Site index research: a literature review. Forest Research Papers 81: 91-98. DOI: 10.2478/frp-2020-0010 – Nature Conservation Act. (2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Paal, J. (1997). Eesti taimkatte kasvukohatüüpide klassifikatsioon. [Classification of Estonian vegetation site types]. Ministry of Environment & United Nations Environment Programme, Tallin, 297 p. – Paal, J. (2002). Estonian forest site types in terms of the Habitat Directive. Baltic Forestry. 8. 21-27.
Risk rating	**Low risk** Specified 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 Estonian National Forest Inventory (NFI) hosted by the Estonian Environment Agency includes the assessment of forest carbon stocks. Biodiversity in Estonian forests is relatively well-researched, and risks are known. **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 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).

3.2.3 continued
Findings continued

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.

Most of the Estonian forests are well-surveyed and major HCV areas are extensively identified and recorded: all data about different types of protected species, areas, and objects in the surveyed forests are collected to a state-owned database called EELIS (Eesti Looduse Infosüsteem; Environment Agency: the EELIS database). Some of this information is available to everybody, but more sensitive information is available only to authorised people and organisations.

Forest-related protected areas and species can be seen in the public forest registry (except for category I and II species habitats) (Environment Agency: "Metsaportaal" (Forest Portal)). According to the EELIS database, the Ministry of Climate (The Ministry of Climate: "Looduskaitse (Nature conservation)") and the Nature Web (Loodusveeb: "Protected areas"), there are the following protection areas in Estonia (as of 31 December 2022): Six national parks, 238 nature reserves, 147 landscape conservation areas, 311 limited-conservation areas, 456 protected parks and forest stands, 1,929 species protection sites, 12 areas with old or not renewed protection order, 24 locally protected natural objects, and 1,087 protected individual natural objects.

About 17.6% of the total forest land in Estonia is strictly protected (Statistics Estonia 2023) (no management activities allowed) and 11.9 % of the forest land area consists of limited management zones; the strictly protected forests are mostly located in state forests (Sirkas & Valgepea 2022). Thus, in total, 29.5% of forest land area is under a protection regime. All of the protected forests and limited management zones are either managed under the applicable legislation (protection plan, management plan, etc.) or are free of all management activities. The forest operations are being planned and implemented following requirements set up in the Forest Management Regulation (Rules of Forest Management).

Biologically valuable forests in Estonia belong to 10 protected habitat types defined by EU: 9010* Western Taiga, 9020* Fennoscandian hemiboreal natural old broad-leaved deciduous forests (Quercus, Tilia, Acer, Fraxinus or Ulmus) rich in epiphytes, 9050 Fennoscandian herb-rich forests with Picea abies, 9,060 coniferous forests on, or connected to, glaciofluvial eskers, 9070 Fennoscandian wooded pastures, 9080* Fennoscandian deciduous swamp woods, 9180* Tilio-Acerion forests of slopes, screes and ravines, 91D0 Bog woodland, 91E0* Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae), and 91F0 Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) (Ministry of the Environment, 2020).

Many wetland forests and very old mature forests which contain high carbon stocks have a strict protection regime enforced by legislation (Nature Conservation Act). However, even though most HCV areas and areas with high carbon stocks are protected from feedstock extraction, many such habitat types are not in good condition: forest habitats, old natural forests and swamp-deciduous forests are assessed to be in poor condition (Roasto & Tampere 2020).

Regarding the old natural forests, approximately 35% of the habitat area in Estonia is in poor condition, which has been caused by inappropriate management. However, the condition has not significantly deteriorated in the last 6 years.

Regarding the swamp-deciduous forests, approximately 43% of the habitat area is in poor condition, which is mostly caused by continuously functioning drainage and land improvement systems and their reconstruction. There are several projects underway to restore the water regime of wetland habitats which may improve the situation in the future: wetland restoration has been going on in recent years and more projects are being planned. An example of such a project is "Comprehensive management of forest and farming landscapes to improve the conservation status of Natura 2000 habitats and species" (Tallinn University, University of Tartu, State Forest Management Centre, Environmental Board, 2020-2029).

3.2.3 continued *Findings continued*	It is important to highlight that the SBP Standard does not restrict sourcing feedstock for biomass production from wetlands or peatlands. In a guidance note to indicator 2.9.1 in Standard 1 it is explained that drainage shall not be conducted on previously undrained soils (renovation of old Soviet-time drainage systems using modern engineering methods is acceptable) and should be followed in practice. No previously undrained soils should be drained. The same guidance note further explains that wetlands should remain as wetlands and peatlands should remain as peatlands. This should also be followed for all management activities in these areas. Harvesting activities and drainage restoration in peatland and wetland forests may release some soil carbon but the Standard does not currently prohibit forest management in these forests. Also, the released carbon may be absorbed by increased tree growth along the drainage project. However, despite a comprehensive legal framework and a relatively good state of HCV surveillance, the stakeholder consultation suggests that not all HCV forests are inventoried and mapped. According to the recent expert estimation – as the information obtained during the stakeholder consultation – about 3,000 ha of woodland key habitats (WKH, 'väariselupaik' in Estonian) is yet to be conclusively inventoried in the country. Moreover, Kiis et al. (2021) estimated that about 49% of the forest area under the Natura 2000 network is not covered by the forest habitat inventory. Thus, there is a risk that areas with combined attributes of HCV and high carbon stock remain unidentified. **Enforcement and monitoring** The Forest Act regulates the directing of forestry, forest survey and management and compensating the damage caused to the environment within its definitions and provides for liability for the violations (Forest Act). The Nature Conservation Act's purpose is to protect the natural environment by promoting the preservation of biodiversity through ensuring the natural habitats and the populations of species of wild fauna, flora, and fungi are at a favourable conservation status, preserving natural environments of cultural or aesthetical value, or elements thereof, and promote the sustainable use of natural resources. The Forest Act and the Nature Conservation Act are applied under the Ministry of Climate and enforced by the Estonian Environmental Board. The Forest Department of the Environmental Board organises forestry policy, the implementation of development plans in the field and the corresponding programmes. In addition, the Environmental Board checks the compliance of forest owners' planned forestry activities with the applicable legislation. **Risk conclusion and justification** Based on the evidence reviewed, the risk for non-compliance with this indicator is concluded to be specified. Related to the risk conclusion, see also indicators 2.1.1 and 2.1.3.
Means of verification	– Applicable legislation and regulations – Public reports – Public maps, databases and registries – Websites of government agencies and ministries
Evidence reviewed	– Environment Agency: "Metsaportaal" (Forest Portal). https://register.metsad.ee/#/ – Environment Agency: the EELIS (Eesti Looduse Infosüsteem) database. https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est

3.2.3 continued *Evidence reviewed continued*	– 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) – European Commission. (2019). The European Green Deal. Brussels, 11.12.2019. – European Commission. (2020). EU Biodiversity Strategy for 2030: "Bringing nature back into our lives". Brussels, 20.5.2020. – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ķēniņa L, Jaunslaviete I, Liepa L, Zute D, Jansons Ā. (2019). Carbon Pools in Old-Growth Scots Pine Stands in Hemiboreal Latvia. Forests. 10. https://doi.org/10.3390/f10100911 – Kiis, M., Kuresoo, L., Lilleväli, U. (2021). How well are protected forests of high conservation value cared for? Estonian Fund for Nature and Estwatch. – Land Improvement Act (16.05.2018). – Loodusveeb: "Protected areas". https://loodusveeb.ee/en/themes/protected-natural-objects-and-conservation-procedure/protected-areas – Luyssaert, S., Schulze, E. D., Börner, A., Knohl, A., Hessenmöller, D., Law, B., Ciais, P., Grace, J. (2008). Old-growth forests as global carbon sinks. Nature. 455: 213-215. 10.1038/nature07276 – Ministry of the Environment. (2020). Annex I: Article 17 National Summary Factsheet. Lists of habitats and species reported by the Member State with the overall conclusions of conservation status and overall conservation status trend for the reporting period 2007-2012 and 2013-2018. – Molina-Valero, J. A., Camarero, J. J., Álvarez-González, J. G., Cerioni, M., Hevia, A., Sánchez-Salguero, R., Martin-Benito, D., Pérez-Cruzado, C. (2021). Mature forests hold maximum live biomass stocks. Forest Ecology and Management. 480. https://doi.org/10.1016/j.foreco.2020.118635 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current – Nord-Larsen, T., Vesterdal, L., Bentsen, N. S., Larsen, J. B. (2019). Ecosystem carbon stocks and their temporal resilience in a semi-natural beech-dominated forest. Forest Ecology and Management. 447: 67-76. https://doi.org/10.1016/j.foreco.2019.05.038 – Roasto, R. & Tampere, U. (ed.). (2020). Eesti looduse kaitse aastal 2020 (Estonian year of nature protection 2020). The Environment Agency, Tallinn. – Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide – Seedre, M., Kopáček, J., Janda, P., Bače, R., Svoboda, M. (2015). Carbon pools in a montane old-growth Norway spruce ecosystem in Bohemian Forest: Effects of stand age and elevation. Forest Ecology and Management. 346:106-113. https://doi.org/10.1016/j.foreco.2015.02.034 – Sirkas, F. & Valgepea, M. (ed.). (2022). Forest Yearbook 2020. The Environment Agency, 2022. – The Environmental Board: "Forest notification and forest register". https://keskkonnaamet.ee/en/wildlife-nature-protection/forestry/forest-notification-and-forest-register – The Ministry of the Environment: "Looduskaitse (Nature conservation)". https://envir.ee/elusloodus-looduskaitse/looduskaitse
Risk rating	Low risk **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 Estonian Forest Act regulates the directing of forestry, forest survey and management and compensations for the damage caused to the environment within its definitions and provides for liability for the violations which are major sources of woody feedstock in the country. The Energy Sector Consolidation Act provides the measures for achieving the national target of energy efficiency, the principles for promoting renewable energy, and the requirements for improving energy efficiency and the parties on whom obligations are imposed in the public as well as in the private sector (Energy Sector Organisation Act). **Analysis** The Estonian Forest Act provides the main legislative framework for forestry in the country. The Act neither 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. Based on expert consultation, Estonian legislation does not restrict the use of wood for energy purposes in any way. In practice, mostly low-quality wood is used, but nothing – except the economic reasons[7] – prohibits the use of higher-quality wood for energy purposes. Wood-based biomass makes up a significant proportion of the fuel used in energy production: 2.8 million m^3 of wood chips and waste was used in energy production in 2022; the share of wood-based energy of the total energy production was 34.7% (Statistikaamet: "KE033"). Estonia's 2030 National Energy and Climate Plan (NECP 2030) states that biomass use will be "in line with the environmental sustainability and biodiversity conservation aspects and biomass sustainability criteria under the Renewable Energy Directive". The Energy Sector Consolidation Act provides the measures for achieving the national target of energy efficiency, the principles for promoting renewable energy, and the requirements for improving energy efficiency and the parties on whom obligations are imposed in the public as well as in the private sector (Energy Sector Organisation Act). However, neither addresses the cascading use of wood. Even though no legislation or regulation is preventing the use of high-quality wood for energy purposes, the stakeholder consultation suggests that in practice, there is no evidence of frequent, large-scale wood sales against the cascade principle. Timber and pulpwood prices have consistently been higher than biomass prices (Environmental Investment Centre (Eramets): "Puidu hinnainfo"; State Forest Management Centre: "Metsamaterjali hinnastatistika"). According to the stakeholder consultation, the Estonian wood processing industry is strong, and the bio-energy sector does not compete with it. The recently agreed REDIII addresses the principles of cascading use which will be adopted by the member states. **Enforcement and monitoring** The Ministry of Economic Affairs and Communications sets the national energy efficiency targets, prepares the national energy efficiency action plan, and completes an analysis of meeting the national renewable energy target provided by the Energy Sector Organisation Act.

7 As there is a high demand for quality wood, its price is much higher than for the energy wood, and thus there is no reason for the timber producer to sell the high-quality wood for energy. The mentioned 15.6% is most probably mainly branches and strains of the trees, that have few other uses. However, it has to be noted that Estonia is sparsely populated country, and many small forest owners use the wood for heating their own households.

3.3.1 continued *Findings continued*	**Risk conclusion and justification** Based on the evidence provided above, it is concluded that even though there are no legislative or regulatory requirements related to the issue, the markets have most likely thus far steered the use of wood according to the cascade principle and the risk for non-compliance can be considered to be low. However, the developments both in biomass demand and price must be considered when reassessing this indicator in the future. The market alone might not be enough to ensure the cascading use of wood in the coming years.
Means of verification	– Consultation of a local expert – Relevant Estonian legislation and regulations – Relevant reports – Statistical data
Evidence reviewed	– Energy Sector Organisation Act (16.06.2016). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/528102022001/consolide – Environmental Investment Centre (Eramets) : "Puidu hinnainfo". https://www.eramets.ee/uuringud-ja-statistika/hinnainfo/ – Estonia's 2030 National Energy and Climate Plan (NECP 2030). Estonia's Communication to the European Commission under Article 3(1) of Regulation (EU) No 2012/2018. Final version 19 December 2019. – State Forest Management Centre: "Metsamaterjali hinnastatistika". https://media.rmk.ee/files/Metsamaterjali_hinnastatistika_2023-04.xlsx – Statistikaamet: "KE033 (Production of power plants and consumption of fuels for energy generation)". https://andmed.stat.ee/en/stat/majandus__energeetika__energia-tarbimine-ja-tootmine__aastastatistika/KE033
Risk rating	**Low risk** Specified 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** Freedom of association and the right to collective bargaining is a fundamental right in Estonia in all sectors of the economy. The risk assessment focuses on national legislation that protects the rights in line with international law.

4.1.1 continued *Findings continued*	**Analysis** Estonia has ratified the ILO Convention 87 on 'Freedom of Association and Protection of the Right to organise' and ILO Convention 98 'Right to organise and collective bargaining' and the national legislation is in conformance with the objectives and conditions of the signed Convention. The Trade Unions Act (2000) provides for the general rights of the activities of trade unions and their relations with the state, authorities and employers. The Act protects the rights for establishing and being a member of trade unions and for their competence in collective bargaining. Article 29 of the Estonian Constitution establishes that workers are free to form and join trade unions and workers have the right to strike for protecting their economic and social interests. Persons have the right to freely join or not to join trade unions and trade unions may form federations (Trade Unions Act, Article 4). A minimum of five employees may form a trade union. Trade unions have the right to represent employees collectively and individually. They may also represent non-member employees under his / her consent. If employees' rights for work or unequal treatment are restricted by the employer due to the membership of a trade union, the employee is entitled to claim correction of the situation and/or compensation (Trade Union Act, Article 20). The Estonian Trade Union Confederation (EAKL) comprises 15 branch unions that represent public and private sector workers in the administration, education, services, industries and transport sectors. The Estonian Forestry Workers' Union (EMA) is a member of EAKL. By law, workers have the right but no obligation to join trade unions and the threshold to form a trade union is low. Collective agreements are made between the specific trade union (e.g. forestry) and each company. The State Forest Management Centre (RMK) has an agreement with the trade union. Membership of trade unions has decreased significantly since 2000. In 2015, about 18–19 % of employees were covered by either industry- or company-level collective agreements. The binding national-level minimum wage agreement covers all employees and employers. **Enforcement and monitoring** The Gender Equality and Equal Treatment Commissioner enforces the laws related to the equal rights of all societal groups. The Estonian Labour Inspectorate under the authority of the Ministry of Social Affairs has the responsibility for the implementation of work environment policy, national supervision of requirements of legal acts regulating health and safety at work and labour relations in the work environment, notification of the general public, employees and employers about hazards in the work environment, and resolution of individual labour disputes at an extra-judicial labour dispute resolution body. In the Labour Inspectorate, the Supervision Department is responsible for making employment rights effective and supervising requirements of legal acts regulating labour relations and the working environment. Employers are required to register their employees in the electronic Employment Register before the employee starts work. The Register contains up-to-date data on employment in one place. It creates efficiencies for the public sector stakeholders who use the data as well as making it easier for employers who can input and track their details in one single registration system. The Estonian Tax and Customs Board (ETCB) maintains the register. **Risk conclusion and justification** Based on the evidence reviewed, the risk for non-compliance with this indicator is concluded to be low.
Means of verification	– Existing legislation – Level of enforcement – Public information

Annex 1 Detailed findings for Supply Base Evaluation continued

4.1.1 continued *Evidence reviewed continued*	– Estonian Forestry Workers' Union (Eesti Metsatöötajate Ametiühing (EMA)): "Avaleht". http://www.emtay.ee/ – European Platform Undeclared Work. Good practice fiche: https://ec.europa.eu/social/BlobServlet?docId=17227&langId=en¨European Commission. (2017). Factsheet on Undeclared Work – Estonia. https://ec.europa.eu/social/ajax/BlobServlet?docId=18160&langId=en – Gender Equality and Equal Treatment Commissioner: "Võrdsete võimaluste volinik" (homepage). https://volinik.ee/en/ – ILO conventions (relevant sections for legal employment have been incorporated into Estonian Legislation by the Employment Contracts Act and the Trade Unions Act). – ILO: "NATLEX database – Estonia (302)". https://www.ilo.org/dyn/natlex/natlex4.countrySubjects?p_lang=en&p_country=EST – ILO: Homepage. https://www.ilo.org/ – ILO: NORMLEX information system – Ratifications for Estonia". https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102620 – Kallaste, E. (2019). Chapter 9: Estonia: simultaneous institutionalisation and waning of collective bargaining. In Müller, T., Vandaele, K., Waddington, J. (ed.). (2019). Collective bargaining in Europe: towards an endgame. Volume I. ETUI aisbl, Brussels, 2019. – Labour Inspectorate: "Avaleht | Tööinspektsioon". https://www.ti.ee/ – Ministry of Social Affairs: "Kollektiivlepingute andmekogu" (Collective agreements): https://klak.sm.ee/index.html – The Estonian Trade Union Confederation (Eesti Ametiühingute Keskliit (EAKL)): "Avaleht". http://www.eakl.ee/ – Trade Unions Act (14.06.2000). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023006/consolide
Risk rating	**Low risk** Specified risk
4.1.2	**Forced or compulsory labour shall not be used.**
Findings	**Scale of assessment** Estonia has ratified the ILO Convention 29 on Forced Labour and 105 on the Abolition of Forced Labour. It also respects other international laws protecting human rights. Estonia has ratified the ILO Convention concerning Forced or Compulsory Labour No I-507. Pursuant to the Estonian Penal Code (Article 133) placing a person, with or without financial gain, in a situation where he is forced to ..., work under abnormal conditions, ... or perform any other repulsive obligation, as well as keeping a person in such a situation, if the act has been committed deprivation of liberty, violence, fraud, the threat of harm, dependence on another person, exploitation of a helpless state or a vulnerable state, is prohibited. A vulnerable state is considered in the Penal Code to be a situation where a person does not have a real or acceptable possibility of not fulfilling any of the mentioned obligations. **Analysis** According to the Constitution of the Republic of Estonia (Article 29) forced labour is prohibited. The Ministry of Social Affairs is responsible for implementing ILO Conventions and related national laws and taking all measures to avoid forced or compulsory labour in the country.

4.1.2 continued
Findings continued

The Estonian Tax and Customs Board (ECTB) maintains a mandatory workers' register where all employers shall register all persons that work for them for pay or voluntarily. The registration obligation has decreased the share of undeclared work that has a higher risk to include some form of forced labour.

The objectives of the introduction of the employment register are:

- to reduce the use of illegal labour, to improve the protection of employees' social rights
- to simplify and streamline the work of the tax authorities, to increase the availability of electronic data and bring information relating to employment into a single system, to reduce the administrative burden on employers and various public sector stakeholders
- to simplify the operating principles of the social guaranteed system.

Data from the employment register is used by a number of stakeholders e.g. to:

- determine health insurance
- determine unemployment benefits (on termination of employment)
- monitor the working conditions of migrant workers
- monitor and investigate accidents at work
- verify tax compliance (labour taxes).

Citizens of third countries must be registered with the police, in the case of working as a posted employee with the Labour Inspectorate, or as an employee of an Estonian enterprise in the employment register. The registration ensures that foreign employees also have access to health insurance and other statutory benefits.

The Employment Contract Act (2008) (Article 1) states that if a person does work for another person which, under the circumstances, can be expected to be done only for remuneration, it is presumed to be an employment contract. The law applies to work done for another person under his / her management and control where the employer is supposed to pay remuneration for the work. In forestry, the workforce is usually employed locally in rural communities. Workers are mostly Estonian citizens.

Enforcement and monitoring

The Gender Equality and Equal Treatment Commissioner enforces the laws related to the equal rights of all societal groups. The Estonian Tax and Customs Board (ETCB) maintains mandatory workers register where all employers shall register all persons that work for them for pay or voluntarily. The Labour Inspectorate addresses any appeals on activities that conflict with labour laws.

The Labour Inspectorate has good online information on human trafficking and forced labour with contact information for victim helplines. The Labour Inspectorate also inspected in 2021 undeclared and illegally working persons in co-operation with the Police and Border Guard Board and the Tax and Customs Board. The Labour Inspectorate as well as the Tax and Customs Board have taken measures to minimise the risk of forced or undeclared work in the supply chains.

Risk conclusion and justification

Based on the information on legislation and its enforcement through workers' registration and the Labour Inspections based on sampling or provided tips, the risk for forced labour in forestry work is deemed low in Estonia.

4.1.2 continued *Means of verification*	– Existing legislation – Level of enforcement – Public information
Evidence reviewed	– Employment Contract Act (17.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023009/consolide – Equal Treatment Act (11.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022003/consolide – European Commission. (2017). Factsheet on Undeclared Work – Estonia. https://ec.europa.eu/social/ajax/BlobServlet?docId=18160&langId=en – Gender Equality and Equal Treatment Commissioner: "Võrdsete võimaluste volinik" (homepage). https://volinik.ee/en/ – ILO conventions (relevant sections for legal employment have been incorporated into Estonian Legislation by the Employment Contracts Act and the Trade Unions Act). – Labour Inspectorate : "Labour exploitation". https ://www.ti.ee/en/foreign-worker/labour-exploitation – Trade Unions Act (14.06.2000). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023006/consolide
Risk rating	**Low risk** Specified risk
4.1.3	**Child labour shall not be used.**
Findings	**Scale of assessment** In 1992, Estonia ratified the UN Convention on the 'Rights of the Child' and ILO Convention 182 on 'Worst Forms of Child Labour'. The Ministry of Social Affairs is responsible for implementing this convention and taking all measures to protect the rights of the children. The Employment Contracts Act permits entry into employment contracts with a minor of 13 years of age for light work in agriculture or other sectors. Thereby, the employer must take into consideration that the work provided to a child may not entail a contract with working environment risk factors that are prohibited for children. Employers are not required to apply for the Labour Inspectorate's permission for employing a young person under 15 years of age; however, they must ask for the permission of the parent for hiring a child aged 7-14. **Analysis** The terms and conditions of employment for under-age workers are regulated in the Employment Contracts Act. There are very strict rules for the types of jobs and working time and hours that children under the age of 18 are allowed to do and agreements that conflict with the law are void. **Enforcement and monitoring** The Ministry of Social Affairs is responsible for managing the protection of children's rights. **Risk conclusion and justification** Based on the analysed information, the risk of using child labour in forestry work is estimated to be low.

4.1.3 continued *Means of verification*	– Existing legislation – Level of enforcement – Public Information
Evidence reviewed	– Employment Contract Act (17.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023009/consolide – ILO: NORMLEX Information system – Convention 182. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312327 – Labour Inspectorate. (2021). Annual Report of Work Environment 2021. – Labour Inspectorate: "Labour exploitation". https ://www.ti.ee/en/foreign-worker/labour-exploitation – UN: Convention on the Rights of the Child. https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child
Risk rating	**Low risk** Specified risk
4.1.4	**Workers shall not be discriminated in hiring, remuneration, access to training, promotion, termination or retirement.**
FIndings	**Scale of assessment** In Estonia prohibition of discrimination is governed by various legislative acts, for example, the Equal Treatment Act, the Gender Equality Act, the Employment Contracts Act, the Penal Code and other legal instruments and policy documents include relevant provisions. The Equal Treatment Act (2008) aims at ensuring the protection of persons against discrimination on grounds of nationality (ethnic origin), race, colour, religion or other beliefs, age, disability or sexual orientation. It provides for 1) the principles of equal treatment 2) duties upon implementation and promotion of the principle of equal treatment 3) the resolution of discrimination disputes. The scope of the Act specifically addresses protection against discrimination in access to employment and promotions and also entry into an employment contract or contracts for the provision of services, appointment to office, working conditions, remuneration and cancellation or termination of contracts etc. In addition, it requires equal access to vocational guidance and training. The Gender Equality Act (2004) aims at ensuring equal treatment of men and women as provided for in the Constitution and to promote equality in all areas of social life. The Act also specifies the types of discrimination including the conditions for remuneration or conditions for the provision and receipt of benefits at work. **Analysis** Estonia has ratified ILO Convention 111 on Discrimination, and Convention 100 on Equal Remuneration, and relevant sections have been incorporated into Estonian Legislation by the Employment Contracts Act and the Trade Unions Act. The Equal Treatment Act (2008) prohibits direct discrimination or harassment i.e. a person is treated less favourably than another based on his/her ethnic origin, religion, disability or sexual orientation etc. The Act also protects the persons who have filed a discrimination complaint or supported a person who has filed such a complaint.

4.1.4 continued
Findings continued

Pursuant to the Gender Equality Act employers shall aim at hiring a balanced share of men and women to different positions and ensure equal treatment of them upon promotion. They shall also create working conditions which are suitable for both women and men and enhance the reconciliation of work and family life, taking into account the needs of employees. Employers shall also protect workers from any gender-based harassment and sexual harassment in the working environment.

The legislation on equal treatment covers the common potential types of discrimination at work. The UN Human Rights Council's report (2021) states that measures have been taken to raise employers' awareness of discrimination and improve their willingness and ability to act. The Labour Inspectorate have a good Internet site for information and links for appeals procedures.

UN Human Rights Council's report (2021) states that to combat discrimination in the labour market, the Ministry of Social Affairs together with the Estonian Human Rights Centre and other agencies have made:

- Efforts to raise the awareness of employers, where cooperation with civil society plays an important role. The Ministry of Social Affairs in co-operation with the Estonian Human Rights Centre has launched a Diverse Workplace label to recognise companies that systematically promote diversity
- In 2020, the Ministry of Social Affairs initiated an Equal Treatment Campaign to break stereotypes and prejudices regarding different minority groups, promote understanding and solidarity among various social groups and reduce discrimination by setting a good example
- The Chancellor of Justice and the Gender Equality and Equal Treatment Commissioner are playing an important role in promoting equality and ensuring and exercising supervision over compliance with current legislation.

The gender pay gap of 21.8% (2018) in Estonia is still the widest in the EU (Eurostat) although it has decreased since 2012 and the country has taken measures to increase gender equality.

Enforcement and monitoring

The non-discrimination laws are under the competence of the Ministry of Social Affairs. The Gender Equality and Equal Treatment Commissioner enforces the laws related to the equal rights of all societal groups. The Commissioner is an independent and impartial expert who acts independently, monitors compliance with the requirements of this Act and the Gender Equality Act and performs other functions imposed by law.

Pursuant to the Equal Treatment Act or Gender Equality Act a person suspected of discrimination shall provide a written explanation within fifteen working days after receiving a written request from the person who believes that he/she has been discriminated against.

In cases brought to the Court, the Labour Dispute Committee or the Gender Equality and Equal Treatment Commissioner lay down the facts available on discrimination. It is the task of the respondent to prove that there has been no breach of the principle of equal treatment. Discrimination disputes shall be resolved by a court or a labour dispute committee. Discrimination disputes shall be resolved by the Chancellor of Justice by way of a conciliation procedure.

The enforcement of the Gender Equality Act has compatible enforcement procedures. The Equal Treatment and Gender Equality Acts oblige all government sectors to promote equal treatment and to monitor compliance with the Acts in their sectors. The requirement for equal treatment applies also to part-time workers and workers contracted through agencies. Relevant collective agreement or in the absence of an agreement, the employee rights in similar work in the region set the baseline for the assessment of equal treatment.

The Working Conditions of Employees Posted to Estonia Act (2004) applies to EU and Swiss or Norwegian workers sent to Estonia for a specific time by their foreign employers. The work conditions shall respect the Estonian laws if they ensure equal or better benefits compared to the laws of the country of origin. The Labour Inspectorate is the responsible authority of the Act. Posted workers may raise claims in line with the Estonian legislation and judiciary system e.g. on discrimination.

4.1.4 continued *Findings continued*	**Risk conclusion and justification** Based on available information on legislation and enforcement procedures on discrimination and monitoring information on raised appeals, the risk for discriminatory activities in forestry work is estimated to be low.
Means of verification	– Existing legislation – Level of enforcement – Monitoring information – Company policies indicate that the requirements are met
Evidence reviewed	– Equal Treatment Act (11.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022003/consolide – Gender Equality Act (07.04.2004). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022002/consolide – Gender Equality and Equal Treatment Commissioner: "Võrdsete võimaluste volinik" (homepage). https://volinik.ee/en/ – ILO: NORMLEX Information system – Convention 100. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312245:NO – ILO: NORMLEX Information system – Convention 111. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312256:NO – Labour Inspectorate: "Applicable law and working conditions". https://www.ti.ee/en/foreign-worker/applicable-law-and-working-conditions – Labour Inspectorate : "Labour exploitation". https ://www.ti.ee/en/foreign-worker/labour-exploitation – UN Human Rights Council: "OHCHR Dashboard". https://indicators.ohchr.org/ – UN Human Rights Council: Universal Periodic Review, Third Cycle (2021). All UPR's for Estonia: https://www.ohchr.org/en/hr-bodies/upr/ee-index – Working Conditions of Employees Posted to Estonia Act (17.03.2004). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/517102022003/consolide
Risk rating	**Low risk** Specified 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** Estonia has a defined minimum wage that increased to EUR 725 per month in 2023, i.e. EUR 4.30 per hour. The minimum wage was agreed in an agreement between the Estonian Trade Union Confederation and the Estonian Employers' Confederation. A total of 6.8% of all employees earned below EUR 725 in 2022. **Analysis** The minimum wage was raised by 11% in 2023. With the current, exceptional inflation rate it does not strengthen adequately the incomes of low-income households. The average gross salary in Estonia in the 3rd quarter of 2022 was EUR 1,679. In forestry and timber processing the salaries are above the average levels. In wood processing the gross salary was EUR 1,792 and in paper production EUR 1,761. In forestry the salary has been higher, almost EUR 2,200.

4.1.5 continued *Findings continued*	Pursuant to the Employment Contract Act, all work shall be conducted under a signed work contract that specifies e.g. conditions of payment, the place of work and a job description. **Enforcement and monitoring** The Estonian State Labour Inspectorate, the Estonian Tax and Customs Board and the Police Department take active measures to prevent undeclared or other forms of unauthorised work where payment levels may be unreasonably low. Workers register their income information and all employees must be registered; this also contributes to minimising the risk of illegal and underpaid work. The register of workers also records information on wages paid. **Risk conclusion and justification** Based on the legislation and enforcement procedures in force, the risk for underpaid work in forestry is low.
Means of verification	– Existing regulations – Level of enforcement
Evidence reviewed	– Ministry of Social Affairs: "The minimum wage increases to 725 euros in 2023". https://www.sm.ee/en/news/minimum-wage-increases-725-euros-2023 – Statistics Estonia. www.stat.ee (2023) – Working Conditions of Employees Posted to Estonia Act (17.03.2004). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/517102022003/consolide – Employment Contract Act (17.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023009/consolide
Risk rating	**Low risk** Specified 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 Estonia. The Employment Contracts Act regulates the working time and minimum times for rest and holidays as well as the family and study leaves. **Analysis** Pursuant to the Employment Contract Act employer shall ensure the agreed-to work and rest time and keep account of working time. General working time in Estonia is eight hours a day, five days per week. The duration of the annual vacation is 28 days, and the number of annual public holidays is 12. Over a seven-day period, the employee may work a maximum of 48 hours and in exceptional cases 52 hours. The employer shall give breaks during a working day and a 0.5-1-hour lunch break that is not work time. Between consecutive working days, the employee shall have at the minimum an 11-hour rest period and 48-hour consecutive rest time in a week. The working hours are significantly restricted for persons of minor age and the number of allowed working hours is even lower if the work is done within the school year. An employee with independent decision-making capacity in his/her task may agree in written form with the employer to organise their own working time regardless of the detailed legal requirements. The legislation defines the terms for working overtime and states that overtime shall be compensated with a payment of 1.5 times the wage or with time off 1:1.

4.1.6 continued *Findings continued*	**Enforcement and monitoring** The Labour Inspectorate is the government agency addressing all complaints related to the Employment Contract Act. Employers are obliged to follow the working time of each employee. **Risk conclusion and justification** Based on the information on applicable legislation and enforcement, the risk of working illegal hours is estimated to be low in forestry work.
Means of verification	– Applicable legislation – Enforcement Working Environment Authority under the Ministry of Employment – Public information on labour conditions
Evidence reviewed	– Employment Contract Act (17.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023009/consolide – Estonian State Portal (Riigiportal): "Working time and rest periods, overtime". https://www.eesti.ee/en/work-and-labor-relations/working-and-rest-time/working-time-and-rest-periods-overtime – ILO: "OHAS country profile – Estonia". https://www.ilo.org/global/topics/safety-and-health-at-work/country-profiles/europe/estonia/WCMS_156046/lang–en/index.htm
Risk rating	**Low risk** Specified 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** Healthcare is the application of work-related organisational and medical measures to prevent damage to the health of an employee. Occupational safety is a system of work-related organisational measures and technical means to provide such a state of the working environment which enables an employee to work without endangering their health. **Analysis** The Estonian Tax and Customs Board obliges employers to register all employees at the latest when they start work. The registration brings the persons under tax rules and gives them access to public benefits. The registration obligation applies also to foreign workers, although they do not have an Estonian ID code. All employees registered and earning at least EUR 654 per month have Public Health Insurance regardless of the hours they work. The Insurance funding is collected in social tax. The Insurance covers medical expenses and the Insurance Fund pays compensation e.g. for work-related diseases or damages. The Occupational Health and Safety Act (1999) requires that in addition to this public health care, employers shall organise occupational health and safety services for employees. An employer shall ensure conformity with occupational health and safety requirements in all work-related situations, implement prevention activities, monitor the occupational safety situation, organise a risk assessment, and create and implement an action plan to increase occupational safety.

4.1.7 continued
Findings continued

An employee shall comply with an occupational health and safety order of the employer, a working environment specialist, an occupational health doctor, a labour inspector and a working environment representative. Pursuant to the Occupational Health and Safety Act, the employer shall provide occupational health services with the services of occupational health doctors, nurses and other specialists, where necessary. The Act specifies the qualifications and obligations of occupational health service providers (e.g. private companies).

The doctor shall review the risks in the working environment and carry out a medical examination of employees based on the risk assessment within four months of the time the employee commences work and at least every three years (minors every year). The examinations are carried out during working time and at the cost of the employer.

The employer and employees shall have an organisation in the workplace to enable and monitor occupational health and safety:

Working environment specialist: an employee whom the employer has authorised to perform occupational health as a safety responsibility (may also be the employer).

Working environment representative: elected by employees to represent health and safety issues and monitor measures taken and notify risks identified. Collective labour agreements may additionally specify the duties and rights of the representatives.

Working environment council is a body for co-operation between an employer and the employees' representatives which resolves occupational health and safety issues in the enterprise, monitors the situation and plans improvements.

The **Advisory Committee on Working Environment** is an advisory board in the Ministry of Social Affairs which assesses and suggests improvements to occupational health and safety at the national level.

Pursuant to the Equal Treatment Act, employees who perform duties by way of temporary agency work shall not be subjected to less favourable conditions of occupational health and safety, working and rest time and remuneration for work than those applied to comparable employees of the user undertaking. Employees who perform duties by way of temporary agency work are entitled to use, during the period of performing duties, the benefits of the user undertaking.

It is important to realise that only employment contracts ensure social protection in the event of occupational accidents. For example, persons working under contracts for service or self-employed persons are not covered by social protection.

Enforcement and monitoring

The Occupational Health and Safety Act sets comprehensive requirements for the implementation and monitoring of occupational health and safety at work. The employer has clear responsibilities to do risk assessments and take measures to prevent health risks at work. Employee representatives and a joint council of employer and employee members give additional oversight and improvement measures. These company-level structures are enforced with the occupational health service provider that the employer shall contract to improve the health and safety of workers and to provide medical services to employees.

The Labour Inspectorate enforces the implementation of the law and carries out regular checks in workplaces. The employer shall also conform to the reporting obligations of the Labour Inspectorate. The supervision and monitoring of the Labour Inspectorate covered about 89% of the employed people in Estonia (2021).

Risk conclusion and justification

The risk that workers are deprived of access to the services of occupational health care and safety is low.

4.1.7 continued *Means of verification*	– Legislation – Description of occupational health and safety system – Enforcing entities
Evidence reviewed	– Equal Treatment Act (11.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022003/consolide – Estonian State Portal (Riigiportal): "Occupational health and safety". https://www.eesti.ee/en/health-and-care/occupational-health/occupational-health-and-safety – Estonian Tax and Customs Board: "Employment registration". https://www.emta.ee/en/business-client/registration-business/employment-register/employment-registration – Labour Inspection: "Temporary agency work and job mediation". https://www.tooelu.ee/en/40/temporary-agency-work-and-job-mediation – Occupational Health and Safety Act (16.04.1999). https://www.riigiteataja.ee/en/eli/ee/520032019007/consolide/current – Work in Estonia: "Register short-term working". https://www.workinestonia.com/coming-to-estonia/register-short-term-working/
Risk rating	**Low risk** Specified 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** Estonia has curricula for academic and vocational training in forestry and natural resources management. The Institute of Forestry and Rural Engineering gives university-level education on e.g. natural resources management and forest management. Practical training is arranged by the Järvselja Training and Experimental Forest Centre. Luua Forestry School is the only vocational school in Estonia specialising in forestry. It offers vocational education and re-training courses for adults, especially in harvesting and skidding works. **Analysis** Pursuant to the Equal Treatment Act (2008), employees shall have non-discriminated access to access to e.g. vocational guidance, vocational training, advanced vocational training and retraining, and practical work experience. The availability of trained / competent forest workers has been good in Estonia. Workers usually have permanent contracts and about 11% are employed temporarily in forestry and 2.7% in wood and paper industries. The Forestry Development Plan until 2030 records that about 44% of forestry workers have vocational education and 36% do not have formal professional education. The Plan estimates that the need for competent forestry workers will increase in the future. The training curricula include elements of responsible forest management and address the provisions of Estonian forest, environmental and social legislation. Professional training in general and availability of competent workers in forestry are sufficient to implement relevant elements of the SBP standards. It is not guaranteed that the employers ensure the above.

4.1.8 continued *Findings continued*	**Enforcement and monitoring** Biomass producers are responsible for ensuring that all SBP standards are respected in biomass production and procurement. **Risk conclusion and justification** The Estonian legislation prohibits discrimination related to vocational training. The level of professional training as well as availability of competent workers in forestry sector is satisfactory. For this reason, the risk is classified as low.
Means of verification	– Existing legislation – Level of enforcement – Training information
Evidence reviewed	– Equal Treatment Act (11.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022003/consolide – Ministry of the Environment: Estonian Forestry Development Plan until 2030. https://envir.ee/MAK2030
Risk rating	**Low risk** Specified risk
4.1.9	**Mechanisms shall be in place for resolving grievances and disputes in the workplace.**
Findings	**Scale of assessment** Labour rights-related conflicts are defined as work-related disputes, that involve an employer and one employee or groups of employees. **Analysis** In case of work-related problems, the solution should be primarily sought from the employment contract, a collective labour agreement, a legal act, or an administrative act. If the dispute cannot be solved between the employer and employee(s), an appeal can be filed to the Labour Dispute Committee. It is an extrajudicial authority within the Labour Inspectorate. The Committee consist of a chairperson and representatives from federal-level professional associations representing employees and employers. The decision of the committee is binding for both parties. The Labour Dispute Resolution Act governs the establishment and the rules of procedure of labour dispute committees and the procedure for the resolution of a labour dispute. The work contract-related information is filed by the employer to the employment register (kept by the Tax and Customs Board). If the dispute is on the filed information, the decision may be that Labour Dispute Committee corrects the information. Labour disputes that cannot be solved internally may also be brought to court but not if the case is already submitted to the Labour Dispute Committee. **Enforcement and monitoring** The Labour Inspectorate has procedures to address unsolved labour conflicts. Trade unions also give support to arbitrate conflicts related to the implementation of collective agreements. **Risk conclusion and justification** Estonian society has good mechanisms to address labour conflicts. The risk of not finding appropriate grievance procedures is low.

4.1.9 continued *Means of verification*	– Existing legislation – Level of enforcement – Institutional framework for labour-related grievance procedures
Evidence reviewed	– Estonian State Portal (Riigiportal): "Labour dispute". https://www.eesti.ee/en/work-and-labor-relations/working-bases/labour-dispute – Labour Dispute Resolution Act (14.06.2017). https://www.riigiteataja.ee/en/eli/ee/506022018004/consolide/current – Labour Inspectorate: "Resolution of a labor dispute in a Labor Dispute Committee of an employee posted to Estonia". https://www.ti.ee/en/foreign-worker/resolution-labor-dispute-labor-dispute-committee-employee-posted-estonia – Land Board: "Land reform". https://maaamet.ee/en/land-transactions-land-cadastre/land-reform
Risk rating	**Low risk** Specified 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** Health and safety in forestry activities are monitored by the Labour Inspectorate. The Occupational Health and Safety Act provides the occupational health and safety requirements set for work performed by employees. The Act also defines the rights and obligations of an employer and an employee in creating and ensuring a working environment which is safe for health. **Analysis** The Occupational Health and Safety Act (1999) requires that in addition to public health care (Public Health Insurance), employers shall organise occupational health and safety services for employees. Risk assessment is the responsibility of the employer and the occupational health provider. An employer shall ensure conformity with occupational health and safety requirements in all work-related situations, implement prevention activities, monitor the occupational safety situation, organise a risk assessment, and create and implement an action plan to increase occupational safety. According to the Labour Inspectorate's statistics for 2021, there were 3.4 accidents per 1,000 employees (20 accidents in 2021) in the forestry sector which is a fairly low rate compared with the other sectors. In the timber industry, the accident rate was the highest, with 19.3 accidents per 1,000 employees (356 accidents in 2021). The number of reported occupational accidents has had an increasing trend which is partly due to the higher rate of reporting to the Labour Inspectorate. However, the level of serious accidents has been quite stable. Small and medium-sized companies are overrepresented in serious accidents. Typical breaches to the requirements were related to health and safety procedures, for example, risk assessments were missing or were not according to requirements, no internal controls were in place, a lack of safety instructions for the machinery, insufficient training for workers and violations of health control requirements. Especially in state forestry, felling operations are conducted by professional contractors. They pay attention to work safety and the rules on the wearing of safety gear and equipment are well respected.

4.1.10 continued *Findings continued*	The accidents occurring to self-employed forestry workers are not recorded in the statistics of the Labour Inspectorate. In a recent decade, there have been about one to three fatalities per year related to felling activities with chain saws, which deserves attention. In commercial logging, almost all fellings are conducted by harvesters owned by larger professional contractors that typically invest in workplace safety. The obligation to register employees also contributes to improved safety at work. Ongoing control visits are also conducted by the Labour Inspectorate, which helps in improving the gaps that have been identified. **Enforcement and monitoring** An employer must investigate all occupational accidents and, if necessary, involve a specialist in the investigation. A working environment representative or, in their absence, an employee's trustee must participate in the investigation as well. Employers shall report to the agency and employee within three days after closing the investigation. Only if an occupational accident relates to a minor injury which does not result in a temporary incapacity to work can the employer decide the way of investigation; there is no obligation to submit a report to Labour Inspectorate. In any case, the employer shall take preventive measures to avoid further accidents. **Risk conclusion and justification** Based on the legislation and its enforcement as well as the existing procedures to address occupational risks and accidents, the health and safety risks in forest biomass procurement are estimated to be low.
Means of verification	– Existing legislation – Level of enforcement – Labour Inspectorate reports
Evidence reviewed	– Estonian State portal (Riigiportaal): "Occupational accident". https://www.eesti.ee/en/health-and-care/occupational-health/occupational-accident – Estonian State portal (Riigiportaal): "Occupational health and safety". https://www.eesti.ee/en/health-and-care/occupational-health/occupational-health-and-safety – FSC certificates and audit reports: https://connect.fsc.org/fsc-public-certificate-search – Occupational Health and Safety Act (16.04.1999). https://www.riigiteataja.ee/en/eli/ee/520032019007/consolide/current
Risk rating	**Low risk** Specified 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** In Estonian land use planning, community interests are expressed during the various processes of spatial planning. In addition, designated plans may be developed or special consultations held e.g. if interests on land use are very conflicting. Spatial planning creates the preconditions for long-term balanced spatial development that is democratic and considers the needs and interests of the members of society. Spatial plans are divided into four main categories: the national spatial plan, the county-wide spatial plan, the comprehensive plan, and the detailed spatial plan. Most decisions related to land use and construction are made at a local government level because the local governments have the right to prepare comprehensive plans, local government-designated spatial plans and detailed plans. Local governments are legally largely autonomous in planning. Environmental impact assessment (EIA) may also include consultation with local communities. In Estonia, EIAs are, in general, not required in regular forestry operations. However, pursuant to the Environmental Impact Assessment and the Environmental Management System Act, an EIA is required, if a significant operation is located on Natura 2000 site. **Analysis** Woody biomass is mainly procured from forest land where the Forestry Act (2006) sets the outlines for the management of the forests and also the user rights of visitors. The forest owner must submit a forest notification to the Environmental Board concerning planned cuttings, except cleaning roadsides, ditches etc. which gives prior information to the government on the planned operation. Local and national level stakeholders regularly raise concerns about the harvesting of high conservation value forest areas. Spatial planning, implementation of the Forest Act (2006) and forest certification are measures to minimise the risk that harvesting measures cause conflict with local communities. Certification audits require consideration of third-party opinions on forest management. **Enforcement and monitoring** The Environmental Board enforces implementation of the Forest Act. Local governments ensure that land use is in line with the applicable land-use plans. **Risk conclusion and justification** Based on the current information the risk for negative social impacts due to forestry operations are deemed to be low.
Means of verification	– Current legislation on land use planning and environmental impact assessment

4.2.1 continued *Evidence reviewed*	– Environmental Impact Assessment and Environmental Management System Act (22.02.2005). https://www.riigiteataja.ee/en/eli/ee/529082019016/consolide/current – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Ministry of Finance: "Spatial Planning". https://www.fin.ee/en/state-local-governments-spatial-planning/spatial-planning
Risk rating	**Low risk** Specified risk
4.2.2	**Feedstock sourcing shall positively contribute to the local economy, including employment.**
Findings	**Scale of assessment** Feedstock sourcing supports the local economy by providing employment opportunities and/or by bringing material or human investments to the region / community. Increased resources and economic activity diversify the business structure and create drivers for employment opportunities. **Analysis** The State Forest Management Centre (RMK) manages state forests that cover about 40% of the forest area. The harvesting and many forestry operations are contracted to private subcontractors. Forestry workers live usually in rural communities that benefit from the incomes generated by their activities. Private commercial forestry is also fairly consolidated with a few larger companies that use mechanised harvesting chains. They also employ workers from rural communities. Most of the harvested round wood is processed inside Estonia. About 5-6% of the occupied workforce in Estonia is directly linked to the forestry sector. In addition, forestry generates employment in other sectors i.e. transportation and processing, machinery etc. Most forestry jobs are situated in rural areas so local forestry may be directly or indirectly a major livelihood provider. In the European context, the share of forestry workers in the total workforce is high. Forest and wood industries contribute to 5% of the Estonian GDP and 25% of the value-added production of manufacturing industries (2017). Woody biomass for energy is largely procured as a side product in timber harvesting and processing. Since the financial crisis investments in wood industries have increased from EUR 70 million to EUR 370 million (https://estoniantimber.ee/statistics/). **Enforcement and monitoring** Data analysis of economic development in Estonia monitors the regional and national importance of forest and wood industries in the economic and social development of the country. **Risk conclusion and justification** The risk that biomass sources would have negative implications for local communities is low.
Means of verification	– Analysis of economic development in the country – Public information

Annex 1 Detailed findings for Supply Base Evaluation continued

4.2.2 continued *Evidence reviewed*	– Estonian Forest and Timber Industries Association: "Statistics". https://estoniantimber.ee/statistics/ – Ministry of the Environment: "Forestry". https://envir.ee/en/water-forest-resources/forestry
Risk rating	**Low risk** Specified 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** The main necessities of local communities are related to recreation and mushroom and berry picking. These activities are important for many people for leisure or perquisite income. **Analysis** The right to get free access to the forests is guaranteed in the Constitution of the Republic of Estonia, the Forests Act and the General Part of the Environmental Code Act. With few exceptions, all forests are available for berry and mushroom picking. Exceptions include only the nature reserves and berry plantations in the forests. Estonian forest cover is 51% of the land area and various succession-stage forests are available in the landscape. Forest management activities do not play a significant role in relation to community necessities related to food or water supplies. The Nature Conservation Act and the protection rules regulate, among others: water management, protected natural objects, forest harvesting, fishing, hunting and berry and mushroom picking in areas under protection. **Enforcement and monitoring** The Environmental Board enforces forest and environmental codes. **Risk conclusion and justification** The risk that biomass production hampers the basic needs of local communities is low.
Means of verification	– Legislation protects the public access to forests and the right to use non-wood forest products
Evidence reviewed	– Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – General Part of the Environmental Code Act: https://www.riigiteataja.ee/en/compare_original/524032015004 – Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current
Risk rating	**Low risk** Specified risk

4.2.4	**Legal, customary, and traditional tenure and use rights of indigenous people and local communities related to the supply base shall be identified, documented, and respected.**
Findings	**Scale of assessment** The Estonian Constitution and functioning administration protect the legal and tenure rights of people. Forest-related heritage values are protected by the Heritage Conservation Act. Customary rights in forests are stipulated by Forest Act. The state of Estonia does not report on any indigenous groups in the country. However, the Võro and Seto people have recently declared themselves as indigenous people. The United Nations (UN) has not adopted any definition of indigenous people. The UN emphasises the power of people to evaluate whether they regard themselves as indigenous people in line with the following characteristics the UN lists as a basis for the indigenous term: – Self-identification as indigenous peoples at the individual level and accepted by the community as their member – Historical continuity with pre-colonial and/or pre-settler societies – Strong link to territories and surrounding natural resources – Distinct social, economic or political systems – Distinct language, culture and beliefs – Form non-dominant groups of society – Resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities. According to the UN, the most fruitful approach is to identify, rather than define indigenous peoples. This is based on the fundamental criterion of self-identification as underlined in a number of human rights documents. The Seto and Võro people have their language/dialect and culture which are recognised and supported by the state. The traditional territories of the Seto people are in South-East Estonia, next to the border with Russia and those of Võro people are in the counties of Võro, Põlva and parts of Valga County. There are about 20,000 persons identifying themselves as Setos and 70,000 persons identifying themselves as Võros. In addition to the groups above, there are several recognised culturally distinct groups in Estonia. Some groups have special rights to continue with traditional activities e.g. the Ruhnu and Kihnu people have special rights to hunt seals. **Analysis** Tenure rights are protected by the Estonian Constitution. Land Portal Foundation[8] reported that in 2020 83.3% of Estonian people saw it as very unlikely that they could lose the right to use their property or part of it against their will in the next five years. The value was 34. Best out of 139 countries. Land reform was initiated on 1 November 1991, with the adoption of the Land Reform Act. It was carried out by the Government of the Republic through the Land Board, county governors, and local governments and it is now completed.

8 Land Portal Foundation – is a public benefit organisation registered in the Netherlands, established on 8 September 2014.

4.2.4 continued *Findings continued*	Customary rights to forest use include berry / mushroom picking and collecting other non-timber products during the daytime (except in strict nature reserves and during the nesting season of protected species). Camping and campfires require permission from the landowner. All the forest management plans are publicly available and interested persons can see these upon need. The State Forest Management Centre (RMK) also has harvesting plans uploaded on its homepage. The State Forests are FSC-certified, therefore the managers have stated that they are willing to discuss customary rights-related questions with stakeholders. There is no specific risk that forestry would conflict with the traditional forest use of the ethnic communities. Cross-trees and sacred forest sites are protected by relevant legislation. The cultural meaning of forests and their use is widely acknowledged in society and among ethnic groups. **Enforcement and monitoring** Customary rights to use forests are defined in the Forest Act which is enforced by the Environmental Board. The Heritage Conservation Act is enforced by the National Heritage Board and local governments. **Risk conclusion and justification** The risk of violating customary rights or the tenure and other rights of indigenous/ethnic groups in forestry is low.
Means of verification	– Customary and traditional tenure and use rights are identified and documented – Interviews with local communities and other stakeholders indicate that their rights are respected – Appropriate mechanisms to resolve disputes exist – Agreements exist regarding these rights
Evidence reviewed	– https://www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf – https://fennougria.ee/en/peoples/baltic-finnic-peoples/estonians/ – Heritage Conservation Act (20.02.2019). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/513122020003/consolide – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Land Portal: "Estonia". https://www.landportal.org/voc/regions/estonia
Risk rating	**Low risk** Specified 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** For individuals or groups of people, the legislation provides the grievance mechanisms related to tenure rights, use rights or administration / management decisions. Properties and rights for their use are registered in the Land Register. Land classification e.g. the different categories of protected sites (nature reserve, specified protection area and restriction area) define the scale of allowed management practices. Appeals on tenure rights and land use (e.g. forestry) can be made e.g. to the Environmental Board and Court.

4.2.5 continued
Findings continued

Analysis

Grievances and disputes, including those relating to tenure and use rights and forest management practices, are regulated by basic legislation e.g. the Constitution, the Forest Act and labour laws.

In addition, the State Forest Management Centre (RMK) has its additional procedures which regulate the registration, investigation and application of relevant actions to solve disputes with private persons and local communities.

In case people are not satisfied with the results of a grievance process, there is always the possibility to turn to a court of justice. The planned harvesting operations are in the public register "Metsaportaal" and they can be challenged within 30 days after being issued.

The recent conflict between NGOs and the forestry administration (Environmental Board) originates from differing views on the obligation to have an environmental impact assessment (EIA) before issuing harvesting rights to forests on restriction areas that are also part of the Natura 2000 network. The issue was brought to court by NGOs and up until now the lower court levels stipulated that the EIA shall be done before issuing harvesting permits. The level of harvesting volumes has also been debated between the forestry sector, politicians and NGOs.

The forestry sector, including private and public forest organisations, should improve the dialogue with environmental non-governmental organisations (ENGOs) and develop grievance mechanisms that could address the conflicts related to forest management at a lower level than a court. Such an approach would strengthen socially and environmentally sustainable management of forests. Court decisions do not necessarily contribute to the overall sustainability of forest management.

Enforcement and monitoring

Land tenure rights are recorded in the land register whose maintenance is co-ordinated by the Ministry of Justice. The Land Cadastre compiles land-related information in the public interest. It is maintained by the Ministry of Climate. Both registers are fully electronic and accessible to the public. Customary rights to use forests are defined in the Forest Act which is enforced by the Environmental Board.

Resolving conflicts with stakeholders, e.g. NGOs, on forest policy, harvesting levels, nature protection and use of wood would require national-level dialogue between politicians and relevant parties in state and private forestry, timber industry and stakeholders.

To conclude, there are appropriate grievance mechanisms in place to address tenure or specific land use-related conflicts. The procedures to deal with national-level concerns on the forest policy and impacts of intensive forest management are discussed in public without other formal procedures bringing the unresolved issues to court if there is a concern of breaching a law. The current NGO appeal to the court demonstrates that third parties can bring forest management-related conflicts to court.

Risk conclusion and justification

The grievance procedures to address tenure rights and land use-related conflicts are available and accessible to concerned parties and in relevant cases also to third parties.

At the national level, the mechanisms to improve the dialogue with stakeholders should be improved to resolve the conflicts related to forest management before an appeal to the court. At the supply base level, the existing grievance procedures are satisfactory.

The risk of failing to meet this indicator is considered to be low.

4.2.5 continued *Means of verification*	– Existing legislation – Level of enforcement – Institutional framework for land use-related grievances – Grievance case
Evidence reviewed	– Estonian Land Register: https://kinnistusraamat.rik.ee/Login.aspx? – European Land Registry Association (ELRA): "Land Registries & Cadastres". https://www.elra.eu/contact-point-contribution/estonia/land-registries-cadastres-5/ – European Commission. (2017). Factsheet on Undeclared Work – Estonia. https://ec.europa.eu/social/ajax/BlobServlet?docId=18160&langId=en FERN (2019): "Estonian Forest NGOs under pressure after challenging government forestry decision". https://www.fern.org/publications-insight/estonian-forest-ngos-under-pressure-after-challenging-government-forestry-decision-2062 – Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Save the Forest (Päästame Eesti Metsad): ENGO Petition (Dec 8, 2020). https://savetheforest.ee/en/estonian-forest-petition/ – State Forest Management Center (Riigimetsa Majandamise Keskus (RMK)): "Forest management". https://www.rmk.ee/for-a/forest
Risk rating	**Low risk** Specified 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** In Estonia, there are no native indigenous peoples. **Analysis** In Estonian land use planning, community interests are expressed during the various processes of spatial planning. Most decisions related to land use and construction are made at a local government level because the local governments have the right to prepare comprehensive plans, local government-designated spatial plans and detailed plans. Local governments are legally largely autonomous in planning. FSC and PEFC certifications also require consideration of local stakeholder views in forestry and appropriate compensations should be in place. **Enforcement and monitoring** Local governments ensure that land use is in line with the applicable land-use plans. **Risk conclusion and justification** The risk for violation of the requirements for remediation processes and compensations is deemed low.

4.2.6 continued *Means of verification*	
Evidence reviewed	
Risk rating	**Low risk** Specified risk
4.2.7	**Designated cultural heritage sites shall be preserved.**
Findings	**Scale of assessment** Estonia has two UNESCO World Heritage Sites, but none of them is a forest nature site. Estonia has listed eight areas of wooded meadows in the tentative list of World Heritage Sites. **Analysis** Cultural heritage is organised by the Ministry of Culture, the National Heritage Board, and rural municipality and city governments. The National Heritage Board organises, among others, heritage conservation work and heritage conservation areas. The Heritage Cultural Act (2019) stipulates on preservation and diversity of cultural heritage e.g. by protection of archaeological finds and protected archaeological sites and safeguarding intangible cultural heritage. Forestry interests occur rarely in heritage conservation areas or protected archaeological sites protected by the Act but the Act stipulates the measures to be taken if operations on these areas are planned and also on the possible buffer-zones around the areas. The safeguarding of intangible cultural heritage means the creation of conditions to ensure the viability of intangible cultural heritage. It may mean, among others, practices, knowledge, skills, expressions or spaces associated with people and sometimes in a synergy of people and nature. Archaeological finds, if encountered e.g. in forestry operations, belong to the state and may not be damaged before submission to the Board. **Enforcement and monitoring** The National Heritage Board and local governments enforce the Act. **Risk conclusion and justification** The risk of damage to cultural heritage sites in forestry operations is low.
Means of verification	– Existing legislation – Level of enforcement

4.2.7 continued *Evidence reviewed*	– Estonian State Portal (Riigiportaal): "Heritage conservation". https://www.eesti.ee/en/culture-and-leisure/culture/heritage-conservation – Heritage Conservation Act (20.02.2019). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/513122020003/consolide – UNESCO World Heritage Convention: "States Parties". https://whc.unesco.org/en/statesparties/
Risk rating	**Low risk** Specified 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.
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 Martin Küttim	Working Body Member. Estonian forestry, certification and bioenergy expert.
Mr Kristjan Maasalu	FSC Eesti.
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

- BISE (Biodiversity Information System for Europe): "Estonia". https://biodiversity.europa.eu/countries/estonia
- Building Act (15.05.2002). https://www.riigiteataja.ee/en/eli/513122013003/consolide
- Categories of regeneration material and quality requirements for the regeneration material. (Kultiveerimismaterjali kategooriad, kultiveerimismaterjali algmaterjalilening kultiveerimismaterjali kvaliteedile esitatavad nõuded) (2006): https://www.riigiteataja.ee/akt/1048227?leiaKehtiv
- Chatham House. (2023). "Forest Governance and Legality". https://forestgovernance.chathamhouse.org/
- CITES (Loodusliku loomastiku ja taimestiku ohustatud liikidega rahvusvahelise kaubanduse konventsioon) 1973: https://www.riigiteataja.ee/akt/12813058
- Elering: "Elektrituru käsiraamat". https://elering.ee/elektrituru-kasiraamat/3-eesti-elektrisusteem/32-tootmine/321-elektritootmiseks-kasutatavad
- Elering: "Renewable energy charge". https://elering.ee/en/renewable-energy-charge
- Electricity Market Act (11.02.2003). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/530062023003/consolide
- Employment Contract Act (17.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023009/consolide
- Energy Sector Organisation Act (16.06.2016). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/528102022001/consolide
- Environment Agency: "Metsaportaal" (Forest Portal). https://register.metsad.ee/#/
- Environment Agency: the EELIS (Eesti Looduse Infosüsteem) database. https://infoleht.keskkonnainfo.ee/default.aspx?state=2;1525036761;eng;eelisand;;&lang=est
- Environmental Board (Keskkonnaamet): "Avaleht" (Welcome to the Estonian protected areas page!). https://kaitsealad.ee/en/map
- Environmental Board: "Forest notification and forest register". https://keskkonnaamet.ee/en/wildlife-nature-protection/forestry/forest-notification-and-forest-register
- Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en
- Environmental Board: "The Environmental Board suspends felling in forest habitats in the Natura area". https://keskkonnaamet.ee/en/news/environmental-board-suspends-felling-forest-habitats-natura-area
- Environmental Impact Assessment and Environmental Management System Act (22.02.2005). https://www.riigiteataja.ee/en/eli/ee/529082019016/consolide/current
- Environmental Investment Centre (Eramets) : "Puidu hinnainfo". https://www.eramets.ee/uuringud-ja-statistika/hinnainfo/
- Environmental monitoring information system KESE (Keskkonnaseire infosüsteem KESE) : https://kese.envir.ee/kese/welcome.action
- Equal Treatment Act (11.12.2008). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022003/consolide
- Equipment Safety Act (18.02.2015). https://www.riigiteataja.ee/en/eli/ee/510042019003/consolide
- Estonia's 2030 National Energy and Climate Plan (NECP 2030). Estonia's Communication to the European Commission under Article 3(1) of Regulation (EU) No 2012/2018. Final version 19 December 2019.
- Estonian Forest and Timber Industries Association: "Statistics". https://estoniantimber.ee/statistics/
- Estonian Forestry Workers' Union (Eesti Metsatöötajate Ametiühing (EMA)): "Avaleht". http://www.emtay.ee/
- Estonian State Portal (Riigiportaal): "Heritage conservation". https://www.eesti.ee/en/culture-and-leisure/culture/heritage-conservation

Annex 3 List of publications used continued

- Estonian State portal (Riigiportaal): "Occupational accident". https://www.eesti.ee/en/health-and-care/occupational-health/occupational-accident
- Estonian State portal (Riigiportaal): "Occupational health and safety". https://www.eesti.ee/en/health-and-care/occupational-health/occupational-health-and-safety
- Estonian State Portal (Riigiportal): "Labour dispute". https://www.eesti.ee/en/work-and-labor-relations/working-bases/labour-dispute
- Estonian State Portal (Riigiportal): "Working time and rest periods, overtime". https://www.eesti.ee/en/work-and-labor-relations/working-and-rest-time/working-time-and-rest-periods-overtime
- Estonian Tax and Customs Board: "Employment registration". https://www.emta.ee/en/business-client/registration-business/employment-register/employment-registration
- Estonian Tax and Customs Board: "Private client | Estonian Tax and Customs Board". https://www.emta.ee/en
- EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium.
- EU Directive 1999/105/EU 22. December 1999, about marketing of forest regeneration material (NÕUKOGU DIREKTIIV 1999/105/EÜ, 22. Detsember 1999, metsapaljundusmaterjali turustamise kohta)
- EU Glossary Item: "Land with high carbon stock". https://knowledge4policy.ec.europa.eu/glossary-item/land-high-carbon-stock_en
- EU register of authorised GMO: http://ec.europa.eu/food/dyna/gm_register/index_en.cfm
- 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)
- EUR-Lex: "Regulating GM crops: EU countries' rights". https://eur-lex.europa.eu/EN/legal-content/summary/regulating-gm-crops-eu-countries-rights.html
- European Commission. (2019). The European Green Deal. Brussels, 11.12.2019.
- European Commission. (2020). EU Biodiversity Strategy for 2030: "Bringing nature back into our lives". Brussels, 20.5.2020.
- 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
- European Land Registry Association (ELRA): "Land Registries & Cadastres". https://www.elra.eu/contact-point-contribution/estonia/land-registries-cadastres-5/
- European Platform Undeclared Work. Good practice fiche: https://ec.europa.eu/social/BlobServlet?docId=17227&langId=en
- European Commission. (2017). Factsheet on Undeclared Work – Estonia. https://ec.europa.eu/social/ajax/BlobServlet?docId=18160&langId=enFelling permit form and requirements data on felling permits, requirements for registration, requirements for proceed and deadline. (Metsateatisel esitatavate andmete loetelu, metsateatise vorm, esitamise, tagastamise, registreerimise ja menetlemise kord ning tähtajad) (2017): https://www.riigiteataja.ee/akt/115082017009
- FERN (2019): "Estonian Forest NGOs under pressure after challenging government forestry decision". https://www.fern.org/publications-insight/estonian-forest-ngos-under-pressure-after-challenging-government-forestry-decision-2062
- Fire Safety Act (05.05.2010). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/511012023006/consolide
- Forest Act (07.06.2006). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide
- FSC certificates and audit reports: https://connect.fsc.org/fsc-public-certificate-search

Annex 3 List of publications used continued

- FSC. (2017). Centralised National Risk Assessment for Estonia (FSC-CNRA-EE V1-0 EN). https://fsc.org/en/document-centre/documents/resource/309
- Gender Equality Act (07.04.2004). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507032022002/consolide
- Gender Equality and Equal Treatment Commissioner: "Võrdsete võimaluste volinik" (homepage). https://volinik.ee/en/
- General Part of the Environmental Code Act (16.02.2011). https://www.riigiteataja.ee/en/eli/517062022003/consolide
- Hämäläinen, A, Strengbom, J, Ranius, T. (2019). Low-productivity boreal forests have high conservation value for lichens. J Appl Ecol. 2020; 57: 43– 54. https://doi.org/10.1111/1365-2664.13509
- Hämäläinen, A., Strengbom, J., Ranius, T. (2018). Conservation value of low-productivity forests measured as the amount and diversity of dead wood and saproxylic beetles. Ecol Appl, 28: 1011-1019. https://doi.org/10.1002/eap.1705
- Heritage Conservation Act (20.02.2019). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/513122020003/consolide
- Iital, A., Kaasik, A., Pärn, C-T., Kupri, H-L., Miilvee, I., Banyasz, I., Meltz, K., Joa, K., Joon, K., Puusepp, K., Ristkok, K., Maasikmets, M., Kaasik, M., Jakobi, R., Meriküll, S-A., Stõkov, S. (2022). Estonia's Eighth National Communication under the United Nations Framework Convention on Climate Change. Prepared by the Estonian Environmental Research Centre, Ministry of the Environment, and University of Tartu.
- ILO conventions (relevant sections for legal employment have been incorporated into Estonian Legislation by the Employment Contracts Act and the Trade Unions Act).
- ILO: "NATLEX database – Estonia (302)". https://www.ilo.org/dyn/natlex/natlex4.countrySubjects?p_lang=en&p_country=EST
- ILO: "OHAS country profile – Estonia". https://www.ilo.org/global/topics/safety-and-health-at-work/country-profiles/europe/estonia/WCMS_156046/lang–en/index.htm
- ILO: Homepage. https://www.ilo.org/
- ILO: NORMLEX Information system – Convention 100. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312245:NO
- ILO: NORMLEX Information system – Convention 111. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312256:NO
- ILO: NORMLEX Information system – Convention 182. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312327
- ILO: NORMLEX information system – Ratifications for Estonia". https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102620
- Income Tax Act (15.12.1999). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/503012023004/consolide
- Kallaste, E. (2019). Chapter 9: Estonia: simultaneous institutionalisation and waning of collective bargaining. In Müller, T., Vandaele, K., Waddington, J. (ed.). (2019). Collective bargaining in Europe: towards an endgame. Volume I. ETUI aisbl, Brussels, 2019.
- Kędziora, W., Tomusiak, R., Bore, T. (2020). Site index research: a literature review. Forest Research Papers 81: 91-98. DOI: 10.2478/frp-2020-0010
- Ķēniņa L, Jaunslaviete I, Liepa L, Zute D, Jansons Ā. (2019). Carbon Pools in Old-Growth Scots Pine Stands in Hemiboreal Latvia. Forests. 10. https://doi.org/10.3390/f10100911
- Kiis, M., Kuresoo, L., Lilleväli, U. (2021). How well are protected forests of high conservation value cared for? Estonian Fund for Nature and Estwatch.
- Labour Dispute Resolution Act (14.06.2017). https://www.riigiteataja.ee/en/eli/ee/506022018004/consolide/current
- Labour Inspection: "Temporary agency work and job mediation". https://www.tooelu.ee/en/40/temporary-agency-work-and-job-mediation
- Labour Inspectorate. (2021). Annual Report of Work Environment 2021.
- Labour Inspectorate: "Applicable law and working conditions". https://www.ti.ee/en/foreign-worker/applicable-law-and-working-conditions

Annex 3 List of publications used continued

- Labour Inspectorate: "Avaleht | Tööinspektsioon". https://www.ti.ee/
- Labour Inspectorate : "Labour exploitation". https://www.ti.ee/en/foreign-worker/labour-exploitation
- Labour Inspectorate: "Resolution of a labor dispute in a Labor Dispute Committee of an employee posted to Estonia". https://www.ti.ee/en/foreign-worker/resolution-labor-dispute-labor-dispute-committee-employee-posted-estonia
- Land Board: "Land reform". https://maaamet.ee/en/land-transactions-land-cadastre/land-reform
- Land Cadastre Act (12.04.1994). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/521032022003/consolide
- Land Improvement Act (16.05.2018). https://www.riigiteataja.ee/en/eli/ee/516122020009/consolide/current
- Land Portal: "Estonia". https://www.landportal.org/voc/regions/estonia
- Law on the release of genetically modified organisms into the environment (Geneetiliselt muundatud organismide keskkonda viimise seadus) (2004): https://www.riigiteataja.ee/akt/108072014010?leiaKehtiv
- Loodusveeb: "Protected areas". https://loodusveeb.ee/en/themes/protected-natural-objects-and-conservation-procedure/protected-areas
- Loodusveeb: "The types and protection of mires". https://loodusveeb.ee/en/themes/mires/types-and-protection-mires
- Luyssaert, S., Schulze, E. D., Börner, A., Knohl, A., Hessenmöller, D., Law, B., Ciais, P., Grace, J. (2008). Old-growth forests as global carbon sinks. Nature. 455: 213-215. 10.1038/nature07276
- Ministry of Finance: "Avaleht | Rahandusministeerium". https://www.fin.ee/en
- Ministry of Finance: "Spatial Planning". https://www.fin.ee/en/state-local-governments-spatial-planning/spatial-planning
- Ministry of Social Affairs: "Kollektiivlepingute andmekogu" (Collective agreements): https://klak.sm.ee/index.html
- Ministry of Social Affairs: "The minimum wage increases to 725 euros in 2023". https://www.sm.ee/en/news/minimum-wage-increases-725-euros-2023
- Ministry of the Environment. (2011). Forestry Development Plan 2012-2020 http://www.envir.ee/sites/default/files/elfinder/article_files/mak2020vastuvoetud.pdf
- Ministry of the Environment. (2020). Annex I: Article 17 National Summary Factsheet. Lists of habitats and species reported by the Member State with the overall conclusions of conservation status and overall conservation status trend for the reporting period 2007-2012 and 2013-2018.
- Ministry of the Environment. (2021): "Forest management and bioenergy". https://envir.ee/en/node/278
- Ministry of the Environment. (2023a). Forestry Development Plan until 2030. Tallinn, Estonia.
- Ministry of the Environment: "Forestry". https://envir.ee/en/water-forest-resources/forestry
- Ministry of the Environment: "Looduskaitse (Nature conservation)". https://envir.ee/elusloodus-looduskaitse/looduskaitse
- Ministry of the Environment: Estonian Forestry Development Plan until 2030. https://envir.ee/MAK2030
- Molina-Valero, J. A., Camarero, J. J., Álvarez-González, J. G., Cerioni, M., Hevia, A., Sánchez-Salguero, R., Martin-Benito, D., Pérez-Cruzado, C. (2021). Mature forests hold maximum live biomass stocks. Forest Ecology and Management. 480. https://doi.org/10.1016/j.foreco.2020.118635
- National Audit Office of Estonia. (2023). Loodusväärtuste kaitse ja raied kaitstavates metsades Kas kaitstavatel aladel metsa raiudes jäävad kaitstavad loodusväärtused alles? Tallinn.

Annex 3 List of publications used continued

- Nature Conservation Act (21.04.2004). https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current
- Nord-Larsen, T., Vesterdal, L., Bentsen, N. S., Larsen, J. B. (2019). Ecosystem carbon stocks and their temporal resilience in a semi-natural beech-dominated forest. Forest Ecology and Management. 447: 67-76. https://doi.org/10.1016/j.foreco.2019.05.038
- Occupational Health and Safety Act (16.04.1999). https://www.riigiteataja.ee/en/eli/ee/520032019007/consolide/current
- Paal, J. (1997). Eesti taimkatte kasvukohatüüpide klassifikatsioon. [Classification of Estonian vegetation site types]. Ministry of Environment & United Nations Environment Programme, Tallin, 297 p.
- Paal, J. (2002). Estonian forest site types in terms of the Habitat Directive. Baltic Forestry. 8. 21-27.
- Pelkmans, L. (Ed.). (2021). Implementation or bioenergy in Estonia – 2021 update. IEA Bioenegy Country Reports.
- Pärn, C-T., Meriküll, S-A., Kupri, H-L., Maasikmets, M., Štõkov, S., Puusepp, K., Sepp, A., Joa, K., Karu, H. & Suursalu, E. (2022). Estonia's fifth biennial report under the United Nations Framework Convention on Climate Change. Prepared by the Estonian Environmental Research Centre and the Estonian Environment Agency.
- PEFC Certificates: https://pefc.org/find-certified
- Plant Protection Act (21.04.2004). https://www.riigiteataja.ee/en/eli/505092014004/consolide
- Release into Environment of Genetically Modified Organisms Act (14.04.2004). https://www.riigiteataja.ee/en/eli/503122020004/consolide
- Restrictions on Acquisition of Immovables Act (08.02.2012). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/506102021003/consolide
- Riigi Teataja (State Gazette): "Avaleht". www.riigiteataja.ee
- RMK (Riigimetsa Majandamise Keskuse): "Soode seisundi parandamine (Improving the condition of mires)". ttps://www.rmk.ee/organisatsioon/el-fondid-1/uhtekuuluvusfond/soode-seisundi-parandamine
- Roasto, R. & Tampere, U. (ed.). (2020). Eesti looduse kaitse aastal 2020 (Estonian year of nature protection 2020). The Environment Agency, Tallinn.
- Rules of Forest Management (27.12.2006). https://www.riigiteataja.ee/en/eli/521112017002/consolide
- Save the Forest (Päästame Eesti Metsad): ENGO Petition (Dec 8, 2020). https://savetheforest.ee/en/estonian-forest-petition/
- Seedre, M., Kopáček, J., Janda, P., Bače, R., Svoboda, M. (2015). Carbon pools in a montane old-growth Norway spruce ecosystem in Bohemian Forest: Effects of stand age and elevation. Forest Ecology and Management. 346:106-113. https://doi.org/10.1016/j.foreco.2015.02.034
- Sirel, K. Pulk, E. (2020). Natura 2000 võrgustik. Roasto, R., Tampere, U. (toim). Eesti looduse kaitse aastal 2020. Keskkonnaagentuur, Tallinn: 28-31.
- Sirkas, F. & Valgepea, M. (ed.). (2022). Forest Yearbook 2020. The Environment Agency, 2022.
- Sirkas, F. & Valgepea, M. (ed.). (2023). Forest Yearbook 2021. The Environment Agency, 2023.
- State Forest Management Center (Riigimetsa Majandamise Keskus (RMK)): "Forest management". https://www.rmk.ee/for-a/forest
- State Forest Management Centre: "Metsamaterjali hinnastatistika". https://media.rmk.ee/files/Metsamaterjali_hinnastatistika_2023-04.xlsx
- Statistical Office (Statistikaamet): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest
- Statistics about felling permits issued in WKH from Environmental Agency
- Statistikaamet: "KE033 (Production of power plants and consumption of fuels for energy generation)". https://andmed.stat.ee/en/stat/majandus__energeetika__energia-tarbimine-ja-tootmine__aastastatistika/KE033

Annex 3 List of publications used continued

- Taxation Act (20.02.2002). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/524012023004/consolide
- The Estonian Trade Union Confederation (Eesti Ametiühingute Keskliit (EAKL)): "Avaleht". http://www.eakl.ee/
- The regions for forest regeneration material allowed to use in Estonia (Eestis metsa kultiveerimisel kasutada lubatud kultiveerimismaterjali algmaterjali päritolupiirkonnad) (13.12.2006). https://www.riigiteataja.ee/akt/115042011002
- Trade Unions Act (14.06.2000). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/519012023006/consolide
- Transparency International. (2023). "Corruption Perceptions Index Estonia". https://www.transparency.org/en/countries/estonia
- UN Human Rights Council: "OHCHR Dashboard". https://indicators.ohchr.org/
- UN Human Rights Council: Universal Periodic Review, Third Cycle (2021). All UPR's for Estonia: https://www.ohchr.org/en/hr-bodies/upr/ee-index
- UN: Convention on the Rights of the Child. https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child
- UNESCO World Heritage Convention: "States Parties". https://whc.unesco.org/en/statesparties/
- UNFCCC: "Estonia". https://unfccc.int/node/61061
- Value-Added Tax Act (10.12.2003). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/531082022001/consolide
- Waste Act (28.01.2004). https://www.riigiteataja.ee/en/eli/ee/511012023001/consolide/current
- Water Act (30.01.2019). https://www.riigiteataja.ee/en/eli/527122019007/consolide
- Work in Estonia: "Register short-term working". https://www.workinestonia.com/coming-to-estonia/register-short-term-working/
- Working Conditions of Employees Posted to Estonia Act (17.03.2004). https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/517102022003/consolide
- Zanaga, D., Van De Kerchove, R., Daems, D., De Keersmaecker, W., Brockmann, C., Kirches, G., Wevers, J., Cartus, O., Santoro, M., Fritz, S., Lesiv, M., Herold, M., Tsendbazar, N.E., Xu, P., Ramoino, F., Arino, O. (2022). ESA WorldCover 10 m 2021 v200. https://doi.org/10.5281/zenodo.7254221

Annex 4 List of Stakeholders

No.	Organisation	Type of organisation
1	FSC Estonia	Certification
2	State Forest Management Centre (RMK)	State Forests
3	Ministry of the Environment, Forest Department	State Forests
4	The Estonian Private Forest Union (Erametsaliit)	Private Forests
5	Private forests centre (KIK Erametsa)	Private Forests
6	Estonian Forest and Wood Industries Association (EMPL)	Industry organisation
7	Woodhouse Estonia	Industry organisation
8	Estonian Renewable Energy Association	Industry organisation
9	Graanul Invest	Industry company
10	Warmeston	Industry company
11	Estonian University of Life Sciences	Academia
12	Luua Forestry School	Academia
13	Forestry Workers Trade Union	Trade unions
14	Estonian Fund for Nature	NGOs
15	Taarausuliste ja Maausuliste Maavalla Koda	NGOs
16	Preferred by Nature	Certification / Consultation Body

Annex 5 Stakeholder consultation report

Stakeholder consultation report

The draft SBP RRA Revision for Estonia with a cover letter was sent by email to 16 stakeholders (see Annex 4) on 6 April 2023. The cover letter can be seen below. A reminder email was sent to the stakeholders on 27 April 2023.

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 Estonia, Version 1.1 which was published in October 2021.

SBP RRA Procedure requires conducting consultation with relevant stakeholders on the draft RRA Update for Estonia – 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 Estonia (attached herewith). Information about SBP and the background, purpose and scope of the RRA Update for Estonia are given below.

May I request you give your feedback on the attached draft SBP RRA Update for Estonia by May 6, 2023, to sepul.barua@induforgroup.com? If you have any questions, please contact us by e-mail or phone. Thank you for thinking and contributing!

Dr. Sepul Barua, Team Leader and Coordinator Indufor Oy
sepul.barua@induforgroup.com or

Dr Martin Küttim, Independent Estonian Consultant
kyttim@tlu.ee / 56935875

Tere!

Kirjutame teile Indufor Oy poolt. Indufor on rahvusvaheline metsandusalane nõustamisettevõte (www.induforgroup.com). Säästva biomassi programmi (SBP) tellimusel uuendab Indufor SBP piirkondlikku riskianalüüsi (RRA) Eesti kohta (versioon 1.1), mille algversioon avaldati 2021. aasta oktoobris. Allpool on toodud teave SBP kohta ning RRA Eestit puudutava riskianalüüsi taust, eesmärk ja ulatus.

SBP RRA protseduur nõuab enne muudetud Eesti RRA eelnõu esitamist selle osas asjaomaste sidusrühmadega konsulteerimist, kelle Indufor on määratlenud SBP juhiste alusel.

Käesolevaga palume teie kui metsanduse sidusrüham esindaja tagasisidet RRA riskianalüüsi mustandile (manuses) hiljemalt 6. maiks 2023 aadressile sepul.barua@induforgroup.com. Küsimuste tekkimisel palume e-posti või telefoni teel ühendust võtta. Täname kaasa mõtlemast ja panustamast!

Dr. Sepul Barua, projektijuht, Indufor Oy
sepul.barua@induforgroup.com or

Dr Martin Küttim, sõltumatu Eesti-poolne konsultant
kyttim@tlu.ee / 56935875

Annex 5 Stakeholder consultation report continued

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 Estonia, Version 1.0 (published in October 2021) following the updated SBP Standards.

Purpose and scope of RRA update for Estonia

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 Estonia updates the RRA for Estonia, Version 1.1 which was published on 22 October 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 the Republic of Estonia. This RRA Update covers only wood-based primary feedstock sourced from forests. Residues from wood processing industries including all other secondary or tertiary feedstock as well as imported feedstock are excluded. This RRA Estonia Update covers only the land defined as forests by the Forest Act (2006).

SSäästva biomassi programm (SBP)

Säästva biomassi programm (Sustainable Biomass Program; SBP) on sertifitseerimisskeem, mis on loodud tööstuslikus suuremahulises energiatootmises kasutatava puitbiomassi jaoks. SBP eesmärk on tagada, et puitbiomassi hangitakse nii seaduslikult kui ka jätkusuutlikult, võimaldades biomassisektori ettevõtetel tõendada vastavust regulatiivsetele nõuetele. SBP sertifitseerimisskeem on koostatud riskipõhist lähenemist kasutades. See nõuab SBP sertifikaadi omanikelt oma jõupingutustes keskendumist SBP standardi 1 näitajatele, mis on tuvastatud nende tarneahelas teatud riskina.

SBP RRA uuenduse taust

SBP süsteem võimaldab riskianalüüsi läbi viia kahel viisil – kas iga sertifikaadiomanik töötab välja oma hinnangu (nn Supply Base Evaluation – SBE) või piirkondliku riskihinnangu (RRA) töötavad välja eksperdid ja seda peavad kasutama kõik sertifikaadiomanikud, vältides vajadust igal sertifikaadiomanikul oma SBE väljatöötada. Sel juhul peavad kõik geograafilises piirkonnas (antud juhul Eestis) tegutsevad sertifikaadiomanikud kujundama oma SBP sertifikaadihaldussüsteemi kinnitatud RRA alusel.

2023. aasta märtsi seisuga on SBP heaks kiitnud kuus RRA-d, mis hõlmavad järgmisi riike/piirkondi: Läti, Leedu, Eesti, Taani ning Briti Columbia ja Quebec Kanadas. Valmimisel on veel kaks RRA-d (st New Brunswicki provints Kanadas ja Portugal) (SBP poolt heaks kiidetud piirkondlikud riskihinnangud – säästva biomassi programm (sbp-cert.org)).

Kõiki SBP standardeid (standardid 1–6) värskendati 16. märtsil 2023 pärast põhjalikku ülevaatusprotsessi. Sarnaselt teiste standarditega värskendatakse 16. märtsil 2023 ka SBP Standardi 1: Feedstock Compliance Standard kriteeriumeid ja näitajaid versioonile 2.0 (v2.0). Määras Indufor Oy töövõtjaks, kes uuendab Eesti RRA versiooni 1.1 (avaldatud oktoobris 2021) vastavalt uuendatud SBP standarditele.

RRA uuenduse eesmärk ja ulatus Eestis

Iga SBP RRA kehtib teatud aja ja seda tuleb selle perioodi lõpuks ajakohastada. SBP RRA värskendus Eesti jaoks värskendab Eesti RRA versiooni 1.1, mis avaldati 22. oktoobril 2017. Värskendamine toimub vastavalt SBP RRA protseduuri versioonile 1.2 ja SBP standardile 1: Feedstock Compliance Standard, versioon 2.0 (16. märts 2023).

Käesoleva RRA uuenduse geograafiline ulatus hõlmab kogu Eesti Vabariigi territooriumi, kuid ainult metsast hangitud puidupõhist esmast lähteainet. Välja on jäetud puidutöötlemistööstuse jäägid, sealhulgas kõik muud sekundaarsed või tertsiaarsed lähteained, samuti imporditud lähteained. See RRA Eesti uuendus hõlmab ainult metsaseaduses (2006) metsana määratletud maad.

A total of six stakeholders out of 16 initially contacted responded to the request to provide feedback. Five stakeholders gave comments, and one stakeholder did not give any comments. Three stakeholders – including two that did not give comments on the draft – gave follow-up comments on the revised draft RRA. This means the overall response rate was 50%. The stakeholder comments are responded to below.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
On Draft RRA revision for Estonia		
Certification Scheme	My main observation is regarding Principle 2, environmental harm. More precisely, 2.1.1 – mapping of high conservation values seems to be a commonality with FSC Controlled Wood framework, where these values also cannot be harmed. Our risk analysis identifies the risk of harvesting wood from HCV-s due to the fact that not all of them have been inventoried. Specifically, Woodland Key Habitats (WKH, „vääriselupaik" in Estonian) are yet to be conclusively inventoried, about 3,000ha according to recent expert estimations. Does your indicator 2.1.1 also require the identification and mapping of these uninventoried WKH-s („potentsiaalne vääriselupaik")? Another similar risk lies in uninventoried natural sacred sites, also an HCV in FSC Controlled Wood framework.	The analysis is updated accordingly. As all HCVs are not inventoried, which is a requirement under this indicator, the risk class is changed to specified.
	Another observation is about 4.2.4, The legal, customary and traditional tenure and use rights of indigenous peoples and local communities related to the forest, are identified, documented and respected." As of April 2023, the Võro people have declared themselves as indigenous, following suit with the Seto people, who declared it a couple of years earlier. The official position of the state is that there are no IP-s in Estonia. In what way will this event influence, how are IP-s identified in RRA Estonia?	UN supports the approach where groups of people have the power to evaluate themselves if they regard themselves as indigenous. Indicator 4.2.4 is to be reviewed accordingly.
Union	We would like to point out the indicator 3.2.2 which says that 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. The analysis does not include the fact that forestry and primary feedstock sourcing takes place only areas which are registered as managed forest areas. The risk for that is marked as "Specified risk" as we find that it should be definitely "Low". The reason for that is that, in Estonia areas which have less than 1 solid cube of stemwood regrowth per 1 hectare are not classified as managed forests which means that there is no risk for the indicator. Estonian Forest Yearbook gives statistics of site quality classes 1a to 5a which are registered as forestland, but below 5a are not registered as forestlands. Thereby the risk of that indicator is not specified but low.	Indicator 3.2.2 is reviewed accordingly. As primary feedstock is not sourced from forest areas with a yearly growth of <1 m3, the risk class is changed to low.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association	**Indicator 3.1.1:** Based on the evidence provided, the risk for non-conformance with this indicator is classified as 'low'. However, under Table 5.1: Assigned risk classes for the indicators indicator 3.1.1 is indicated as specified risk. Please correct. Also, the risk rating on page 44 (of the file) is incorrectly „specified risk".	The erroneous "specified risk" classification in table 5.1 and on page 44 is corrected to correspond to the correct "low risk" classification of indicator 3.1.1.
	Indicator 3.2.1: Based on the evidence provided, the risk for non-conformance with this indicator is classified as 'low'. Table 5.1: Assigned risk classes for the indicators indicator 3.2.1 is indicated as specified risk. Please correct.	The erroneous "specified risk" classification in table 5.1 is corrected to correspond to the correct "low risk" classification of indicator 3.2.1.
	Indicator 3.2.2: The analysis does not take into account that forestry and primary feedstock sourcing happens on lands with forestland designation and / or established forest regeneration. Forest survey (including surveyors), forest permits, management plans etc. do not consider vegetation on low-productive lands as forests. Therefore, local forestry cannot source such primary feedstock because these areas are outside forest registry and survey. Basic legality and transparency requirements exclude any risk of this happening. For many decades (also most recently in 1998 forest act) the definition of a low-production forest in Estonia has been <1 solid cube of stemwood regrowth per 1 hectare. This has not been repeated in recent laws because it is a strongly implemented common practice within forestry survey expects and statistics. Such areas are just not included under managed forests and managed plans and therefore there is no real risk on these being damaged or sourced from. Reaching out to licensed forestry surveyors, private forest union or even environmental board will confirm that areas under "Va boniteediklass" – site quality class, are not registered as forestlands. Based on Forest Yearbook it can be easily checked that below Va site quality class forests are 2,2% of all forestlands and 1,1% of managed forest areas. Therefore, the risk cannot be specified for this indicator.	Indicator 3.2.2 is reviewed accordingly. As primary feedstock is not sourced from forest areas with a yearly growth of <1 m^3, the risk class is changed to low.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	**Indicator 3.3.1:** The analysis looks for cascading terminology or enforcement in law but does not look into exemplary cascading evidence in quality and value. Single claims and cases of higher value wood being sold to lower priority industries cannot trigger specified risk in short term and long term price relations between different quality classes has not been affected or distorted. The clear criteria for quality classes has been consistent in time and specifications. It is publicly available for different industries and implemented and monitored the same way from forestry to end use markets. There is evidence of uniform quality classes in forest management plans, forestry inventory, harvest permits, stemwood invoices, waybills, measurement reports, Year Book forest, last decade price statistics, contracts, all sector commercial stakeholders and factory gate measurement reports. There is no knowledge or data of regular, high volume, deliberate or accidental feedstock sales against the cascading principle. https://www.eramets.ee/uuringud-ja-statistika/hinnainfo/ https://www.eramets.ee/wp-content/uploads/2023/02/Umarpuidu-lopplaohind-EMKkeskmistega-2022-IV.xlsx https://media.rmk.ee/files/Metsamaterjali_hinnastatistika_2023-04.xlsx https://www.rmk.ee/puidumuuk-1/puidumuuk	Indicator 3.3.1 is reviewed accordingly. As the timber and pulpwood prices have consistently been higher than the energy biomass prices, it is fair to assume that the market has driven the utilisation of wood according to the cascade principle. The risk class is changed to low.
Civil Society Organisation	*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 and means of verifications sections only focus on existence and accessibility of data and do not prove the quality or sufficiency of data. Therefore the "low risk" conclusion on basis of unproven "all key species, ecosystems and HCVs in legally defined forests are identified" is not justified. There is good evidence that all HCV forest have not been mapped and public sources of information are not sufficient (see links below): https://media.voog.com/0000/0037/1265/files/VEP%20raport%20ELF%2016.02.21.pdf https://www.estwatch.ee/wp-content/uploads/2021/03/Natura-logging-Estonia-2021.pdf https://www.riigikontroll.ee/DesktopModules/DigiDetail/FileDownloader.aspx?AuditId=2550&FileId=17202	The analysis is updated now which points out that some WKHs and Natura 2000 forest land are not inventoried. Therefore, the risk class for this indicator is assessed to be specified.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Civil Society Organisation continued	*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.* The conclusion "with the exception of just a few small parcels of private forests, all forests are certified and the risks in the above areas are identified and evaluated" is unacceptably empty of specifications. Certifications vary in their approach to WKHs and Natura 2000 habitats a lot and could not be treated equally in this matter and discourage especially use of PEFC certificates to be used to evaluate this risk. We also disagree that only "few small parcels of private forests" are a subject to risk. For example, the Estonian Ministry of Climate has stated that about a third of Estonian Natura 2000 forest land has never been inventoried.	The analysis is updated now which suggests – along the line with the analysis in indicator 2.1.1 – some WKHs and Natura 2000 forest land are not inventoried and thus, threats to and impacts on the identified key species, habitats, ecosystems, and HCV pertaining to biodiversity in these areas are not known. Therefore, the risk class for this indicator is assessed to be specified.
	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. We do agree with the conclusion of specified risk, but express concerns on broadness in "Means of verifications". Risk objects listed in 2.1.3 should all have individual meaningful pathways in the verification process.	The relevant part of the analysis is revised now. It is stressed in the 'Risk conclusion and justification' that the enhancement and maintenance of key species, habitats, ecosystems, and HCVs pertaining to biodiversity in some WKHs and Natura 2000 forest land can be guaranteed. The above means the risk class remains unchanged as specified.
	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. The justification for low risk conclusion makes use of definition error in the standard and ignores the degradation of wetland/peatland forest and the GHG emissions associated with degradation. Wetland, peatland, and forest are not exclusive terms. A wetland can also be a peatland and a forest. When water levels of the peatland forest are manipulated in order to improve the tree growth, the peatland specific functions are damaged and massive GHG emissions may occur. Renovating old dysfunctional drainage systems happens on a very large scale in Estonia and its impacts are not assessed sufficiently. This must be dealt with as land conversion in our view.	Though GHG emissions from the forestry-drained peatlands do occur, these forests on peat soils were drained mostly in the 1970s and 1980s. In Estonia, about 23% of the land area is on peat soils, some of it naturally peatland forest. Due to drainage, the former natural peatland forests have been converted to drained peatland forests, and the current nearly natural peatland forests are often former open peatlands. In all cases, these areas are on the peat soils e.g. peatlands. The situation is similar in Finland, though Estonian peatland forests are not so intensively drained and are thus more natural. In parallel, some drained peatland forests are currently being restored by blocking the ditches, while in the others the ditches are renovated. Criterion 2.2.1 takes into account a conversion between 2008 and the present. The above-mentioned conversions have taken place, as said, mainly in the 1970s. Therefore, by definition, there is no reason to specify the risk. How and if the forestry on the organic soils, in general, should be assessed by the standard is, however, a separate topic.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Civil Society Organisation continued	*2.2.2 Ecosystems, their health, vitality, functions and services in the Supply Base shall be maintained or enhanced.* We want to draw Indufor´s attention to a recent audit by the National Audit Office of Estonia, which questions most of the confident claims made in the analysis section. The audit can be found here: https://www.riigikontroll.ee/Suhtedavalikkusega/Pressiteated/tabid/168/557GetPage/1/557Year/-1/ItemId/2391/amid/557/language/en-US/Default.aspx	The relevant part of the analysis is revised now accordingly. Also, it is highlighted that any negative impacts of harvesting of protected areas on nature values and services should be carefully assessed and necessary mitigation measures should be taken.
	2.2.5 Quality and quantity of ground water, surface water and water downstream shall be maintained or enhanced. The justification for low risk relies on a lack of evidence of negative impacts forest management or water quality from Estonia. We urge you to use precautionary principle in the case of absence of studies. There is a good evidence base from other countries that forest management activities may impact on the water quality.	To integrate a precautionary principle as well we highlight that the impacts of forest management on water should be regularly assessed and monitored, and measures should be taken to mitigate any negative impacts as the evidence of negative impacts of forest management on water exists from other countries.
	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. Analysis section is replete with errors: – 7.35 million m^3 is not the amount of wood that was harvested in 2019. Yet that figure is used as justification for the conclusion "This means harvesting maintains or improves the long-term production capacity as well as carbon stock of the forests" that follows. – 11 million is not the upper limit of wood harvest per year between 2012-2020. It has been exceeded during several years. We also urge you to take into account the fact that, according to National Forest Inventory, Estonian forests have lost stock during the last few years, referring to an error in increment-harvest based judgement. (https://media.voog.com/0000/0049/4321/files/eesti-metsanduse-alternatiivne-hindamine.pdf)	The errors are now corrected, and the analysis is revised accordingly.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Civil Society Organisation continued	*3.1.1 LULUCF emissions shall be accounted* The analysis does not indicate the choice of the route. The claim that the national LULUCF target is presented in NECP 2030 is misleading as Estonia´s NEPC does not present a means to accomplish this target and has so far been performing badly in terms of moving towards the target. The current logging levels and existing policy are not in accordance with the target.	The choice of route is now indicated in the analysis. It is now addressed in the analysis that NECP 2030 does not present means to achieve the national LULUCF target.
	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.* In this critical element we urge Indufor to take a cautious position. It is too optimistic to attribute LULUCF performance primarily to age distribution of forest stands and ignore the role of harvest. The SBP RRA has been assessing the future outlook of LULUCF wrongly in the past and has therefore allowed drastic carbon sink declines to be considered worthy of a label that is said to address the climate element of biomass sustainability. Different logging scenario outlooks for LULUCF performance are described in numerous studies, and it is risky to place a judgement on the ones that assume a particularly high annual felling level to be compatible with a stable carbon sink. We also note that the most up to date data of past performance can be found in Estonia's National Inventory Report (NIR) to the European Commission 1990-2021. It demonstrates that the forest sink has collapsed rapidly since 2011, correlating with the increase of biomass for energy. Forests already became a source of emissions in 2018.	Indicator 3.2.1 is reviewed accordingly. As the Estonian forest carbon stock currently remains relatively stable, the risk conclusion for the indicator remains unchanged. However, it is now added in the conclusion that the situation related to the indicator must be closely monitored and should the forest carbon stock decline continue, this indicator should be treated accordingly in the future.
	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. We welcome the conclusion of specified risk.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Civil Society Organisation 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).* The conclusion of low risk is unjustified and the analysis relies on unjustified claims like: – "Estonian forests are well-surveyed and major HCV areas are extensively identified and recorded: all data about different type of protected species, areas, and objects are collected to a state-owned database called EELIS (Eesti Looduse Infosüsteem) (Environment Agency: the EELIS database)." Like mentioned in 2.1.1, the existence of data does not tell anything about the quality and sufficiency of data. – "...even though most HCV areas and areas with high carbon stocks are protected from feedstock extraction..." is not a credible justification to rely entirely on the existence of protected areas. – "In a guidance note to the indicator 2.9.1 in Standard 1 it is explained that drainage shall not be conducted on previously undrained soils (renovation of old Soviet-time drainage systems using modern engineering methods is acceptable) and this is being followed in practice. No previously undrained soils are being drained. The same guidance note further explains that wetlands should remain as wetlands and peatlands should remain as peatlands. This is also followed for all management activities in these areas." This is a simplification of a critically important element in favour of allowing biomass extraction at environmental cost. Please follow the detailed argumentation from SOMO Report "Wood pellet damage" (https://www.somo.nl/wp-content/uploads/2021/07/Wood-pellet-damage.pdf)	Indicator 3.2.3 is revised accordingly. The potential existence of unidentified and unmapped HCV areas and WKHs was taken into account in the analysis along with the other information that was provided. The risk class is changed to specified. See also indicators 2.1.1-2.1.3.
Supply chain actor	Please revise and verify the statistics. (Comment referring to Page 6, 2.1 Regional background: ...With the exception of some smallholding private forests – as expert consultation suggests – private forests are also certified).	The text is revised accordingly.
	Please revise, there are inconsistencies with the detailed risk assessment below (3.1.1, 3.2.1). (Comment referring to Page 15, table 5.1 Assigned risk classes for the indicators).	The erroneous "specified risk" classifications in table 5.1 and on page 44 is corrected to correspond to the correct "low risk" classifications of indicators 3.1.1 and 3.2.1.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	The directive has been adopted with; https://www.riigiteataja.ee/en/eli/517032023002/consolide Implementing acts are being prepared. (Comment referring to... Indicator 1.1.1: While Estonia does not have any special regulation or legislation to implement the EU REDII (EU 2018/2001) in the country, the Forest Act (2006) and conventional forest management and harvesting practices fully address the above requirements).	The text is revised accordingly.
	There has been a change in law in 2018 and the threshold has been increased to EUR 40,000 . (Comment referring to Indicator 1.1.4: ...VAT in Estonia is paid by all persons (natural and legal) having annual turnover from their business activities higher than EUR 16,000).	Information is updated.
	Suggested correction: delete the "4". (Comment referring to Indicator 1.1.4: ...In case of the State Forest Management Centre (RMK) that manages the forest owned by the state, the risk of noncompliance with VAT and tax payment is also low as they are audited by the State Control4 according).	Deleted.
	All felling permits in restricted management zones have been halted. No new felling permits are issued before new inventories have been carried out: Source: https://keskkonnaamet.ee/uudised/keskkonnaamet-peatab-raied-natura-alal-asuvates-metsaelupaikades The risk assessment for this "object" should be re-evaluated. (Comment referring to ..Indicator 2.1.2:...In order to protect Natura 2000 habitat types in Natura protection areas, the State has created Special Management Zones and Strict Reserve Zones so that it is possible to protect the majority and most valuable HCVs including Natura 2000 forest habitat types. In these zones commercial forest management is not allowed.	The analysis is updated now which suggests – along the line with the analysis in indicator 2.1.1 – some WKHs and Natura 2000 forest land are not inventoried and thus, threats to and impacts on the identified key species, habitats, ecosystems, and HCV pertaining to biodiversity in these areas are not known. Therefore, the risk class for this indicator is assessed to be specified.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	As the state has decided that it is not feasible to protect all Natura 2000 forest habitat types with such strict zones some of these habitats are covered with limited management zones where commercial felling with restrictions is allowed. Currently, the Environmental Board is not conducting Natura habitat impact assessments each time before issuing felling permits and the felling permits are issued even if the habitat type will be destroyed or damaged). ------- Please align [the five] with the list (4/3?). This [specified risk] creates confusion: There are specified risk objects but the risk is low? The indicator for "identification" and there are databases available to identify these risks. I support the "low risk" assessment for this indicator. Risks from management activities to be addressed under 2.1.3. [The Natura forest habitat types that are in Natura protection areas limited management zones] To be re-assessed based on the latest available information. Specified risk should be removed. (Comments referring to...Based on the information above there are five specified risk objects under this indicator: – Officially registered WKHs – Potential WKHs – Natura forest habitat types that are in Natura protection areas limited management zones – Cross trees) ---------- Please revise and verify statistics. (Comment referring to...With the exception of just a few small parcels of private forests, all forests are certified and the risks in the above areas are identified and evaluated. Therefore, a low risk class is assigned for this indicator...)	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	It would suggest to highlight the "risk objects" under this indicator instead of making reference to indicator 2.1.2. This adds clarity and highlights the risks that need to be addressed. (Comment referring to Indicator 2.1.3: …Risk conclusion and justification. Based on the above analysis, the level of risk for this indicator is assessed "specified").	The relevant part of the analysis is revised now. It is stressed in the 'Risk conclusion and justification' that the enhancement and maintenance of key species, habitats, ecosystems, and HCVs pertaining to biodiversity in some WKHs and Natura 2000 forest land can be guaranteed. The above means the risk class remains unchanged as specified.
	Please check calculations. (Comment referring to Indicator 2.2.2: According to Statistics Estonia, 17.6% of the country's forest land is strictly protected (i.e. no management activities allowed) and over 11% of forest area is categorized as the limited management zones. This means over 29.6% of the forest land in Estonia is under some kind of protection regime).	The calculation is corrected now.
	Please update: This act [The Atmospheric Air Protection Act] is no more in use since 2017. It has been replaced by "General Part of the Environmental Code Act1" https://www.riigiteataja.ee/en/eli/517062022003/consolide (Comment referring to Indicator 2.2.6).	The necessary update is done.
	rare? (Comment referring to Indicator 2.2.7: Risk conclusion and justification. Pesticide use in Estonian forests is very limited and the case of overuse of it is very rate. Therefore, this indicator is given a low-risk class.)	Typo is corrected.
	This seems to be a wrong reference. Please check harvesting volumes from the original source. The 7,3 should have been the harvesting volume from private forest + 4 million m^3 from state forest. However, this remains still significantly below the annual increment. (Comment referring to Indicator 2.2.9: According to the Forest Yearbook 2020 (2022) less than 70% of the annual increment in managed forest land is harvested since 2012. According to the National Forest Inventory record, in 2019 out of a total annual increment in all Estonian forests of 16.7 million m^3, only 7.35 million m^3 wood was harvested. This means harvesting maintains or improves the long-term production capacity as well as carbon stock of the forests.)	The errors are now corrected, and the analysis is revised accordingly.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	Please align with section "Risk rating". (Comment referring to Indicator 3.1.1: Risk Classification and Justification Based on the evidence provided above, the risk for non-conformance with this indicator is classified as 'low'.)	The sections are aligned accordingly.
	Indicator 3.3.1: Even if there are no regulations in place the market drivers have been an efficient and well proven mechanism to hinder the use of high quality stem wood being used for biomass feedstock. Current and historical prices different quality classes of round wood are published both for private and state forest: https://www.rmk.ee/puidumuuk-1/puidumuuk https://www.eramets.ee/uuringud-ja-statistika/hinnainfo/ Furthermore the recently agreed RED-III addresses principles of cascading use and these will be adopted by the member states. The agreement includes: "... woody biomass must be "used according to its highest economic and environmental added value in the following order of priorities: 1. wood-based products, 2. extending their service life, 3. re-use, 4. recycling, 5. bio-energy and 6. disposal". Exceptions: Member States can ignore this if the need to ensure the security of the energy supply, if local industry is not able to use material, if it is necessary for forest management / wildfire prevention, or is in response to a natural disturbance (windstorm, disease outbreak, wildfire, etc.) There is a strong wood processing industry in Estonia and the bio-energy sector does not compete with it. A re-assessment of the risk would be appropriate.	The indicator is reviewed accordingly. As the timber and pulpwood prices have consistently been higher than the energy biomass prices, it is fair to assume that the market has driven the utilisation of wood according to the cascade principle. The risk class is changed to low.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	**Indicator 4.2.5:** [The risk classifications have been confused between the findings section and the risk rating section]: **Risk conclusion and justification** The grievance procedures to address tenure right and land use related conflicts are available and accessible to concerned parties and in relevant cases also to third parties. Thus, the risk for failing to meet this indicator is considered to be low. Due the disputes of forest use and management at the national level, and that the existing grievance procedures cannot address these disputes in an effective manner, the risk is estimated to be specified. [in the Risk rating section: Low risk] Comment: Please align. Further arguments supporting "low-risk" assessment: Each felling permit is a "administrative act" which are publicly available in the "Metsaportaal" (forest register) and can be challenged within 30 days after being issued. Harvesting volumes are a more general debate and there are different views among groups, scientists and politicians. There is a public debate (which shows the topic can and is discussed) and the forest management topic was also on the agenda of parties during the parliamentary elections. Furthermore to my knowledge local authorities can create local protection zones and spatial planning documents that can affect the forest management. Local authorities are elected by local communities so there is also democratic procedures in place, that communities can rely on.	The inconsistency in the conclusion is corrected and the additional information is taken into account in Indicator 4.2.5.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	Thank you for the revised draft RRA. Below are further feedback on the indicators: – 2.1.1 (i.e. HCV identification) – 2.1.2 (i.e. HCV threats and impacts) – 2.1.3 (i.e. HCV Protection) – 3.2.3 (i.e. No-go areas: carbon stock and HCV). All these indicators have been assessed as "specified risk" with the additional argumentation: Despite a comprehensive legal framework, the stakeholder consultation suggests that not all HCV forests are inventoried and mapped. According to the recent expert estimation – as the information obtained during the stakeholder consultation – about 3,000 ha of woodland key habitats (WKH, 'väärіselupaik' in Estonian) is yet to be conclusively inventoried in the country. Moreover, Kiis et al. (2021) estimated that about 49% of the forest area under the Natura 2000 network is not covered by the forest habitat inventory. Indicator 3.2.3 includes in addition: ….According to Van der Wal (2021), the harvesting activities are, in fact, taking place in areas that they should not be happening in, such as peatland forests. The report also points out the negative effects of drainage renovation and incidences of harvesting in HCV areas such as old-growth forests. The following feedback addresses only the newly raised arguments: **1. Topic: WKH** The initial WKH inventory carried out in 1999-2002 described 7,007 WKH with a total area of 19,059 ha. It was estimated by the experts that about 50% of the areas were not discovered. (https://keskkonnaamet.ee/media/1198/download). Today, there are more than 16,500 WKHs with a total area of more than 42,300 ha in the EELIS database. Thus, the official WKH alone cover more than double the area of the initial WKH described during the first inventory. Furthermore, the database prepared by NGO's with potential WKH contains additionally over 24,900 potential WKHs with a total area of more than 24,800 ha (https://ee.fsc.org/ee-et/kontrollitud-puit).	**Indicator 2.1.1** Further research was done on this. It is now highlighted that the initial WKH inventory carried out in 1999-2002 described 7,007 WKH with a total area of 19,059ha. It was estimated by the experts that about 50% of the areas were not discovered. (https://keskkonnaamet.ee/media/1198/download). Currently, there are more than 16,500 WKHs with a total area of more than 42,300 ha in the EELIS database. Thus, the official WKH alone covers more than double the area of the initial WKH described during the first inventory. Furthermore, the database prepared by NGOs with potential WKH contains additionally over 24,900 potential WKHs with a total area of more than 24,800 ha (https://ee.fsc.org/ee-et/kontrollitud-puit)." Also, up-to-date information about all these areas is publicly available at https://register.metsad.ee/#/ In light of the above evidence, the risk class is changed to low. **Indicator 2.1.2** We would like to point out here that for all the fellings on Natura 2000 areas, a proper Natura assessment should have been done. Though there have been several cases, when fellings on Natura 2000 areas have been conducted, so far no Natura assessment has been done for these. The Environmental Board has permitted these and not demanded Natura assessments, so the problem is the overall practice at the state level, not illegal harvesting. Clear-cuts in these areas are, however, not a good practice and should not be generally allowed. Therefore, the overall risk is kept specified.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	These or similar database are widely used by the wood industry and all these areas are regarded as WKH's if an inventory has not been carried out. The risk assessment for identification of WKH (2.1.1) as well ask identification of risks and impacts (2.1.2) should be low. A specified risk is justified only for 2.1.3 as not all identified WKHs are protected on a legislative level. Means of mitigation exist and are widely used by the wood industry (e.g. mapping tool that is referred to in the RRA itself). **2. Topic: Forest habitats (biodiversity protection)** According to the report State of Europe's Forests 2020 (https://foresteurope.org/wp-content/uploads/2016/08/SoEF_2020.pdf, annex 8 table 38), among the European countries Estonia has: – The 2nd highest share of forests protected under the Biodiversity, MCPFE Class 1.1 (No active intervention) – The 6th highest share of forest protected under the Biodiversity, MCPFE Class 1.2 (Minimum intervention) and – The 2nd highest share of forested protected combined under MCPFE Class 1.1 and 1.2. More recent statistics demonstrate that the share of strictly protected forests has further increased to 17,6%. This indicates that the Estonian approach is to protect HCV with strict protection zones where forests habitats are identified and well protected. Considering the recent decision to halt all felling permits and not to issue any new ones in the restricted management zones either. The risks associated with forest habitats should be "low" for all indicators 2.1.1, 2.1.2 and 2.1.3. **3. Topic: Drainage renovation** Considering the previous 2 points a "specified risk" is not justified and the initial "low risk" assessment should be kept. The points raised in the SOMO has been analysed and replied to: https://www.energie-nederland.nl/app/uploads/2021/10/Indufor-Review-of-the-SOMO-Report-27-Sept-2021-ID-142580.pdf.	**Indicator 2.1.3** Since threats and impacts on all areas are not identified – as indicator 2.1.2 suggests – maintenance or enhancement of these areas cannotbe guaranteed. Thus the risk remains specified. Additionally, we would like to highlight that the drainage network can threaten the biodiversity in certain habitat types (especially peatlands) but is inevitable for forest management. However, currently, the distinction between the managed and natural forests is increasing – whilst the first ones are carefully managed to ensure high wood quality, the others are kept in their natural state and the case of peatland forests, rewetted to restore their hydrological state. Anyway, certain buffer areas between these two types should exist and the state (the Ministry of the Environment and RMK) is trying to reach compromises. **Indicator 3.2.3** Indicator 3.2.3 was reviewed. The risk classification remains specified as there is a risk that areas with combined attributes of HCV and high carbon stock remain unidentified. (See also responses related to indicators 2.1.2 and 2.1.3 above).

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	These conclusions should also be considered. Furthermore the Dutch authority conducted a follow-up study and found that the Estonian biomass meets the same Dutch sustainability criteria, that were criticised in the Van der Wal (2021) report (https://www.rijksoverheid.nl/ministeries/ministerie-van-economische-zaken-en-klimaat/documenten/rapporten/2022/06/21/conclusies-onderzoek-nea-duurzaamheid-biomassa-uit-estland-somo-onderzoek).	
Certification Body	I will send some of the ideas and questions regarding the indicators marked as specified risk (2.1.1; 2.1.2; 2.1.3; 3.2.3; 4.1.8) in the updated RA: 2.1.1; 2.1.2; 2.1.3; 3.2.3 – do I understand correct that all those indicators are related WKHs and Natura habitats and nothing else? Also with indicator 3.2.3? At least so it seems from the text. One overall comment regarding the numbers presented regarding WKHs and Natura habitats. As we have been involved in other RA s in EE these number seem to be sent by environmental NGOs and thus can't be considered as independent expert opinion rather subjective opinion about the situation. Do not say that wrong info but NGOs have their own interests regarding the RAs and therefore it is important to be clear on this topic. Regarding inventory results covering WKHs and Natura habitats – no country we know has ever reached to result that 100% of the areas are found. New values will come when forest gets older and also some values disappear due to different reasons. So it is important that there is a system to register new values and monitor old ones. Regarding WKHs I agree that due to legislation change there is no effective way to register new WKHs – there is a way but landowner can always say no and new WKH will not be registered. Regarding Natura habitats we have a situation today where habitats are well inventoried on strictly protected conservation areas and there is ongoing processes to inventory Natura habitats in protected areas limited management zones. Also Environmental Board will not issue felling permit to forest plots where there is a risk of Natura habitat existing there or to be damaged. This practice has been going on already for a while. Our proposal is to remove Natura 2000 habitats from specified risk indicators 2.1.1; 2.1.2; 2.1.3; 3.2.3.	**Indicator 2.1.1** Further research was done on this. It is now highlighted that the initial WKH inventory carried out in 1999-2002 described 7,007 WKH with a total area of 19,059 ha. It was estimated by the experts that about 50% of the areas were not discovered. (https://keskkonnaamet.ee/media/1198/download). Currently, there are more than 16,500 WKHs with a total area of more than 42,300 ha in the EELIS database. Thus, the official WKH alone covers more than double the area of the initial WKH described during the first inventory. Furthermore, the database prepared by NGOs with potential WKH contains additionally over 24,900 potential WKHs with a total area of more than 24,800 ha (https://ee.fsc.org/ee-et/kontrollitud-puit)." Also, the up-to-date information about all these areas is publicly available at https://register.metsad.ee/#/ In light of the above evidence, the risk class is changed to low. **Indicator 2.1.2** We would like to point out here that for all the fellings on Natura 2000 areas, a proper Natura assessment should have been done. Though there have been several cases, when fellings on Natura 2000 areas have been conducted, so far no Natura assessment has been done for these. The Environmental Board has permitted these and has not demanded Natura assessments, so the problem is the overall practice at the state level, not illegal harvesting. Clear-cuts in these areas are, however, not a good practice and should not be generally allowed. Therefore, the overall risk is kept specified. **Indicator 2.1.3** Since threats and impacts on all areas are not identified – as indicator 2.1.2 suggests – maintenance or enhancement of these areas cannot be guaranteed. Thus, the risk remains specified.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Certification Body continued		Additionally, we would like to highlight that the drainage network can threaten the biodiversity in certain habitat types (especially peatlands) but is inevitable for forest management. However, currently, the distinction between the managed and natural forests is increasing – whilst the first ones are carefully managed to ensure high wood quality, the others are kept in their natural state and the case of peatland forests, rewetted to restore their hydrological state. Anyway, certain buffer areas between these two types should exist and the state (the Ministry of the Environment and RMK) is trying to reach compromises. **Indicator 3.2.3** Indicator 3.2.3 was reviewed. The risk classification remains specified (see the responses related to indicators 2.1.2 and 2.1.3 above).
	Regarding Indicator 4.1.8 we do not agree with the approach marked in the justification that Universities or vocation schools shall include voluntary schemes (such as SBP, FSC, PEFC) training in detail – this does not make sense since all the schemes have their own training programs, requirements and interpretations change often and there is already a functioning system to train and inform relevant forestry workers who are involved with those schemes. Such trainings are provided by Schemes themselves, certified companies, consultants and in some conditions also by CBs. Based on our experience as SBP, FSC and PEFC certification body we can see that this system works well and when there are issues with trainings then there is non-conformity system available in all of those schemes to deal with the issues. Overall forestry education level in Estonia is good and voluntary certification topics are also covered by the programs. Our proposal is to change risk designation to Low risk for indicator 4.1.8	The SBP indicator requires training on ALL elements of SBP standards. Although training is good there is no guarantee that the letter of the indicator is complied with. Thus, it remains a specified risk.
Supply chain actor	I don't think we have anything super new to add within a few days but will prepare the team to thoroughly respond to the SBP's own Estonian RRA consultation window later in the year. If you include PBN and Warmeston/Purutuli and EMPL (wood processing and forestry association) feedback then you should have our indirect input for this stage.	Noted with thanks.

Annex 6 REDII Level A risk assessment – Estonia

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)	– Forest Act (2006), Chapter 4, Subchapters 3 (silviculture) – Articles 28 – 33 – Energy Sector Organization Act (2023), Article 32 – Nature Conservation Act – Articles 14, 17, 31, 32, 33, 37, 45, 73, 77 and 91
Sources	– Forest Act (2006) – https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Energy Sector Organization Act (2023) – https://www.riigiteataja.ee/en/eli/517032023002/consolide – Nature Conservation Act – https://www.riigiteataja.ee/-en/eli/ee/530062021001/consolide/current

Step 2: Description of enforcement and monitoring

Description of the practical implementation of the law(s)	The Estonian Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. For fulfilling sustainability criteria related to forest biomass sourcing, Article 32 of the Energy Organisation Act refers to the relevant requirements specified by the Forest Act (concerning forest management and conservation) and the Nature Conservation Act (protected areas). The above means the sustainability criteria of the Energy Organisation Act related to forest biomass are effectively also enforced by the Environmental Board.
Sources	– Environmental Board: "Home page | Keskkonnaamet" – https://keskkonnaamet.ee/en – Environmental Board: Forest Notification and Register – https://keskkonnaamet.ee/en/wildlife-nature-protection/forestry/forest-notification-and-forest-register – Ministry of the Environment: Forest Management and Bioenergy https://kliimaministeerium.ee/en/node/278 – Ministry of the Environment: Forestry and Biodiversity – https://kliimaministeerium.ee/en/node/277 – Consultations with responsible officials from the relevant agencies and other stakeholders.
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Estonia 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	Regular monitoring of the enforcement of the applicable legislation is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement and monitoring are effective.
Sources	Webpages of and interviews with responsible officials from the relevant agencies. – EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium. – Consultations with responsible officials from the relevant agencies and other stakeholders.
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

(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)	– Forest Act (2006) – Articles 24 and 25
Sources	– Forest Act (2006) – https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide
Step 2: Description of enforcement and monitoring	
Description of the practical implementation of the law(s)	The Estonian Ministry of Climate with the support of the Environmental Board enforces the Forest Act.
Sources	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Environmental Board: Forest Notification and Register – https://keskkonnaamet.ee/en/wildlife-nature-protection/forestry/forest-notification-and-forest-register – Ministry of the Environment: Forest Management and Bioenergy https://kliimaministeerium.ee/en/node/278 – Ministry of the Environment: Forestry and Biodiversity – https://kliimaministeerium.ee/en/node/277 – Consultations with responsible officials from the relevant agencies and other stakeholders.
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Estonia 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	Regular monitoring of the enforcement of the applicable legislation is conducted and reported by the concerned agencies. The EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement is effective.
Sources	– EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium. – Consultations with responsible officials from the relevant agencies and other stakeholders.
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

(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)	– Forest Act (2006) – Chapter 4, Subchapter 2 (Article 25), Subchapter 5 (Articles 40 – 42) – Energy Sector Organization Act (2023) – Article 32 – Nature Conservation Act – All Articles
Sources	– Forest Act (2006) – https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Energy Sector Organization Act (2023) – https://www.riigiteataja.ee/en/eli/517032023002/consolide – Nature Conservation Act – https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current
Step 2: Description of enforcement and monitoring	
Description of the practical implementation of the law(s)	The Estonian Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. For fulfilling sustainability criteria related to forest biomass sourcing, Article 32 of the Energy Organisation Act refers to the relevant requirements specified by the Forest Act (concerning forest management and conservation) and the Nature Conservation Act (protected areas). The above means the sustainability criteria of the Energy Organisation Act related to forest biomass are effectively also enforced by the Environmental Board.
Sources	Webpages of and consultation with the official from the relevant agencies

Annex 6 REDII Level A risk assessment – Estonia continued

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 of the applicable legislation is conducted and reported by the concerned agencies. EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement is effective.
Sources	– EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium. – Consultations with responsible officials from the relevant agencies and other stakeholders.
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

(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)	– Forest Act (2006) – Chapter 4, Subchapter 2 (Article 24), Subchapter 3 (Articles 27, 33), Subchapter 5 (Articles 40, 42), Chapter 5 (Article 67) – Energy Sector Organization Act (2023) – Article 32 – Nature Conservation Act – Articles 1, 17, 33, 37, 77
Sources	– Forest Act (2006) – https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/507062022001/consolide – Energy Sector Organisation Act (2023) – https://www.riigiteataja.ee/en/eli/517032023002/consolide – Nature Conservation Act – https://www.riigiteataja.ee/en/eli/ee/530062021001/consolide/current

Step 2: Description of enforcement and monitoring

Description of the practical implementation of the law(s)	The Estonian Ministry of Climate with the support of the Environmental Board enforces the Forest Act and Nature Conservation Act. For fulfilling sustainability criteria related to forest biomass sourcing, Article 32 of the Energy Organisation Act refers to the relevant requirements specified by the Forest Act (concerning forest management and conservation) and the Nature Conservation Act (protected areas). The above means the sustainability criteria of the Energy Organisation Act related to forest biomass are effectively also enforced by the Environmental Board.

Annex 6 REDII Level A risk assessment – Estonia continued

Sources	– Environmental Board: "Home page | Keskkonnaamet". https://keskkonnaamet.ee/en – Environmental Board: Forest Notification and Register – https://keskkonnaamet.ee/en/wildlife-nature-protection/forestry/forest-notification-and-forest-register – Ministry of the Environment: Forest Management and Bioenergy https://kliimaministeerium.ee/en/node/278 – Ministry of the Environment: Forestry and Biodiversity – https://kliimaministeerium.ee/en/node/277 – Consultations with responsible officials from the relevant agencies and other stakeholders.
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required

Step 3: Description of enforcement and monitoring

Evaluation of the practical implementation of the law(s) and explanation for the evaluation	Regular monitoring of the enforcement of the applicable legislation is conducted and reported by the concerned agencies. EU (2021) report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive as well as stakeholder consultation do not point to any shortcomings in the enforcement of the above legislation in Estonia. This suggests the enforcement is effective.
Sources	– EU. 2021. Final report on the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive (REDIIBIO – final report). Brussels, Belgium. – Consultations with responsible officials from the relevant agencies and other stakeholders
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Estonia 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 Estonia related to the above requirement. In Estonia, apart from final felling and commercial thinnings, there are regeneration felling, sanitary cuttings and precommercial thinnings to maintain forest health and vigour and long-term production capacity. The overall forest harvesting level in the country remains far below annual growth and thus standing stock is growing. According to Statistics Estonia (2023) less than 70% of the annual increment in forest land is harvested since 2012. This implies that harvesting level maintains a sustainable standing stock and maintain or improves the long-term production capacity and carbon stock of the forests.
List of applicable law(s)	Not applicable
Sources	– Statistics Estonia (2023): "Forest". https://www.stat.ee/en/find-statistics/statistics-theme/environment/forest

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 – Estonia 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 Estonia: https://unfccc.int/node/61061 – 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 – Estonia 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