Netherlands Enterprise Agency

Verification Protocol for Sustainable Biomass in Pellet Installations – Demonstrating sustainability for the SDE and EU ETS

Commissioned by the Ministry of Economic Affairs and Climate Policy

Version: January 2023

>>Sustainable, Agricultural, Innovative and International Enterprise

Contents

1 Introduction

1.1 Sustainability requirements and demonstrating sustainability

1.1.1 Sustainability requirements for biomass in pellet-fired plants

From 2018, sustainability requirements apply to biomass that is used by energy producers (EPs) that receive an SDE subsidy for this, in various categories of plants that produce energy from biomass in the form of pellets. The sustainability requirements are laid down in the Decree and the Regulation on the conformity assessment of solid biomass for energy applications. The sustainability requirements consist of the Dutch variant of the requirements as laid down in RED II, plus additional Dutch requirements. Exactly which energy producers with what types of plants need to demonstrate compliance with the sustainability requirements is defined in the Regulation designating Sustainable Energy Production categories.[1] This is then included as a subsidy condition in the SDE decisions by these EPs. This includes EPs with plants in which pellets are co-gasified or co-fired in coal-fired power plants, and with plants that use pellets to produce industrial power.

Since 1 January 2023, EU ETS companies that burn pellets have also been subject to sustainability requirements in the EU ETS. Biomass that is burned in these plants may only be reported as zero emissions if the biomass used for this purpose meets the applicable sustainability requirements. The Dutch Regulation Emissions Trading Scheme (*Regeling handel in emissierechten*) stipulates that this biomass must meet the sustainability requirements of the Regulation for the Conformity Assessment of Solid Biomass for energy applications, and that conformity must be demonstrated by means of this protocol. More information about the sustainability requirements in the EU ETS can be found on the website of the Dutch Emissions Authority (NEa): www.emissieautoriteit.nl.
Please note: for the sake of readability, in this protocol the term 'energy producers' (EPs) is also used to mean: EU ETS companies that burn pellets.

1.1.2 Demonstrating that biomass conforms to the sustainability requirement: certification and verification

EPs that produce energy from pellets and that receive an SDE subsidy for this, and EU ETS companies that burn pellets and wish to report zero emissions in that context, must demonstrate that each consignment of biomass conforms to the applicable sustainability requirements.
There are four ways in which this can be done:

1. by using a certification scheme that has been approved by the Minister for Climate and Energy Policy for all of the sustainability requirements that apply to the consignment of biomass;
2. by using a combination of certification schemes that have been individually approved by the Minister for Climate and Energy Policy for part of the sustainability requirements that apply to the consignment of biomass, and which collectively cover all applicable sustainability requirements;
3. by using a certification scheme that has been approved by the Minister for Climate and Energy Policy for part of the sustainability requirements that apply to the consignment of biomass, in combination with verification of the applicable sustainability requirements that are not covered by that scheme;
4. by using verification for all sustainability requirements applicable to the consignment, in accordance with the requirements as laid down in this protocol.

Use of approved certification schemes

Energy producers (EPs) may only use certification schemes that have been approved by the Minister for Climate and Energy Policy on the basis of the Decree on the Conformity Assessment of Solid Biomass for Energy Applications, and only for the approved requirements. An up-to-date list of certification schemes and the requirements for which the relevant schemes have been approved is available at www.rvo.nl/duurzaamheidseisen. In addition, the Conformity Assessment Body that carries out audits for an approved

[1] References to SDE in this Verification Protocol must be read to include both SDE+ and SDE++.

scheme must be approved by the Minister. A list of approved Conformity Assessment Bodies is also available at www.rvo.nl/duurzaamheidseisen.

Use of verification for consignments of biomass

The use of verification to demonstrate that consignments of biomass are conform the sustainability requirements must take place in accordance with the requirements set out in this Verification Protocol. The Conformity Assessment Bodies that carry out these verifications of biomass consignments must be recognised by the Minister for Climate and Energy Policy, based on an accreditation for this protocol on the basis of the above-mentioned Decree on the Conformity Assessment. A list of approved Conformity Assessment Bodies is available at www.rvo.nl/duurzaamheidseisen.

1.1.3 Conformity year statement

A Conformity Assessment Body (CAB) verifies the sustainability information on all consignments, which the EP has collected by means of certification and/or verification, in the course of a calendar year.
The findings of this conformity assessment are laid down by the CAB in a conformity year statement (CYS). The Conformity Assessment Body must obtain recognition from the Minister for Climate and Energy Policy, in order to draw up CYSs.

The CYS signed by the CAB can be used by the EP for receiving the SDE subsidy and the EU ETS report. For the SDE subsidy, the EP submits the CYS to the Netherlands Enterprise Agency (RVO). For the EU ETS emission report, the content of the CYS determines which biomass can be reported as zero emissions.

1.2 About this Verification Protocol

This Verification Protocol specifies:

1. the sustainability information that EPs and their suppliers must collect if they wish to use verification for consignments of biomass instead of, or in addition to, certification schemes approved by the Minister for Climate and Energy Policy. An important point here is that sustainability information must also be collected by other parties in the biomass supply chain, in the Netherlands and elsewhere.
2. the verification procedure: the requirements for the verification of individual biomass consignments by accredited CABs, at EPs and in the supply chain;
3. requirements for drawing up the conformity year statement by CABs recognised for this purpose, and the content of the CYS;
4. the requirements that must be met by CABs that carry out verifications of individual biomass consignments for the purposes of the CYS.

The protocol focuses on EPs and other parties in the chain, and on CABs. Those energy producers that wish to use verification to demonstrate that the biomass used is conform the sustainability requirements can use this protocol to collect relevant sustainability information, in consultation with parties in their supply chains. In addition, the protocol helps these parties to prepare for verifications of individual biomass consignments and verifications for the CYS.
CABs must use this protocol when preparing, implementing and reporting verifications of individual biomass consignments or for the purposes of the CYS.

What is not covered by this Verification Protocol?

This protocol does not address the approval and use of certification schemes (or the associated procedure) to demonstrate that biomass in the form of pellets conforms to the sustainability requirement. Nor does it address the requirements that apply to CABs that carry out checks for approved certification schemes. All this information is available at www.rvo.nl/duurzaamheidseisen.

This verification protocol only applies to EPs that use pellets

Installations that need to demonstrate compliance with the sustainability requirements for the SDE and EU ETS installation that use pellets for energy production and wish to report zero emissions. EPs with other installations that need to demonstrate compliance with the RED II biomass sustainability requirements for the SDE and/or other EU ETS companies use the corresponding verification protocol: "Verification Protocol for Sustainable Biomass – Demonstrating compliance with the RED II sustainability criteria for the SDE++ Scheme and EU-ETS."

Explanatory notes on this version of the Verification Protocol (January 2023 version)

The present Verification Protocol for Sustainable Solid Biomass for Energy Applications replaces the January 2022 version of the Verification Protocol for Sustainable Solid Biomass for Energy Applications. This new version includes the requirements that apply to verification and to the CYS for the purpose of the EU ETS. In addition, a number of changes have been implemented in terms of demonstrating that biomass conforms to the sustainability requirements. The key changes concern the indicators for the sustainability criteria under P3-P5. Compliance with these indicators can now be demonstrated at the First Collection Point. Additionally, there have been revisions in terms of the applicability of 'controlled biomass' and 'RED II compliant biomass', as well as the implementation of a Risk Based Approach (RBA).
With the implementation of the new version of the protocol, any verifications conducted on individual biomass consignments that have changed legal ownership after 31 December 2022 must adhere to the requirements outlined in the updated protocol. The verifications for the CYS on consignments in 2022, scheduled to take place at the beginning of 2023, must also be conducted using this latest version of the protocol.

Document history

- Verification Protocol for Sustainable Solid Biomass for Energy Applications, version December 2017
- Verification Protocol for Sustainable Solid Biomass for Energy Applications, version January 2020
- Verification Protocol for Sustainable Solid Biomass for Energy Applications, version January 2021
- Verification Protocol for Sustainable Biomass that must comply with the requirements of the Regulation on the Conformity Assessment of Solid Biomass for Energy Applications (January 2022 version) for the purposes of the SDE scheme

1.3 Normative references and other relevant documents

Normative references

- NEN-EN-ISO 19011, Guidelines for auditing management systems;
- NEN-EN-ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories;
- NEN-EN-ISO/IEC 17065, Conformity assessment - Requirements for bodies certifying products, processes and services;
- NEN-EN-ISO/IEC 17020:2012, Conformity assessment – Requirements for the operation of various types of bodies performing inspection;
- NTA 8003:2017; Classification of biomass for energy applications.

Other relevant documents

- Decree on the Conformity Assessment of Solid Biomass for Energy Applications *(Besluit conformiteitsbeoordeling vaste biomassa voor energietoepassingen)*;
- Regulation on the Conformity Assessment of Solid Biomass for Energy Applications *(Regeling conformiteits-beoordeling vaste biomassa voor energietoepassingen)*;
- Decree for Stimulating Sustainable Energy Production *(Besluit stimulering duurzame energieproductie)* (*);
- General Implementing Regulations for Stimulating Sustainable Energy Production *(Algemene uitvoerings-regeling stimulering duurzame energieproductie)* (*);
- Regulations designating Sustainable Energy Production categories *(Regeling aanwijzing categorieën duurzame energieproductie)* (*);
- BioGrace-II, the GHG emission calculation tool;
- Chain of Custody Guidelines;

- Guidance on the Classification of Biomass;
- Guidance for the use of pellet certification within SDE+.

* For the current version, see www.rvo.nl/duurzaamheidseisen.

Where there is reference to dated documents, only the cited version is applicable. Where there is reference to undated documents, the most recent version of the referred document (including associated regulations) is applicable.

2 Verification basics

2.1 Solid biomass sustainability requirements

The verification protocol relates to five categories of biomass specified in Regulation on the Conformity Assessment of Solid Biomass for Energy Applications. Each of these five categories of biomass is subject to different sustainability requirements, which must be met in order to qualify for an SDE subsidy. Also, if companies participating in the EU ETS use pellets, the biomass used must meet these sustainability requirements in order for the companies to be eligible to report zero emissions. This section describes the five categories of biomass and summarises the applicable sustainability requirements.

2.1.1 Biomass categories

Category 1: Woody biomass from Forest Management Units (FMU)
This includes branches, tops, trees and primary felling residues sourced directly from forests. This shall also include unused wood that has the same composition as wood growing in the forest and that has not been mixed with or contaminated by foreign materials or substances.

Category 2: Woody biomass from small Forest Management Units (FMU) (<500 hectares)
This includes branches, tops, trees and primary felling residues sourced directly from forests of less than 500 ha. This shall also include unused wood that has the same composition as wood growing in the forest and that has not been mixed with or contaminated by foreign materials or substances.
Category 2 biomass is distinguished from Category 1 biomass based on the size of the Forest Management Units. Biomass from FMUs smaller than 500 hectares can also be submitted as Category 1 biomass, in which case the sustainability requirements for Category 1 biomass shall apply.
The geographical borders as laid down in the forest management plan are an important indicator for determining the size of an FMU. This is because management, in the context of the FMU definition, cannot be seen as separate from a management plan. According to the requirements under Principle 10 (P10) of the 'Regulation on the Conformity Assessment of Solid Biomass for Energy Applications', all forests should be managed according to a management plan. Essential elements of this forest management plan include long term goals, planning and monitoring and a clear description of the state of the FMU.

Category 3: Residual flows from nature and landscape management
These are biomass waste products (branches, tops, trees) produced in the course of managing urban and rural green spaces and nature areas, other than forests designated for the preservation, restoration or enhancement of specific natural, recreational or aesthetic functions. These also include biomass waste produced during the routine maintenance of public green spaces and parks.

Category 4: Agricultural residues
This concerns biomass consisting of residues obtained directly from agricultural business. Short rotation crops are excluded, with the exception of the residues thereof. (N.B. Plants that use primary agricultural biomass, i.e. not residual flows, are not eligible for SDE subsidies).

Category 5: Biogenic residues and waste flows
These are residual flows from the agri-food and timber industries (secondary residual flows) and tertiary residual flows such as post-consumer wood waste.

Category 2 FMU

Historically, to be eligible for an SDE subsidy, the intention of the Dutch sustainability system for solid biomass for energy applications has been that forests must be certified at FMU level (FSC or equivalent). To encourage certification amongst the numerous managers of small-scale FMUs, many of which are not currently certified, a growth path has been developed. This involved a transition period during which these forest managers were allowed the necessary time to individually undergo the certification process (i.e. certification at the level of their FMU).

During the transition period, managers of small-scale FMUs were allowed to demonstrate compliance with SDE sustainability requirements at the level of the First Collection Point (FCP), in many cases the biomass producer (pellet mill).The transition period terminated at the end of 2022. Since 1 January 2023, it has no longer been possible for the managers of small Forest Management Units to demonstrate compliance with SDE sustainability requirements at the level of the First Collection Point. However, this is still possible on EU ETS.

2.1.2 Sustainability requirements

In the Regulation on the Conformity Assessment of Solid Biomass for Energy Applications, sustainability requirements are categorised into five themes, namely:

1. requirements for greenhouse gas (GHG) emission reduction and calculation;
2. requirements for soil management when using residues from nature and landscape management and agriculture;
3. carbon and land use change requirements;
4. Sustainable Forest Management (SFM) requirements;
5. requirements relating to the Chain of Custody.

The sustainability requirements are further divided into 13 principles, as indicated in Table 1. Each principle includes one or more criteria and indicators. An economic operator meets the principles and related criteria when conformity with all applicable underlying indicators is demonstrated. Chapters 3 to 7 of this protocol provide further details of these sustainability requirements.

Table 1 *Economic operators and biomass categories to which the requirements apply:*

Principle		Requirements applying to:	
		Economic operator	Biomass category
Requirements for greenhouse gas (GHG) emission savings and calculation			
Principle 1:	The use of biomass shall lead to a substantial reduction in greenhouse gas emissions calculated across the entire chain in comparison to the use of fossil fuels.	EP	All categories
Requirements for soil management when using residues from nature and landscape management and agriculture			
Principle 2:	Soil quality shall be maintained and where possible improved.	First Collection Point (FCP)	3 & 4
Carbon and land use change requirements*			
Principle 3:	Production of raw biomass does not result in the destruction of carbon sinks.	All FMUs	1 & 2
Principle 4:	The use of biomass does not result in long-term carbon debt.	All FMUs	1 & 2
Principle 5:	Biomass production does not result in Indirect Land Use Change (ILUC).	All FMUs	1
Sustainable Forest Management requirements			
Principle 6:	Relevant international, national, regional and local legislation and regulations are complied with.	All FMUs	1 & 2
Principle 7:	Biodiversity is maintained and where possible enhanced.	All FMUs	1 & 2
Principle 8:	The regulating effect and the quality, health and vitality of the forest are maintained and where possible enhanced.	All FMUs	1 & 2
Principle 9:	The production capacity for wood products and relevant non-timber forest products is maintained in order to safeguard the future of the forests.	All FMUs	1 & 2
Principle 10:	Sustainable forest management is achieved through a management system.	All FMUs	1 & 2
Principle 11**:	Forest management by a group offers sufficient safeguards for Sustainable Forest Management.	All FMUs	1 & 2
Requirements relating to the Chain of Custody			
Principle 12:	A Chain of Custody is in place for the biomass, covering the entire chain from the first actor to the energy producer, that links the source to the material used in the product or product group and provides the greenhouse gas emission data for each individual link.	All economic operators	All categories
Principle 13**:	In the case of a group management system for the Chain of Custody, the same requirements shall apply to the group as a whole as to individual businesses.	All economic operators	All categories

* *FMUs must comply with Principles 3 to 5, however verification may take place at the level of the First Collection Point (the next link in the chain of custody, see Chapter 5).*

** *The requirements under P11 and P13 are only relevant if group certification is applied by the forest owner or forest manager (P11) or in the Chain of Custody (P13). If group certification is not applied, the sustainability of biomass can be demonstrated without compliance with the requirements under P11 and P13.*

2.2 'Controlled biomass' and 'RED II compliant forest biomass'

Under certain conditions, the forest biomass (or part thereof) used for energy production may meet a more limited set of sustainability requirements. This biomass is defined as 'controlled biomass' or 'RED II compliant biomass'. 'Controlled biomass' may only be used for the SDE. 'RED II compliant biomass' may be used for both the EU ETS and the SDE. Further details are provided below:

The former Requirement 12.6 in Annex B of the Regulation on the Conformity Assessment of Solid Biomass for Energy Applications (Government Gazette 2017, 70368) defines **'controlled biomass'** as Category 1 or 2 (forest biomass) that only meets Requirements 1.1, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 7.1 and 7.3 of the Regulation and for which the biomass producer is the first link in the Chain of Custody. Since the implementation of RED II in 2021, the AUR SDE (General Implementing Regulation for Stimulating Sustainable Energy Production) includes the requirements that controlled biomass must meet. Section 7.2.1 of this verification protocol provides the mixing rules under which controlled biomass can be used for verification under this protocol.

'RED II compliant forest biomass' is biomass originating from forests as defined in the Regulation on the Conformity Assessment of Solid Biomass and meets all relevant RED II requirements. Thus, it is not about woody residual flows from the timber industry.
Section 7.2.3 specifies the mixing rules under which 'RED II compliant biomass' can be included in the verification of the EP's conformity year statement.
In Chapter 7, only Section 7.5 is relevant to 'RED II compliant biomass'.

For **EU ETS companies**, up to 30% of the amount of forest biomass used (category 1 and 2 biomass) may consist of 'RED II compliant biomass' and can be reported as zero emissions. Under the EU ETS, 'controlled biomass' may not be reported as zero emissions.

To be eligible for an **SDE subsidy**, EPs operating plants with capacities of up to 20 MW have a restriction on the composition of forest biomass they use. No more than 30% of this biomass must consist of 'controlled biomass', 'RED II compliant biomass' or a combination of both categories. In the case of EPs operating plants with capacities greater than 20 MW and an application for an SDE decision predating 21 December 2018, up to 30% of the forest biomass used may consist of 'controlled biomass', 'RED II compliant biomass' or a combination of both categories. In the case of EPs operating plants with capacities greater than 20 MW and an application for an SDE decision dated after 21 December 2018, up to 30% of the forest biomass used may consist of 'RED II compliant biomass' (i.e. no 'controlled biomass'). This is shown in Table 2:

Table 2 *Potential use of 'controlled biomass' and 'RED II compliant biomass' under the SDE*

	Application for an SDE decision *before 21-12-2018*	**Application for an SDE decision** *after 21-12-2018*
Input capacity	Tot 30% gecontroleerde biomassa en/of of REDII compliant biomassa	Tot 30% REDII compliant biomassa
Input capacity <20 MW	Up to 30% controlled biomass and/or RED II compliant biomass	Up to 30% controlled biomass and/or RED II compliant biomass

2.2.1 RED II compliant biomass

To be able to use 30% RED II compliant biomass in a plant, an EP needs to demonstrate that the biomass meets the criteria set out in Article 29 of the RED II. This means consignments of biomass must be delivered with Proof of Sustainability (PoS) issued under an EC-recognised scheme (Voluntary schemes | Energy (europa.eu)) by a party certified in accordance with the same scheme.
The EP is also required to hold certification in accordance with this scheme. Verification of conformity with RED II, per consignment, is not permitted on the basis of this protocol.
The auditor responsible for the conformity year statement will assess whether the biomass listed on the certificate can in fact be classified as forest biomass.

2.2.2 RED II claim for liquid biomass

Some EPs with plants that convert pellets into energy also mix in a limited amount of liquid biomass. The General Implementing Regulations for Stimulating Sustainable Energy Production do not rule out the use of liquid biomass in co-firing and co-gasification plants. European regulations (RED II) prohibit the use of a specific national framework that imposes its own set of rules or additional requirements regarding liquid biomass. Therefore, the sustainability of liquid biomass must be demonstrated in accordance with a European sustainability system. This requires the provision of Proof of Sustainability (PoS) issued under an EC-recognised scheme (Voluntary schemes | Energy (europa.eu)) by a party certified in accordance with the same scheme. The EP is also required to hold certification in accordance with this scheme. The auditor must assess whether the feedstock listed on the certificate has in fact been correctly classified.

2.3 Participants in the verification process

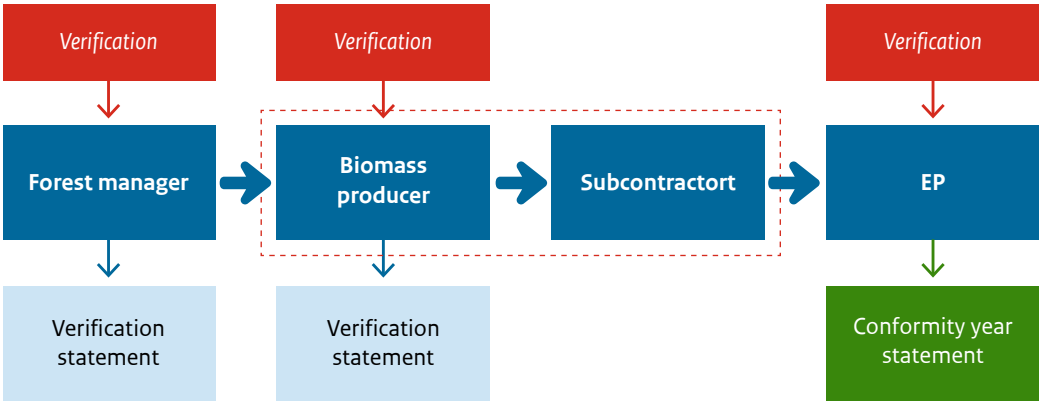
The verification process follows the supply chain of the biomass. All economic operators and relevant subcontractors in the solid biomass supply chain must undergo independent third-party verification in order to demonstrate that the biomass consignment meets the requirements of this protocol. The independent third party is an auditor from an approved Conformity Assessment Body (CAB). Based on a risk assessment, the auditor of this CAB decides whether any affiliated subcontractors must also be audited. The audited economic operators in the biomass supply chain are shown in Figures 1 and 2.

In this protocol, an economic operator is defined as a legal entity that legally owns (see box) the biomass. Where economic operators hire subcontractors for work relating to the biomass, responsibility for these subcontractors' compliance with the sustainability requirements rests with the economic operator. More details about the various economic operators and relevant subcontractors involved in handling biomass are included in Table 3. Any economic operator can supply biomass to the next economic operator in the supply chain with its own verification statement. This verification statement provides the buyer of the biomass with proof that the seller of the biomass supplies biomass that is compliant with the sustainability requirements.

However, verification statements do not have to physically accompany the biomass consignments in each step in the supply chain. It is also possible to have an approved Conformity Assessment Body issue a verification statement for each economic operator at the end of the year, covering all biomass consignments supplied by that economic operator in that year.
At the end of each calendar year, EPs that have received the subsidy in the previous year must demonstrate that all the biomass used for energy production in that year met the sustainability requirements. For this purpose, an approved Conformity Assessment Body must issue a conformity year statement to the EP. For the conformity year statement, the EP needs verification statements and/or certificates for all biomass consignments in that calendar year that are eligible to be subsidised. A format for reporting on the sustainability to which the conformity year statement relates is available at www.rvo.nl/duurzaamheidseisen.

What is legal ownership?
The term legal ownership is defined in Section 1 of Book 5 of the Dutch Civil Code (BW). The transfer of legal ownership of moveable goods (in this case the consignment of biomass) shall take place by way of consignment under a valid title, carried out by the party authorised to dispose of the goods (Section 84 of Book 3 of the BW). The 'valid title' will generally be the purchase agreement. However, the transfer of the legal ownership of the consignment of biomass is not yet completed simply by conclusion of the purchase. It also requires the selling party to supply the consignment of biomass to the purchasing party. Supply or delivery in this case means 'acquisition of ownership'. The physical location of the consignment of biomass is in principle not relevant in this regard. The time and manner of delivery must be laid down in the purchase agreement. From the moment of delivery, purchasing party shall be free to dispose of the consignment of biomass (given that legal transfer of ownership is also a consequence of the delivery) and is also responsible for the biomass and shall bear the risks thereof (including for damage resulting from loss, etc.).

Figure 1 *Verification of the Category 1 and 2 solid biomass supply chain*



Forest managers, First Collection Points, subcontractors and EPs are possible actors in the Categories 1 and 2 solid biomass supply chain and are subject to verification (see Figure 1). Only economic operators that have legal ownership of the biomass can issue verification statements. This means that subcontractors' activities performed on behalf of economic operators in the supply chain are part of the verification at the contracting economic operator concerned. Subcontractors do not receive verification statements themselves.
Economic operators (referred to as Points of Origin) supplying Category 3, 4 or 5 biomass to a First Collection Point are not subject to verification, but may be selectively audited during verification of the First Collection Point (FCP), depending on identified risks (see Figure 2).

Figure 2 *Verification of the Category 3, 4 and 5 solid biomass supply chain*

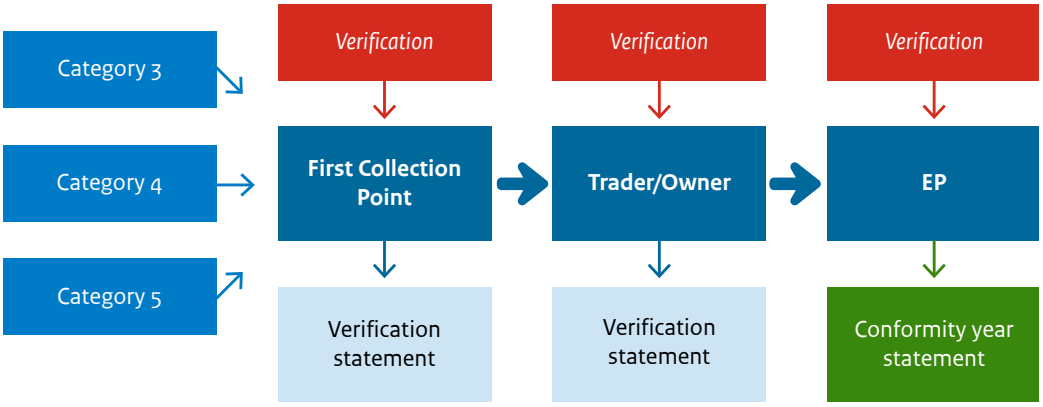


Table 3 *Parties in the solid biomass supply chain*

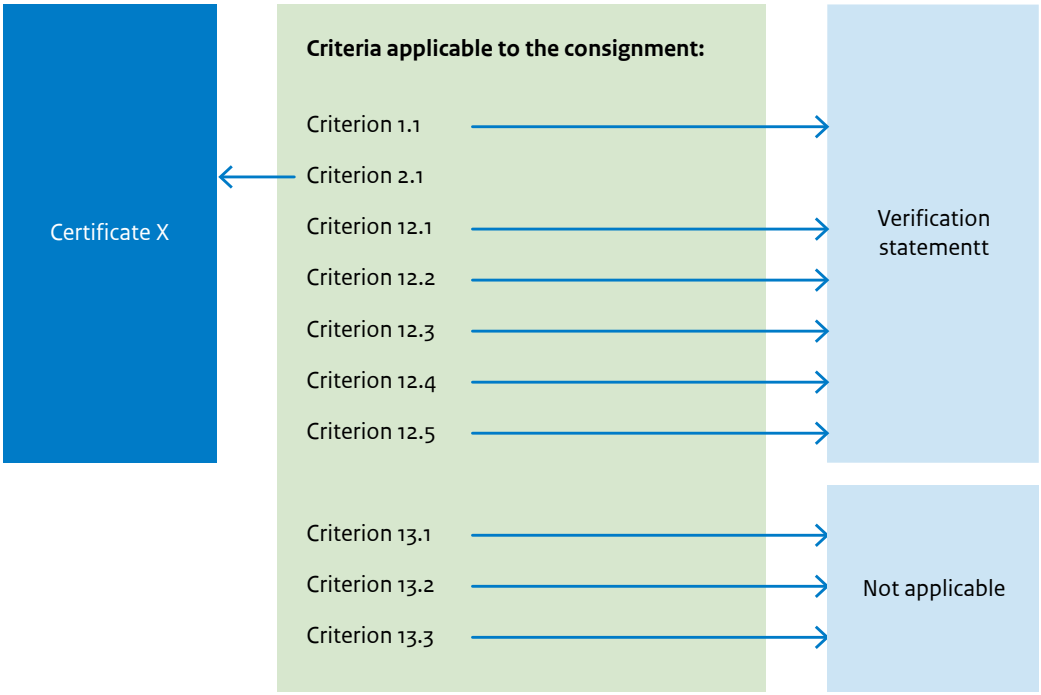
Economic operator *Any company or organisation (legal entity) that handles (e.g. trades, stores, processes) sustainable solid biomass and has legal ownership of the biomass.*	**Subject to verification**
Forest manager The owner, concessionaire or person who is otherwise legally responsible for the management and exploitation of a Forest Management Unit, being one or more forest stands containing natural forest, planted forest or other types of forest that are managed as a single unit, in accordance with a forest management plan as referred to in Criterion 10.2.	Yes
First Collection Point FCPs are economic operators that collect or receive biomass directly from the point of origin. In addition, biogenic raw materials can be processed at a First Collection Point into biomass suitable for an energy producer (such as a pellet mill). In cases like this, the First Collection Point is the biomass producer. FCPs trade and distribute the collected biomass. FCPs are responsible for the correct documentation of the categories and quantities of biomass collected.	Yes
Points of Origin Points of Origin (POs) are economic operators where Category 3, 4 or 5 biomass occurs or is generated. POs are not subject to verification, but may be audited during the FCP verification, based on identified risks.	No
Subcontractor Company or organisation that has a contract with an economic operator for services or activities, such as harvesting, transport or storage. The subcontractor has no legal ownership of the biomass and is therefore not formally considered an economic operator in this protocol. A subcontractor can be audited during the verification of the hiring economic operator, based on identified risks.	No
Energy Producer The subsidy recipient that runs an energy production plant where sustainable solid biomass is processed into renewable electricity and/or renewable heat (in EU ETS: in which biomass is burned).	Yes*

* *For the EP, this is the conformity year statement*

2.4 Verification in conjunction with certificates

In addition to verification statements, under this verification protocol, economic operators can also make use of certificates to demonstrate that the biomass meets the sustainability requirements. The assessment of these certificates and determining their scope falls beyond the scope of the verification protocol.
In practice, however, it is quite possible for economic operators to use the verification protocol in conjunction with certificates. The reason for this is that certification schemes do not always cover all sustainability requirements. In such cases, economic operators can ensure compliance with the missing requirements by way of a verification statement (see Figure 3). The verification statement would then only relate to the part of the sustainability requirements not covered by the certificate. An overview of approved certification schemes and the scope of these schemes is available at www.rvo.nl/duurzaamheidseisen. When determining the scope of the verification, in the case of partial verification, checks must be made to ascertain which requirements have already been covered by certificates. This is not a substantive assessment, and the verification statement will make no ruling on compliance with the section of the requirements that is guaranteed by certificates. When issuing the conformity year statement to the EP, an assessment will be carried out for each underlying consignment in order to ascertain whether the correct verification statements and/or approved certificates have been issued for all the requirements. In addition, the conformity year statement will verify whether the EP has complied with a number of specific requirements (also see Section 2.6 on the conformity year statement).

Figure 3 *The combination of the scopes of the certificates and verification statements present covers all the requirements for the biomass consignment. An example of a Category 3 biomass consignment.*

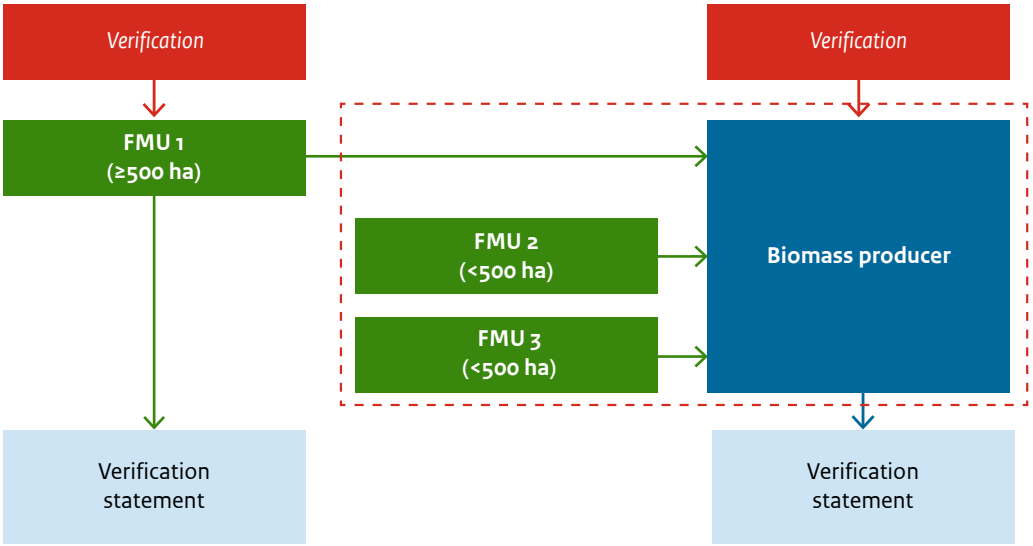


Please note that, if 12.2 and/or 12.4 and/or 12.5 take place by verification, then 12.5 must also take place by that same verification.

2.5 Verification of conformity with Sustainable Forest Management criteria using a Risk Based Approach (only possible for EU ETS)

For FMUs <500 ha, the EU ETS states that the sustainability of biomass does not have to be verified at the level of the FMU, but that this is also permitted at the level of a defined sourcing area. As such, the Chain of Custody starts with the First Collection Point that can demonstrate compliance with Sustainable Forest Management criteria, based on a Risk Based Approach (RBA) (see Figure 4).

Figure 4 *Verification of compliance with Sustainable Forest Management criteria, based on a Risk Based Approach at the First Collection Point.*



The First Collection Point will need to produce sufficient evidence to demonstrate that the initial or residual risk level is 'low' for each Sustainable Forest Management (SFM) criterion. For each criterion with a higher risk level in the relevant sourcing area, mitigation measures must be implemented. These measures must be effective and be monitored by the First Collection Point in such a way that the risk of non-compliance is reduced to a 'low' level.
The requirements for demonstrating compliance using a Risk Based Approach (RBA) are set out in Chapter 8. The period in which compliance with the SFM criteria can be demonstrated for Category 2 biomass, for the SDE, using an RBA, depends on the first year in which the EP receives SDE subsidy. This period has now elapsed for all SDE plants. This Risk Based Approach can still be used for reporting zero emissions for the EU ETS.
N.B. since the start of 2023, the Risk Based Approach has no longer been permissible for the SDE.

2.6 Verification statements

2.6.1 Responsibility of economic operators

Each economic operator in the sustainable biomass supply chain is responsible for compliance with the requirements of this protocol, as well as for the completeness and correctness of the information relevant to the verification. The economic operator must check and confirm that its processes and documentation are in compliance with the requirements before supplying biomass to the next economic operator.
As the party with a legal obligation under the Regulation, the EP is expected to have processes in place (e.g. contractual agreements, supplier evaluations) to ensure compliance with the requirements of this protocol within the entire sustainable biomass supply chain.

2.6.2 Responsibility of Conformity Assessment Bodies

Conformity Assessment Bodies issue a verification statement based on a successful audit of an economic operator. They have been recognized to do so by the Minister for Climate and Energy Policy. A list of recognized Conformity Assessment Bodies is available at www.rvo.nl/duurzaamheidseisen.

The Conformity Assessment Body keeps a register of all issued verification statements and conformity year statements, containing the following information:
- unique number of the statement issued;
- date of the statement;
- name and address of the economic operator for which the statement was issued;
- name and address of the recipient of the biomass.

2.6.3 The verification process

Economic operators up to and including the EP can demonstrate compliance with the requirements of this protocol through a verification process. This is conducted by way of post-delivery verification. The verifications include checks to determine whether the quantities of biomass that have already been supplied (or received and processed by an EP) meet the requirements of this protocol. The verification process assumes:
- an economic operator that has supplied the next economic operator (buyer/receiver) during a certain period of time, and the available information on the sustainability of the biomass consignment.

The biomass consignment must comply with the principles, criteria and indicators in this protocol to which the verification statement relates. The combination of the scopes of the various certificates and the statement should encompass the entire scope of the relevant biomass category in the consignment. A successful verification results in a verification statement for each customer to which the economic operator supplies biomass.

2.6.4 Purpose of the verification statement

The verification statement confirms that a consignment of biomass supplied by an economic operator was produced in accordance with the sustainability requirements (or part thereof). Insofar as the information relates to the emissions reduction calculation, the statement confirms that the necessary information that has passed down the Chain of Custody is correct. After all, the requirement as outlined in Criterion 1.1 is verified at the EP, but can only be assessed there if the correct information is passed down through the entire Chain of Custody. A verification statement is issued for a specific period for each economic operator that is part of the Chain of Custody of a consignment.

2.6.5 General requirements

A verification statement for a consignment of biomass can only be issued for a single geographical location of an economic operator in the Chain of Custody (i.e. an FMU, a processing unit or the EP) or for a group of FMUs. The verification statement reflects the quantity and the sustainability characteristics of the biomass consignment. Given that the statement is issued as proof of a sustainable consignment to the next link, a separate statement is issued for each economic operator in the Chain of Custody receiving biomass. Each economic operator supplying biomass submits a copy of the verification statement to the economic operator receiving the biomass, as proof that the consignment of biomass complies with the requirements of this protocol to which the statement relates.
If the scope of this verification comprises Criterion 12.2 and/or 12.4 and/or 12.6, then 12.5 must also be included in the verification.

2.6.6 The verification statement

Each verification statement must contain at least the following information:

General
- name and address of the economic operator that has requested the verification statement;
- legal framework and requirements (this protocol) upon which the verification statement is based;
- specification of the claims of the approved certificates that are present for the consignment of biomass, including a list of the criteria for which the relevant certification schemes have been approved, in accordance with the results published regarding the approval of the schemes;
- the scope of this verification statement. These are the additional requirements that apply to this consignment of biomass. These must be listed at the level of the criteria;
- work performed during the verification;
- quantities (in tonnes) of the biomass consignments;

- an assessment of the application of the criteria as defined in the scope of this verification statement. If these criteria have been met, a positive statement may be issued;
- a specification or list of the criteria covered by the certificates and the criteria for which a positive statement was issued, collectively covering all applicable requirements for this consignment;
- name and address of the economic operator that took receipt of the biomass;
- a unique code with the following format: AAA-VXXXXX-20zz:
  - AAA is a letter code provided by the Netherlands Enterprise Agency (RVO), referring to the issuing Conformity Assessment Body;
  - V indicates the type of statement: verification statement;
  - XXXXX is a unique serial number for each verification statement;
  - 20zz is the year in which the verification statement was issued;
- date of issue of the verification statement;
- name and signature of the Conformity Assessment Body[2].

Sustainability characteristics

- biomass category (1, 2, 3,4 or 5);
- for Categories 1 and 2: does the consignment qualify as 'controlled biomass' or as 'RED II compliant biomass' (yes/no);
- for Category 2, has the RBA been used (yes/no);
- country of origin of the biomass (country of the FMU or Point of Origin (PO) from which the biomass originated);
- GHG emission (in g CO_2-eq/MJ energy carrier) and/or information enabling the use of default values further down the chain. This information must be sufficient to enable selection of the correct category in RED II Annex VI C and D for deliveries to the EP (MJ on lower heating value).

2.6.7 Splitting of verification statements

Splitting of a statement may be requested if the biomass covered by the verification statement is delivered to two or more different buyers after declaration. Splitting is allowed under the following conditions:

- Verification statements based on this protocol can only be split by the Conformity Assessment Body that issued the original statement.
- The statement to be split shall be handed in to the Conformity Assessment Body and cannot be used again.
- The Conformity Assessment Body will subsequently issue one or more statements for an amount of biomass not exceeding the total amount on the original statement.
- The sustainability characteristics stated on the original statement will be allocated to the new statements, in order to comply with mass balance requirements and the emission reduction calculation rules.
- New statements issued after splitting will state that they originate from a split, together with the unique identification code of the original statement.
- The split must be traceable in the mass balance and in the GHG balance.

2.7 Conformity year statements

The responsibilities of economic operators (in this case, the EPs) and the Conformity Assessment Bodies with regard to a conformity year statement are equivalent to those for a verification statement as outlined in Sections 2.5.1 and 2.5.2.

[2] Or the digital equivalent.

The verification process in the case of a conformity year statement relates to:

- The consignments of sustainable biomass received during a year by an EP and processed into renewable electricity and possibly renewable heat, and the available information on the sustainability of the consignments of biomass received.
- The consignments of sustainable biomass received must comply with the principles, criteria and (in the case of verification statements) indicators in this protocol, including the requirements for GHG emission reductions, mixing (mass balance) and the entire Chain of Custody. In addition, the EP must meet the requirements for the use of controlled biomass and Category 2 biomass, in which the Chain of Custody starts with the First Collection Point.
- In addition, the auditor also determines whether the five categories have been applied correctly. When verifying these claims, the auditor may use the reports that have been drawn up by an accountant for the company under the Dutch Guarantee of Origin regulations. In these statements, the biomass used is specified by NTA 8003 coding. The auditor will include this information in their assessment of whether the EP has applied the categories correctly, but is not required to evaluate the NTA 8003 coding itself. A positive verification results in a conformity year statement.

2.7.2 Purpose of the conformity year statement

If, according to the final assessment of the CAB, compliance with all the requirements has been demonstrated for all consignments throughout the year, the CAB in question issues a conformity year statement and submits a more detailed verification report to the EP.
A conformity year statement allows an EP to provide proof that every consignment of solid biomass received in a given calendar year was accompanied by the necessary verification statements and certificates.
No further substantive assessment is carried out on the documentation required, except with regard to Criterion 1.1 regarding GHG emission savings. Assessment in this regard takes place at the EP, based on the information from the Chain of Custody and the EP itself, both per consignment and for joint consignments. In addition, where applicable, the conformity year statement assesses the reported share of controlled biomass and the use of the RBA for Category 2 biomass, if this is used for EU ETS.
The format for the conformity year statement (including the list of consignments covered by the statement) is available at rvo.nl/duurzaamheidseisen.

2.7.3 General requirements

A conformity year statement can only be issued for an EU ETS plant and/or an EP receiving SDE subsidy.
The EP itself appends the conformity year statement to the sustainability report required by the Netherlands Enterprise Agency for the SDE. For the EU ETS emission report, the content of the CYS determines the biomass that may be reported as zero emissions.

The conformity year statement is drawn up using the mass balance determined no later than 31 December of the relevant calendar year. Given that the actual biomass used each year is usually not perfectly equal to the incoming consignments at the EP, the auditor will have to translate the delivery documentation present into biomass used.

2.7.4 The conformity year statement

Each conformity year statement must contain at least the following information:

General

- name of the EP and address of the plant verified for the conformity year statement;
- the area of application of the CYS, that is, the SDE and/or EU ETS;
- the emissions permit number of the EU ETS plant (if applicable);
- the legal framework and requirements (this protocol) on which the conformity year statement was based;
- the calendar year covered by the conformity year statement;
- a description of the activities carried out by the Conformity Assessment Body for this verification;
- a list of all consignments for the biomass used in a calendar year, and a statement from the Conformity Assessment Body confirming that the biomass used by the EP and the sustainability characteristics of the biomass have been reported to the Netherlands Enterprise Agency correctly and meet the requirements of this protocol;

- a unique code with the following format: AAA-CXXXXX-20zz:
  - AAA is a letter code provided by the Netherlands Enterprise Agency, referring to the issuing Conformity Assessment Body;
  - C indicates the type of statement, namely a conformity year statement;
  - XXXXX is a unique serial number for every conformity year statement;
  - 20zz is the year in which the conformity year statement was issued;
- For each consignment, the NTA 8003 code that was used in the reports drawn up by an accountant for the EP under the Dutch Guarantee of Origin regulations (for biorefinery residues, see 2.6.6). This only applies to the CYS for the SDE. This information is not relevant for the CYS for the purposes of the EU ETS;
- date of issue of the conformity year statement;
- name and signature of the Conformity Assessment Body.

Sustainability characteristics for every consignment:

- The quantities of biomass consignments (in tonnes, litres or normalised cubic metres) including the units used. For the SDE: statement of the quantity delivered in tonnes;
- biomass category (1, 2, 3, 4 or 5);
- for Categories 1 and 2: does the consignment qualify as 'controlled biomass' and/or as 'RED II compliant biomass', and that the correct information has been supplied and is linked to the correct consignments;
- for Category 2: has the RBA been used (only permissible for EU ETS);
- country of origin of the biomass (country of the FMU or PO from which the biomass originated);
- GHG emission of the biomass (default or calculated values).
- Calculated values are reflected in g CO_2/MJ (electricity) or MJ (heat);
- an indication of whether and, if so, which approved certification schemes were used (see 2.6.5);
- If an RED II scheme for liquid biomass is applied, or that the correct information has been supplied and has been linked to the correct consignments;
- an indication of whether verification statements were used, including the criteria they covered;
- a statement indicating that the combination of the scopes of all the certificates and verification statements present for the consignment, as mentioned in the foregoing, covers all the applicable requirements for this category of biomass.

Sustainability characteristics for the year:

- Average emission reduction in % compared to the given reference value (only for plants that have an SDE decision and were put into operation prior to 1 January 2021 and not for RED II compliant biomass);
- Since 1 January 2023: an indication that no certification claims for biomass in Category 2 were used based on the RBA and that verification, too, was not carried out using the RBA. This indication is not necessary for EU ETS.
- Amount of 'controlled biomass' and/or 'RED II compliant biomass' (Category 1 and Category 2) as a % of the total material from Category 1 and 2 (see Table 2 for permitted types of biomass).
- A statement indicating that all certificates and verification statements used to demonstrate sustainability were issued by approved Conformity Assessment Bodies. Biomass with an RED II claim does not require this.
- A statement indicating that, throughout the entire Chain of Custody, only approved versions of the certification scheme have been used. Biomass with an RED II claim does not require this.
- Used RED II compliant biomass from Category 1 and Category 2 as a % of the total amount of biomass from Category 1 and 2; this percentage of biomass should not exceed 30%[3].

[3] Table 2 lists the decisions in scope for RED II compliant biomass.

2.7.5 Certificates

Biomass from forests (Category 1 and 2):
When drafting the CYS, it should still be clear which claim covered the forest management requirements of the biomass consignment. This means that, at the end of the Chain of Custody, it should still be clear how the forest was certified, even if the other links in the chain have transferred the biomass consignment under another approved scheme certificate that changed the name of the claim on the biomass.

Determining the category
In addition, at the end of the Chain of Custody, there should be certainty regarding the category of biomass (1 or 2). Certificates from certification schemes that have been approved for 12.4 ensure that the certified parties are able to effectively make that determination and, as such, need only to provide an indication of the category without all the underlying information. If the certificate has not been approved for 12.4, sufficient information is required to travel through the chain to enable verification by the Conformity Assessment Body checking the conformity year statement at the EP. Another way to do this is for the party at the point of origin to draft a verification statement and send it along the chain. For more information, please see the Guidance on the Classification of Biomass: RVO.nl/duurzaamheidseisen.

Where an RED II scheme is applied, sufficient information must be available to determine whether the biomass is Category 1 or 2. In the case of liquid biomass, the category does not need to be determined.

Certification scheme updates
The Decree on the Conformity Assessment of Solid Biomass for Energy Applications includes a strict definition of an approved certification scheme. This is regarded as a fixed set of certification scheme documents (hereinafter referred to as a certification scheme version) on which the assessment of the scheme is based and which has been included in the approval decision to the certification scheme holders. All decisions, including the approved certification scheme versions, are available at the Netherlands Enterprise Agency (RVO) website and have been published in the Government Gazette.
Newer certification scheme versions (for example, if a scheme has updated one or more approved documents) have not been formally assessed and approved and, as such, cannot be used by economic operators in the biomass chain to demonstrate the sustainability of solid biomass for the SDE subsidy. This applies to every document included in the approval decision. This means that any modified document will result in a new certification scheme version. Each new certification scheme version needs approval in order for it to be used to demonstrate compliance with the sustainability requirements.
Where the approval concerns an international meta scheme, this principle applies to the documents at meta scheme level. Each new underlying country scheme that is added on this basis and becomes applicable can be considered a new scheme approval for certified economic operators in the relevant country.

2.7.6 Demonstrating sustainability for biorefinery residues
If an EP wishes to make use of the option to use more than 15% of other residual flows under the exception provided by the General Implementing Regulations for biorefinery residues (NTA 8003:2017 code 595), the sustainability of the biomass that is entered as input at the refinery must be demonstrated in accordance with Section 2.7.4 above. The Conformity Assessment Body drafting the conformity year statement will verify this at the biorefinery. The EP will be responsible for making the relevant arrangements.
The biomass is generated at the refinery as a residual flow. For that reason, the greenhouse gas calculation begins immediately after the creation of this residual flow, and the biorefinery process need not be taken into account in the calculation.

N.B. A non-SDE subsidised EU ETS plant seeking to use residual flows from biorefining is not required to demonstrate sustainability at the biorefinery. Furthermore, it is not restricted by the maximum utilisation limit of 40% for these flows.

3 Requirements for total GHG reductions

The requirements for GHG emission reductions in this chapter apply to EPs that process biomass into renewable electricity and/or heat. An economic operator complies with a criterion when compliance with all applicable underlying indicators is demonstrated.

3.1 Criteria and indicators for Principle 1

Principle 1: **The use of biomass leads to a substantial reduction in greenhouse gas emissions calculated across the entire chain in comparison with the use of fossil fuels.**

C1.1a **The reduction in CO_2-eq emissions is calculated to be a minimum of 70% per year on average based on the EU reference value. The average emissions shall have a maximum of 56 g CO_2-eq/MJ for electricity and 24 g CO_2-eq/MJ for heat. The calculated maximum CO_2-eq emission levels are based on the method and reference values for fossil fuels in Annex VI.B of Directive (EU) 2018/2001.**

C1.1b **No consignment of biomass shall result in emissions above 74 g CO_2-eq/MJ for electricity and 32 g CO_2-eq/MJ for heat. Where an installation has been put into operation on or after 1 January 2021, or will be put into operation by 31 December 2025 at the latest, the envisaged reduction per consignment must be at least 70%. For facilities becoming operational from 1 January 2026, the envisaged reduction is a minimum of 80%. The calculated maximum CO_2-eq emission levels are based on the method and reference values for fossil fuels in Annex VI.B of Directive (EU) 2018/2001.**

The provisions of Criterion 1.1b do not apply to power generation facilities with a total nominal thermal input capacity of less than 20 MW overall.

Indicators	
1.1.1	The EP shall calculate, using BioGrace-II, the total GHG emissions in gram CO_2-eq of biomass processed into renewable electricity and/or heat, based on: default values in RED II Annex VI; or calculated values using the latest version of the BioGrace-II calculation tool (or, with valid justification, an equivalent tool that follows the calculation methodology in RED II Annex VI*); or a combination of calculated values and disaggregated default values where appropriate. The requirements on mixing in the chapter on mass balancing apply. The EP shall register all relevant data.
1.1.2	In relation to Criterion 1.1a, the calculated reduction of CO_2-eq emissions over an average of one year shall be a maximum of 56 g CO_2-eq/MJ for electricity and 24 g CO_2-eq/MJ for heat. Emission reductions shall be calculated using BioGrace-II.
1.1.3	In relation to Criterion 1.1b, no individual biomass consignments shall result in emissions above 74 g CO_2-eq/MJ for electricity and 32 g CO_2-eq/MJ for heat. Where a facility has been put into operation on or after 1 January 2021, or will be put into operation by 31 December 2025 at the latest, the envisaged reduction per consignment must be at least 70%. For facilities becoming operational from 1 January 2026, the envisaged reduction is a minimum of 80%.

* *In 2020, the BioGrace-II tool was updated from version 3 to version 4, due to RED II.*

Criteria 1.1a and 1.1b as a table

	Facility operational prior to 1 January 2021	Facility operational after 1 January 2021 and by no later than 31 December 2025	Installatie operationeel na 1 januari 2026
Minimum average reduction in CO_2-eq emissions over one year	Reduction of at least 70% compared to the reference values for fossil sources	N/A	N/A
Maximum average CO_2-eq emissions over a year	56 g CO_2-eq/MJ for electricity;	n.v.t.	n.v.t.
Maximum CO_2-eq emissions per consignment	74 g CO_2-eq/MJ for electricity;	minimaal 70% reductie ten opzichte van de fossiele referentiewaarden	minimaal 80% reductie ten opzichte van de fossiele referentiewaarden

4 Sustainability requirements for residues from nature and landscape management and agriculture

The Sustainable requirements in this chapter apply to First Collection Points that collect residual flows from nature and landscape management (Category 3 biomass) and agriculture (Category 4 biomass).
An economic operator complies with a criterion/criteria when compliance with all applicable underlying indicators is demonstrated.
A Strategic Risk Assessment (SRA) shall be part of any verification, as outlined in Section 9.2.2 of this protocol. The primary objective is the identification of the compliance aspects that require more or less attention during the verification process. The scale and intensity of the activities producing Category 3 and 4 material will influence the risks of non-compliance with criteria and indicators in this protocol, as well as the measures required to be taken by the economic operators. Examples include the risk of erosion or the importance of the nutrient balance for the different types of soil concerned.

4.1 Criteria and indicators for Principle 2

Principle 2: **Principle 2: Soil quality shall be maintained and where possible improved**

C2.1 **Best practices are applied for the maintenance or improvement of the soil and soil quality in relation to production or the management objectives as these have been included in a management plan.**

Indicators	
2.1.1	The First Collection Point (FCP) shall demonstrate that the supplying Point of Origin (PO) has a policy or a plan for maintaining (and where possible improving) soil quality, based on local best practices. If relevant, this plan shall include: 1. key objectives of soil management; 2. measures to prevent erosion; 3. maintenance of the soil nutrient balance (nitrogen, phosphorus, potassium); 4. maintenance of soil organic matter and soil fertility, structure and salinity.
2.1.2	The FCP shall hold relevant information (e.g. reports from the PO, audit reports, monitoring data) to demonstrate that the plan or policy has been implemented.

5 Carbon and land use change requirements

The criteria and indicators for carbon and land use change in this chapter apply to Category 1 and 2 biomass (C5.1 applies only to Category 1).An economic operator is considered to be in compliance with the criteria once compliance with all applicable underlying indicators has been demonstrated.

For each of the criteria under Principles 3 to 5, economic operators may decide whether they wish to demonstrate compliance at the level of the Forest Management Unit or at the First Collection Point. When conformity is demonstrated at the level of the Forest Management Unit, conformity assessment is performed by the individual forest manager. When conformity is demonstrated at the level of the First Collection Point, conformity assessment is performed by the next link after the forest manager, i.e. the First Collection Point. In practice, this is usually the pellet mill or biomass producer. This party must be able to present all the evidence needed to demonstrate that the Forest Management Units from which it sources biomass satisfy the criterion for which the conformity assessment is conducted.

5.1 Criteria and indicators for Principles 3 to 5

Principle 3: Production of raw biomass does not result in the destruction of carbon sinks

C3.1 Biomass is not sourced from permanently drained land that was classified as peatland on 1 January 2008, unless it can be demonstrated that the production and harvesting of the biomass does not result in water depletion of a previously undrained soil.

Indicators	
3.1.1	The economic operator shall demonstrate that the biomass is not sourced from permanently drained land that was classified as peatland on 1 January 2008.
3.1.2	If Indicator 3.1.1 cannot be fulfilled, the economic operator shall demonstrate that the production and harvesting of the biomass does not result in water depletion of a previously undrained soil.

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point. When demonstrated at the level of the individual Forest Management Unit, the evidence must cover the entire area of the individual Forest Management Unit. When demonstrated at the level of the First Collection Point, the evidence must cover all Forest Management Units in the area from which the First Collection Point sources biomass. Evidence can be obtained by comparing two or more relevant sources of information on the Forest Management Unit (or Units) from which biomass is sourced, for the situation before and after 1 January 2008. Relevant information sources in this context are, for example, area photographs, satellite images, land register documents/ certificates, online maps/databases, site inspections, NGO reports, forest management plans.

If only one type of relevant information is available to compare the situation before and after 1 January 2008, additional evidence is required. This may consist of:

- *Environmental Impact Assessments of expansions since 1 January 2008 (showing no conversion of peatland) conducted with appropriate assessment tools. Examples of appropriate assessment tools include databases like the Harmonized World Soil Database;*
- *reports of consultation with relevant stakeholders (State Environmental Agency, local community, NGOs) confirming that no conversion of peatland occurred after 1 January 2008.*

C3.2 Biomass is not sourced from land that was converted from a wetland to an alternative, dryer ecosystem after 1 January 2008.

Indicator	
3.2.1	The economic operator shall demonstrate that the biomass is not sourced from land that was converted from wetland to an alternative (possibly dryer) ecosystem after 1 January 2008.

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point. When demonstrated at the level of the individual Forest Management Unit, the evidence must cover the entire area of the individual Forest Management Unit. When demonstrated at the level of the First Collection Point, the evidence must cover all Forest Management Units in the area from which the First Collection Point sources biomass. Evidence can be obtained by comparing two or more relevant sources of information on the Forest Management Unit (or Units) from which biomass is sourced, for the situation before and after 1 January 2008. Relevant information sources in this context are, for example, area photographs, satellite images, land register documents/ certificates, online maps/databases, site inspections, NGO reports, forest management plans.

If only one type of relevant information is available to compare the situation before and after 1 January 2008, additional evidence is required. This may consist of:

- *Environmental Impact Assessments of expansions since 1 January 2008 (showing no conversion of wetland) conducted with appropriate assessment tools. Examples of appropriate assessment tools include databases like the RAMSAR Convention, the Modis Land Cover Database and the World Intact Forest Landscape Database;*
- *reports of consultation with relevant stakeholders (State Environmental Agency, local community, NGOs) confirming that no conversion of wetland into an alternative, dryer ecosystem occurred after 1 January 2008.*

C3.3 Biomass is not sourced from wood plantations that were created by means of conversion of natural forests after 31 December 1997, unless the forest manager is not directly or indirectly responsible for the conversion. Biomass originating from wood plantations that were created after 1997 by means of conversion of degraded natural forests or degraded land is exempt from this requirement on condition that this is ecologically and economically justified and that the forest manager is not directly or indirectly responsible for the degradation.

Indicator	
3.3.1	In the case of biomass from wood plantations, the economic operator must prove that: • The wood plantations were not created by the conversion of natural forests, or;. • If the wood plantations were created by the conversion of natural forests, that this conversion took place before 31 December, 1997, or; • If the wood plantations were created by the conversion of natural forests, that this conversion took place after 31 December, 1997, or; 1. the forest manager that harvested the biomass was not directly or indirectly responsible for the conversion, or; 2. the conversion took place in natural forests that, at the time of conversion, were in a degraded state or their soil had degraded, and that the conversion was carried out in an ecologically and economically justifiable manner.

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point. When demonstrated at the level of the individual Forest Management Unit, the evidence must cover the individual Forest Management Unit. When demonstrated at the level of the First Collection Point, the evidence must cover all Forest Management Units in the area from which the First Collection Point sources biomass. Evidence that the wood plantation was not created by the conversion of natural forest can be obtained from two or more relevant sources of information concerning the area on which the wood plantation was developed. Relevant sources of information in this context include forest classification studies, land registry documents, map material and satellite images.

If the wood plantation was established by the conversion of natural forest before 31 December 1997, evidence of this can be obtained by comparing two or more relevant sources of information concerning the area on which the wood plantation was developed, for the situation before and after 31 December 1997.

Relevant information sources in this context are, for example, area photographs, satellite images, land register documents/ certificates, maps, databases, site inspections, NGO reports, forest management plans. In the event that only one type of relevant information is available for the situation before and after 31 December 1997, additional proof is required that may consist of relevant environmental impact assessments or reports of consultations with relevant stakeholders that confirm that the criterion has been met.
If the wood plantation was established by the conversion of natural forest after 31 December 1997, the forest manager must prove that they were not personally responsible (directly or indirectly) for that conversion or that, at the time of conversion, the natural forests were in a degraded state or their soil had degraded, and that the conversion was carried out in an ecologically and economically justifiable manner. When such proof is provided at the level of the First Collection Point, this economic operator must be able to demonstrate the above for all Forest Management Units in which the conversion of natural forest has taken place after 31 December 1997.

Note: Enrichment planting after clear-cutting within a Forest Management Unit could be part of the sustainable management of natural forests, depending on the scale and intensity of the forest management. This is not considered to constitute the conversion of natural forest into a wood plantation.

Principle 4: The use of biomass does not result in long-term carbon debt

C4.1 The Forest Management Unit where the wood is sourced is managed with the aim of retaining or increasing carbon stocks in the medium or long term.

Indicator	
4.1.1	The economic operator shall provide clear and sufficient evidence that the harvesting rates and methods ensure that carbon stocks, in terms of tree stands or other carbon proxies, are maintained or increased in the medium or long term.

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point. When demonstrated at the level of the individual Forest Management Unit, the evidence must cover the entire area of the individual Forest Management Unit. When demonstrated at the level of the First Collection Point, the evidence must cover all Forest Management Units in the area from which the First Collection Point sources biomass.

When such proof is provided at the level of the individual Forest Management Unit, evidence may be submitted in the form of a forest management plan or similar documentary proof. This plan shall outline the current carbon stocks in the Forest Management Unit's above-ground vegetation, as well as the desired development of these carbon stocks. The plan shall focus specifically on the envisaged harvest volumes and the impact of this harvest and of the regrowth on the carbon stocks in the mid to long term. The duration of this 'mid to long term' will depend inter alia on the type of forest, the growth rate and the type of forest management.

Where proof is provided at the level of the First Collection Point, evidence can be provided by independent studies showing that carbon stocks remain the same or increase in the Forest Management Units from which the First Collection Point sources biomass. The assessment of these studies should also include publicly available written views from NGOs or other stakeholders (where available).
If the studies do not provide sufficient evidence that carbon stocks remain the same or increase, additional evidence should be gathered by assessing a sample of forest management plans for Forest Management Units in the area from which the First Collection Point sources biomass. The auditor identifies the forest management plans to be examined, and the First Collection Point ensures that these are available.

C4.2 **Biomass is not sourced from stumps unless these stumps had to be removed from the site for reasons other than wood or biomass production.**

Indicators	
4.2.1	If tree stumps are removed, the forest manager must prove that they are not used as raw material for the production of pellets. OR If the tree stumps are used for the production of pellets, the forest manager must be able to prove that these tree stumps were removed for a reason other than wood or biomass production, for example in the construction of a road (Indicator applies if demonstration of conformity takes place at the level of the Forest Management Unit).
4.2.2	The First Collection Point has an acceptance protocol showing that it only accepts tree stumps (processed or not) as raw material for the production of pellets, if there is evidence that these tree stumps were removed for a reason other than wood or biomass production (Indicator applies if demonstration of conformity takes place at the First Collection Point).

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point.

It goes without saying that the demonstration of compliance with this requirement takes place at the level of the First Collection Point. Individual forest managers face greater challenges in demonstrating that tree stumps from their Forest Management Units, if removed, were not used in pellet production.

C4.3 **On average, less than half the volume of the annual round wood harvest from forests is processed as biomass for energy generation. Round wood from thinning or from production forests with a rotation period of 40 years or less is exempt from this requirement.**

Indicators	
4.3.1	The forest manager must be able to demonstrate, by means of mass balancing, that less than half of the volume of the annual round wood production from the Forest Management Unit is used for the production of pellets (Indicator applies if the demonstration takes place at the level of the Forest Management Unit).
4.3.2	The First Collection Point must use relevant information to demonstrate that less than 50% of annual round wood production (excluding thinning) in the Forest Management Units from which it sources its raw materials, is used in the production of pellets for energy generation. Round wood from production forests with a rotation period of 40 years or less is exempt from this criterion (Indicator applies if the demonstration takes place at the level of the First Collection Point).

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point.

It goes without saying that the demonstration of compliance with this requirement takes place at the level of the First Collection Point. Individual forest managers face greater challenges in demonstrating that less than 50% of the round wood removed from the Forest Management Units is used in pellet production.

In Indicator 4.3.2, 'relevant information' means: reports from government authorities, NGO reports, local economic statistics or similar information to substantiate the claim that less than 50% of the annual roundwood production (excluding thinning) in the Forest Management Units from which roundwood is sourced is used in pellet production. If this information is not available or does not provide sufficient substantiation, the First Collection Point must draw up a mass balance of the annual harvested volume of roundwood in the Forest Management Units from which it sources roundwood. This mass balance must show how much roundwood has been harvested, and that less than 50% of this volume has been used in pellet production.

Principle 5: Biomass production does not result in Indirect Land Use Change (ILUC).

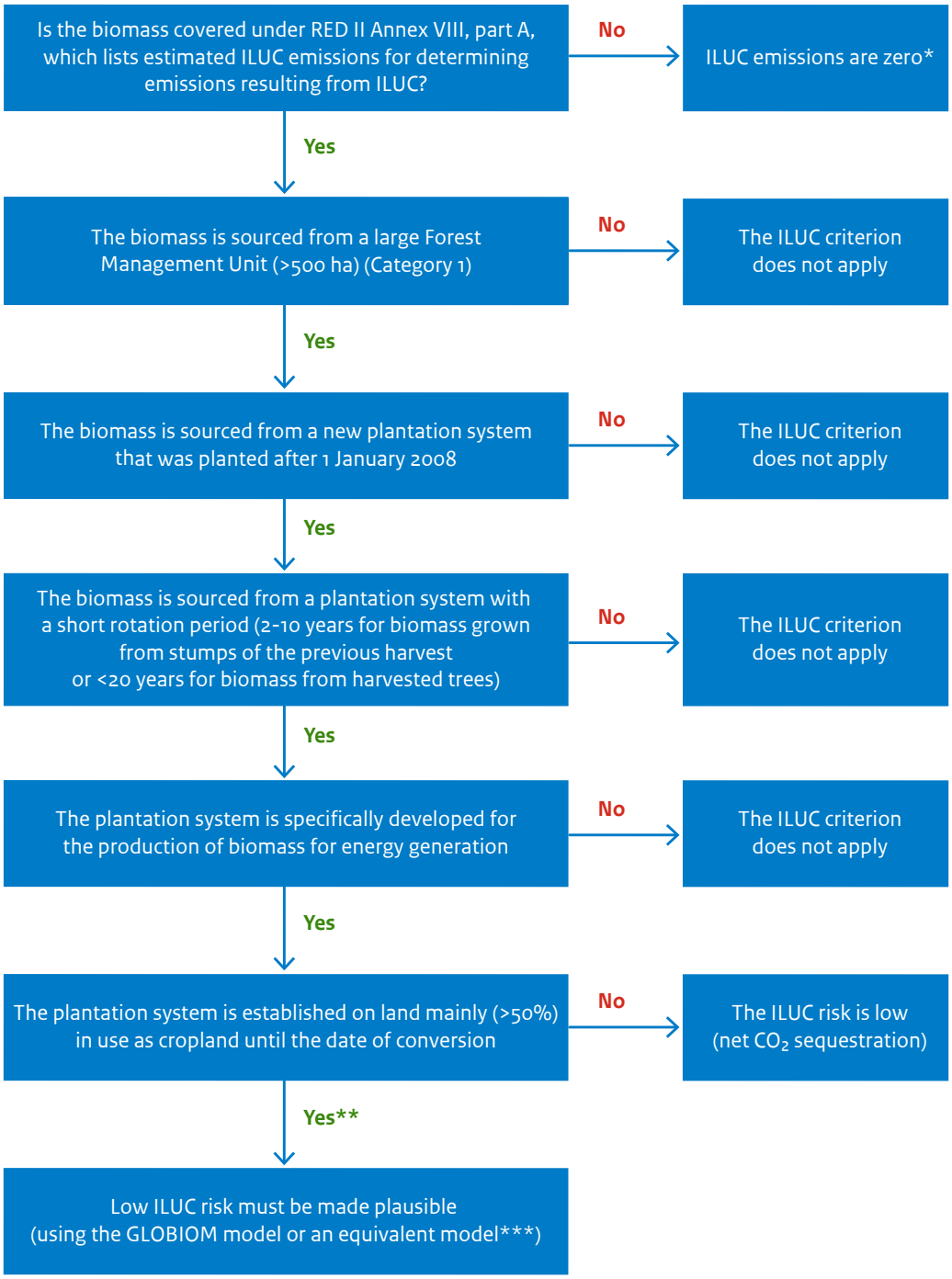
C5.1 Biomass sourced from bioenergy plantation systems that were planted after 1 January 2008 must have a demonstrably low ILUC risk. Biomass from Forest Management Units smaller than 500 hectares is exempt from this requirement.

Indicators	
5.1.1	With regard to biomass sourced from bioenergy plantation systems that were planted after 1 January 2008, forest managers must demonstrate that no ILUC is involved or that there is a low risk of ILUC. To this end, forest managers must navigate through the decision tree shown below and document the results. If the decision tree indicates the need for additional evidence to establish a low risk of ILUC, the forest manager is obliged to furnish this substantiation by using the GLOBIOM model or an equivalent model. This substantiation must be documented.
5.1.2	If the demonstration occurs at the level of the First Collection Point, the economic operator is required to provide evidence of the above for all biomass it receives from bioenergy plantation systems established after 1 January 2008.

Explanatory notes

Demonstration of compliance with this requirement may take place at the level of the individual Forest Management Unit or at the level of the First Collection Point. When demonstrated at the level of the individual Forest Management Unit, the evidence must cover the entire area of the individual Forest Management Unit. When demonstrated at the level of the First Collection Point, the evidence must cover all Forest Management Units in the area from which the First Collection Point sources biomass.

ILUC criterion decision tree



* *In accordance with RED II Annex VIII, ILUC emissions are taken to be zero for feedstocks not listed in Part A of Annex VIII. Part A references the categories of cereal and other starch-rich crops, sugars and oil crops*

** *There is a risk that a possible increase in CO_2-emissions cannot be fully compensated by carbon sequestration in plantations (net ILUC emission), but this risk is expected to be low.*

*** *The GLOBIOM model builds on the LIBB method mentioned in the explanatory notes to the criterion.*

6 Sustainable Forest Management requirements

The SFM criteria and indicators in this chapter apply to Category 1 and 2 biomass. In the case of Category 2 biomass, FMUs and First Collection Points could be eligible for an SDE subsidy by using an RBA to demonstrate compliance with SFM requirements at the level of the sourcing area. While this option is no longer possible for SDE subsidies, it is still available for EU ETS. If indicators cannot be used for the risk assessment, other means of verifying that the criterion has been met may be used. This shall be made transparent to the Conformity Assessment Body during the verification process (see Section 8.3.1 of this protocol).

An economic operator is considered to be in compliance with a criterion once compliance with all applicable underlying indicators has been demonstrated. A Strategic Risk Assessment (SRA) shall be part of any verification, as outlined in Section 9.2.2 of this protocol. The primary objective is to identify the compliance aspects that require more attention during the verification process. The scale and intensity of forest management will influence the risk of non-compliance with the criteria and the indicators of this protocol or the required measures to be taken by the economic operator. Aspects of the scale and intensity of forest management are relevant for such activities as the identification, monitoring and protection of locations with a high conservation value (C7.1), protection of endangered species (C7.2) and the management plans and systems in place for forest management (C10.1, C10.2, C10.3 and C10.5).

6.1 Criteria and indicators for Principles 6 to 11

Principle 6: Relevant international, national, regional and local legislation and regulations are complied with.

C6.1 The forest manager holds the legal right to use the forest.

Indicator	
6.1.1	Documentation demonstrating legal rights to manage the land as forests and manage and utilise its forest resources (e.g. registrations in the land register, licences, permits), including associated maps (where applicable), shall be provided.

Explanatory notes

Legal rights comprise at a minimum:

- *land tenure and management rights;*
- *concession licences;*
- *harvesting permits;*
- *legally required licences for the exploitation, payment and claims related to ecosystem services.*

C6.2 The forest manager complies with all obligations to pay taxes and royalties.

Indicator	
6.2.1	Clear and sufficient evidence (statement from tax authorities, auditor's statement, payment receipts) that all taxes and royalties related to forest management are paid correctly (timely and in full) shall be provided.

Explanatory notes

This includes all legally required taxes/royalties, such as:

- *forest harvesting fees, such as royalties, stumpage fees and other volume-based fees. These payments must be based on correct classification of quantities, qualities and species;*
- *sales taxes that apply to wood being sold, including sale of wood as growing forest (standing stock sale);*
- *income and profit taxes related to profit derived from the sale of forest products and harvesting activities.*

C6.3 **Anti-corruption legislation is complied with. If no anti-corruption legislation exists, the forest manager shall take alternative anti-corruption measures proportionate to the scale and intensity of the management activities and the risk of corruption.**

Indicators	
6.3.1	The economic operator is aware of any applicable anti-corruption laws and regulations and has a system in place to monitor its performance against these measures.
6.3.2	In countries with a Corruption Perception Index (CPI) of less than 50 and where anti-corruption laws and regulations do not exist or are ineffective, the economic operator shall ensure that staff whose roles carry a higher level of risk in the area of ethical business practice (e.g. sales, harvesting, logistics, dealing with local officials) are trained on what action to take in the event of an issue arising in their area.
6.3.3	In countries with a Corruption Perception Index (CPI) of less than 50 and where anti-corruption laws and regulations do not exist or are ineffective, the economic operator shall have a transparent and effective system in place for confidentially reporting and dealing with unethical business practices without fear of reprisals towards the reporting party.

Principle 7: Biodiversity is maintained and where possible enhanced

C7.1 **Sites with a high conservation value and representative areas of native ecosystems that are found in the Forest Management Unit have been identified and are protected and where possible enhanced. The sites may contain one or more of the following values: diversity of species, ecosystems and habitats, ecosystem services, ecosystems at landscape level and cultural values.**

Indicators	
7.1.1	Documentation has shown that a process has been followed for the Forest Management Unit, regarding the identification, protection and monitoring of sites with a high conservation value. This process comprises, at minimum, the following elements: • identification of sites with a high conservation value: locations of sites with a high conservation value shall be established. This is done using relevant regional scientific information, nationally and/or internationally recognised databases, environmental impact assessments, and information submitted by interested and affected stakeholders. Involvement of the local inhabitants or indigenous people is a condition for establishing cultural values; • development and implementation of measures to protect sites with a high conservation value: potential threats with regard to the identified sites with a high conservation value shall be established. Effective measures shall be developed and implemented to protect and/or enhance sites with a high conservation value. In the development of these measures, the stakeholders affected shall be proactively involved, with interested stakeholders involved on request; • Monitoring and feedback: within the framework of the forest management plan, there shall be an effective programme aimed at monitoring the status of the sites with a high conservation value and the effectiveness of the measures that have been taken. If necessary, the conservation measures shall be modified. A key part of the monitoring process is the proactive involvement of affected stakeholders and the involvement of interested stakeholders at their request.

Indicators	
7.1.2	Sites that, after the completion of the process, have been identified as sites with a high conservation value shall contain at least one of the following values: • diversity of species: Concentrations of biological diversity, including indigenous species and rare or endangered animal species that are of importance at global, regional or national level; • ecosystems and habitats: rare or endangered ecosystems, habitats or refuges; • ecosystem services: basic ecosystem services in critical situations, such as the protection of important water sources and control of the erosion of vulnerable soils and slopes; • ecosystems at landscape level: intact forest landscapes or other large intact ecosystems or mosaics of ecosystems at landscape level that are of importance at a global, regional or national level because they contain viable populations of the majority of the natural species in natural patterns with regard to distribution and numbers; • cultural values: sites or means of living that are of global or national cultural, archaeological or historical importance and/or fundamental to the traditional cultures or beliefs of the local population or indigenous people.
7.1.3	Local communities must be involved in the establishment and evaluation of strategies and measures to maintain and/or enhance the sites of high conservation value if they were consulted to help identify these sites.

C7.2 Measures have been taken to protect endangered plant and animal species and, if applicable, to increase the populations and enhance the habitats of these species.

Indicators	
7.2.1	Rare and endangered species and their habitats (e.g. nesting and feeding areas) that are present or are likely to be present within the FMU are identified based on 'best available information' known to and observed by the economic operator and based on what could be learned from neighbours and other local stakeholders.
7.2.2	In the presence of rare and endangered species within the FMU, appropriate forest management practices to protect or maintain the presence of rare or endangered species and their habitats within the FMU have been defined and implemented. Appropriate forest management practices include, but are not limited to: • conservation zones (or protected areas). The size and location of the conservation zones conform to national and local legislation and shall be sufficient to guarantee the continuing presence of the identified species. Conservation zones have been identified and marked on maps and, where necessary, on the ground, in a way that is visible when entering the zone; and • reduced harvesting methods to protect nesting and breeding sites

Explanatory notes

Conservation zones are not necessarily forestland. They may include wetlands and open space and may have dual purposes.

C7.3 The conversion of forests within the Forest Management Unit to other forms of land use, including wood plantations, is not permitted unless:

- the area concerned is small, no greater than 5% of the area of the Forest Management Unit on the benchmark date of 1 January 2008, it clearly leads to long-term advantages for nature conservation and there is no damage or threat of damage to sites with a high conservation value.

Indicators	
7.3.1	Any parts of the FMU that are scheduled for conversion from natural or seminatural forest to plantation or any other kind of non-forest land use have been clearly identified and documented.
7.3.2	The areas scheduled for conversion shall total less than 5% of the total area of the FMU as of 1 January 2008.
7.3.3	The areas scheduled for conversion do not damage or threaten any site of high conservation value.

Explanatory notes

'Clear long-term advantages for nature conservation' means that the conversion fits in a long-term forest management plan and the related forest management measures. If, for example, the conversion is part of the construction of a road, and this road is beneficial for the implementation of the Sustainable Forest Management plan and the conversion complies with the other conditions specified here, then the conversion is compliant with the requirement formulated here.
The requirements of C7.3 refer to conversion within an FMU to other types of land use, including wood plantations. Beside this, biomass from wood plantations that were created by conversion of natural or semi-natural forests after 31 December 1997 is not accepted according to C3.3.

C7.4 **In the case of wood plantations, there is a preference for native species, and a relevant percentage of the wood plantation area must be able to revert to natural forest at a later stage.**

Indicators	
7.4.1	In the case of wood plantations, it is demonstrated through documented trials that the selection of species for planting is based on their overall suitability for the location and their appropriateness to the management objectives.
7.4.2	Any decision to use exotic species and genotypes must be clearly justified.
7.4.3	Representative samples of existing natural ecosystems, which shall cover at least 5% of the area of the FMU, are managed so as to retain them or restore them to their natural state, based on the identification of key biological areas and consultations with stakeholders, local government and scientific authorities.

C7.5 **Exploitation of non-timber forest products, including products from hunting and fishing, is regulated, monitored and controlled to safeguard the maintenance of the biodiversity in the forests.**

Indicators	
7.5.1	The forest manager identifies and complies with all legal requirements applicable to the management and/or collection of the non-timber forest products in question, including CITES.

Principle 8: **The regulating effect and the quality, health and vitality of the forest are maintained and where possible enhanced**

C8.1 **The soil quality of the FMU is maintained and if necessary improved, with special attention to coasts, riverbanks, erosion-sensitive areas and sloping landscapes.**

Indicators	
8.1.1	Specific measures have been taken to maintain and if necessary improve the soil within the FMU in terms of structure, fertility and biological activity. As a minimum, site preparation and harvesting methods within the FMU shall have been designed to minimise soil compaction and maximise the retention of nutrients on-site.
8.1.2	All forestry operations within the FMU with a potentially negative environmental impact, with an emphasis on watershed protection (e.g. coasts, riverbanks), areas susceptible to erosion and slopes are accompanied by appropriate control systems and procedures. Control systems are based on national or regional best practices with regard to erosion and sediment control, minimisation of forest damage during harvesting, road construction and other mechanical disturbances that may arise under specific weather conditions (all-weather harvesting vs dry weather harvesting).

C8.2 **The water balance and quality of both groundwater and surface water in the FMU and downstream (outside the Forest Management Unit) shall be at least maintained and where necessary improved.**

Indicators	
8.2.1	Forestry operations within the FMU should not negatively impact the local hydrology of natural water courses, water bodies, riparian zones and their connections.
8.2.2	All forestry operations within the FMU with a potentially negative environmental impact shall be accompanied by appropriate control systems and procedures with regard to protection of water resources both within and downstream from the FMU, based on national and regional best practices.

C8.3 Important ecological cycles present in the Forest Management Unit are preserved, including carbon and nutrient cycles.

Indicators	
8.3.1	Site preparation and harvesting methods have been designed to minimise soil compaction and maximise the retention of nutrients on-site.
8.3.2	There is evidence that specific measures have been taken to ensure that sensitive areas are sufficiently protected from erosion or fire.

C8.4 Unnecessary damage to ecosystems is prevented by applying Reduced Impact Logging and the most suitable road construction methods and techniques for local conditions.

Indicators	
8.4.1	There is evidence that the most suitable logging (Reduced Impact Logging (RIL)) and road construction methods and techniques are used in the Forest Management Unit to prevent unnecessary damage to ecosystems. This may include the use of RIL techniques, adapted to the site-specific characteristics within the FMU.
8.4.2	Harvest planning and harvest operations are carried out in accordance with national or subnational best practice guidelines.

C8.5 If fires are used to achieve forest management objectives, such as regeneration of specific tree species, then adequate control measures have been taken.

Indicator	
8.5.1	Where fires are used to achieve forest management objectives, such as regeneration of specific tree species, adequate control systems and procedures shall be in place, including fire control and safety precautions.

C8.6 **The forest management measures are designed to prevent and control diseases and pests where these form a threat to natural capital.**

Indicators	
8.6.1	The forest manager has identified pests and diseases that are present and that potentially threaten the natural stock within the FMU.
8.6.2	Where applicable, the forest manager has strategies (in writing) in place to prevent and control any potential and existing pests and diseases that have been identified (e.g. by means of Integrated Pest Management (IPM)).

C8.7 **The use of chemicals is only permitted if ecological processes and the optimal deployment of sustainable alternatives prove insufficient. Pesticides classified as type 1A and 1B by the World Health Organization and chlorinated hydrocarbons are not permitted.**

Indicators	
8.7.1	The forest manager shall not use or store any pesticides classified as type 1A and 1B by the World Health Organization (WHO) nor any chlorinated hydrocarbons.
8.7.2	Where chemicals are used, an up-to-date list is kept of all pesticides used in the FMU.
8.7.3	Where chemicals are used, all staff and contractors involved in their use have received training in handling, application and storage procedures.
8.7.4	Where chemicals are used, safe transport, storage, handling, application and emergency procedures have been implemented.

C8.8 **The accumulation of inorganic waste and litter is prevented, or such waste and litter is collected, stored in approved areas and disposed of responsibly.**

Indicators	
8.8.1	There is a documented system in place for collecting and storing inorganic waste and litter safely, and for safe transportation for disposal.
8.8.2	There shall be no evidence that the forest manager's waste products are disposed of other than at the listed sites or in any manner other than according to environmentally appropriate and safe methods and applicable legal requirements.
8.8.3	All staff and subcontractors involved in the use of chemicals, fuel and oil have received training and materials for controlling and cleaning up chemicals, fuel and oil in the case of accidental spillage.

Principle 9: **The production capacity for wood products and relevant non-timber forest products is maintained in order to safeguard the future of the forests.**

C9.1 **The production capacity of all forest types represented in the Forest Management Unit is maintained.**

Indicators	
9.1.1	There is a clear methodology to determine the Annual Allowable Cut (AAC) or harvest per forest type.
9.1.2	The allowable harvest level is based on conservative, well-documented and most current estimates of growth and yield in order to not jeopardise the forest's productive potential in the medium to long term.
9.1.3	There are clear, accurate and up-to-date records of harvest volumes for all commercial timber species, and of the commercial harvest of any non-timber forest products.

C9.2 **The Forest Management Unit is sufficiently protected against all forms of illegal exploitation of timber and non-timber forest products, including hunting and fishing, illegal establishment of settlements, illegal land use, illegally initiated fires and any other illegal activities.**

Indicators	
9.2.1	The boundaries of the FMU have been clearly marked and mapped.
9.2.2	Concrete measures are taken to prevent illegal harvesting, including of products of hunting and fishing, settlement, illegal land-use, illegal fires and any other unauthorised activities within the FMU.

Explanatory notes

Depending on the size of the forest area and on the risk of illegal activity occurring, such measures may include:

- *forest roads with gates and/or controlled access to areas of high risk;*
- *forest roads that are physically closed off after harvesting;*
- *forest roads that are patrolled to detect and prevent illegal access to the forest;*
- *personnel and resources that have been assigned to promptly detect and control any illegal activities.*

Indicators	
9.2.3	Appropriate measures are taken when illegal activities are detected.

Explanatory notes

Depending on the nature of the activity, such measures may include:

- *reporting the activity to an appropriate authority;*
- *disciplinary action or fines in the event that staff were involved;*
- *working with the appropriate authorities, always within the law, to control the unauthorised activity;*
- *taking legal action (e.g. prosecution), if necessary.*

Principle 10: **Sustainable Forest Management is achieved through a management system.**

C10.1 **The forest management system is designed to achieve the objectives of a forest management plan and covers the inventory, analysis, planning, execution, monitoring, evaluation and adjustment cycle.**

Indicators	
10.1.1	The FMU shall have policies and operational management objectives that at least meet national and regional legal requirements.
10.1.2	Depending on the scale and intensity of the forest management, the FMU shall have a management plan and/or supporting documents. This management plan shall include the long-term management objectives and a description of the inventory, planning, monitoring and evaluation cycle. An Environmental Impact Assessment is part of the planning.

C10.2 **A forest management plan is drawn up that at least includes:**

- a description of the current condition of the Forest Management Unit;
- long-term goals for the ecological functions of the Forest Management Unit;
- the average annual allowable cut per forest type and, if applicable,
- the annual allowable harvest of non-timber forest products based on reliable and current data;
- budget planning for the implementation of the forest management plan.

Indicator	
10.2.1	A forest management plan includes the long-term management objectives for the FMU, with due regard for ecological (species, ecosystems, functions) aspects. The forest management plan shall contain at least the following information: • a description of the inventory and analysis, planning, execution, monitoring, evaluation and review cycle; • a description of the current state of the FMU; • long-term goals aimed at ecological functions; • average annual allowable cut by forest type and, if applicable, the annual allowable commercial exploitation of non-timber forest products, calculated on the basis of reliable and timely data;

C10.3 **Essential elements for the management of the forest are indicated on maps.**

Indicators	
10.3.1	There are appropriate maps of the forest resource base, indicating conservation zones, planned management and land ownership.
10.3.2	Before the commencement of harvesting and road construction, clear and accessible maps shall be made available describing the forest resource base and the boundaries of the FMU, including sites with special ecological, archaeological or cultural values, sites reserved for wildlife and sites where harvesting takes place.

C10.4 **The implementation of the forest management plan is periodically monitored and the ecological effects of forest management are evaluated.**

Indicators	
10.4.1	Procedures for collecting the monitoring data have been clearly documented and are consistent and replicable over time to allow comparison and assessment of change.
10.4.2	The frequency, intensity and expense of the monitoring activities are defined and are appropriate to the scale, intensity and risks of the forestry operations, as well as to the relative complexity and fragility of the resources under management. Monitoring shall at least include the following information in order to facilitate evaluation: • data collected during surveys before and after harvesting and the generic inventories in order to identify and describe key changes in forest flora over time; • data on the presence of key fauna species within the FMU, sufficiently so to allow the identification and description of significant changes in the population over time; • data aimed at demonstrating the maintenance of high conservation values and representative sites of forest types within the FMU.

C10.5 **The forest management plan is implemented by professional office and field staff, whose expertise and knowledge is maintained by means of an effective and regular training programme.**

Indicators	
10.5.1	Competence/training requirements for all employees are identified, and necessary training is provided to ensure employees are sufficiently well qualified and trained to perform their tasks.
10.5.2	Appropriate employee qualification is available.
10.5.3	Safeguards and verification procedures are in place to ensure that contractors are qualified for the activities they conduct within the FMU.

Principle 11: **Forest management by a group offers sufficient safeguards for Sustainable**

C11.1 **A group is led and supervised by a legal entity.**

Indicators	
11.1.1	The group or regional association shall be led and supervised by an independent legal entity or by a person acting as a legal entity.
11.1.2	The entity shall meet all statutory requirements, such as registrations and the payment of taxes.
11.1.3	The division of responsibility between the entity and the members of the group in relation to Sustainable Forest Management and the requirements of this protocol has been clearly laid down.

C11.2 **A group shall meet the requirements for Sustainable Forest Management. The separate forest management activities of the individual members of the group shall also meet these requirements, if applicable for the management of the forest concerned.**

Indicators	
11.2.1	The group or the regional association shall have procedures in place for the membership of the group, in which the requirements of this protocol have been incorporated in relation to the scale and complexity of the group, containing, for example: the organisational structure; • the responsibilities of the entity and the members with corresponding activities; • rules regarding membership of the group; • rules regarding suspending or revoking membership; • complaints procedures for group members; • procedures for taking corrective measures following an internal request or a request from the Conformity Assessment Body, including deadlines and consequences if the measures are not complied with.
11.2.2	The status of the FMUs in the relevant region shall be outlined in a forest management plan or a similar document.

7 Traceability and Chain of Custody requirements

7.1 Introduction

The traceability and Chain of Custody requirements in this chapter ensure that information regarding the physical flow of biomass can be traced back throughout the supply chain. This also ensures that sustainability characteristics can be assigned to individual biomass consignments and that the quantity of biomass withdrawn from any link in the supply chain does not exceed the quantity of biomass supplied. This guarantees the integrity of verification and conformity year statements. The term 'consignment' refers to a specific quantity of biomass with the same sustainability characteristics. A requirement for all consignments is that their origin must be traceable.
Economic operators that are subject to verification are required to have processes in place to ensure that evidence of the sustainability characteristics of received and supplied biomass is documented, managed and forwarded throughout the supply chain. At the first link in the chain, information on the origin of the biomass shall be present in order to allow the category and corresponding sustainability requirements to be determined, making it possible for the EP that receives subsidy as the last link in the chain to demonstrate that the consignments of biomass that have been processed into renewable electricity and/or heat meet the scheme's sustainability requirements.
The requirements in the scheme related to the Chain of Custody are transformed into an integral approach in this chapter. The criteria are included in 7.2, but have not been elaborated into individual indicators as it is usually impossible to consider them independently of one another. Requirements 12.2 and/or 12.4 and/or 12.6, for example, cannot be met without Requirement 12.5 being met for the same verification. Experience in the field has shown that it makes more sense to look at these criteria collectively and transform them into general requirements for traceability and Chain of Custody. This has been done in the rest of this chapter.

7.2 Criteria for the Chain of Custody as defined in the Regulation

The Chain of Custody requirements for all links in the supply chain are outlined in the Regulation on the Conformity Assessment of Solid Biomass for Energy Applications under Principles P12 and P13. Six requirements were included in the Regulation under Principle 12. Principle 13 sets out further requirements for Chain of Custody management carried out by a group or regional association. The Regulation uses the term *handelsketensysteem* (chain of custody system) to refer to the Chain of Custody.

P12	**A Chain of Custody is in place for the biomass, covering the entire chain from the first actor to the energy producer, that links the source to the material used in the product or product group and provides the greenhouse gas emission data for each individual link.**
C12.1	Each link in the Chain of Custody bears final responsibility and has a quality management system in place that provides safeguards for compliance with the requirements of the Chain of Custody.
C12.2	Each link in the Chain of Custody has the relevant greenhouse gas emissions data for its own organisation, which was obtained using the methodology reference values provided for fossil fuels in Annex VI.B of Directive (EU) 2018/2001.
C12.3	Each link in the Chain of Custody keeps all necessary documentation for demonstrating compliance with the applicable sustainability requirements available for a minimum of five years.
C12.4	Each link in the Chain of Custody registers for all incoming or outgoing consignments the quantities and the sustainability information required under these regulations. The verification protocol will specify the required sustainability information.

Explanatory note to 12.4

Sustainability information as referred to in 12.4 shall at least include:

- *The correctly established biomass category or information that allows the biomass category to be clearly determined;*
- *for Category 2 biomass: whether sustainability has been demonstrated at the sourcing area or at the level of the forest manager;*
- *for biomass Categories 1 and 2: whether this is a case of controlled biomass;*
- *country of origin of the feedstock;*
- *the kind of GHG emission value that is being used: (a) a total default value, (b) an actual value or (c) a combination of disaggregated default values and actual values;*
- *If actual values are being used: the GHG emission in g CO_2-equivalent per MJ or tonne of biomass produced;*
- *the certification scheme, including the claim on the biomass consignment, including all additional verification statements that have been used to demonstrate compliance with requirements under P2-P11;*
- *the certification scheme, including the claim on the biomass consignment, including all additional verification statements that have been used to demonstrate conformity with the CoC requirements under P12-P13.*

C12.5	Each link in the Chain of Custody applies a mass balance in case of mixing or splitting of materials with different sustainability characteristics. For mixing, the following applies: • the method shall be applied at least at the level of a location; • the organisation defines a period with a maximum of a year, during which incoming and outgoing consignments are measured, and shall report the results; • all sustainability characteristics of mixed biomass output can be traced back to the characteristics and quantities of the incoming consignments, taking account of the applicable conversion factors.
P13	**In case of a group management system for the Chain of Custody, the same requirements shall apply to the group as a whole as to individual businesses**
C13.1	A group is led by a legal entity that is responsible for the group as a whole. This entity uses a management system as well as technical and human resources that enable it to supervise the participating locations within the scope of the system. The entity conducts an annual audit of a sample of the affiliated group members.
C13.2	The group applies the requirements as described in 12.1 through 12.5 (6). Furthermore, each group member individually meets these requirements insofar as applicable to their own activities.
C13.3	The group leader uses a registration system to record: • the names and addresses of the group members; • a declaration from each member in which they declare that they meet chain of custody systems requirements; • the incoming and outgoing consignments of each individual group member.

7.2.1 Controlled biomass – Guidance on the former Requirement 12.6.

C12.6	When being mixed with other consignments, Category 1 and 2 consignments that only comply with requirements 1.1, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 7.1 and 7.3 are designated as controlled biomass on the mass balance. For controlled biomass, the First Collection Point is the first link in the Chain of Custody and the source is the Forest Management Unit or a defined supply area.

The former Requirement 12.6 exclusively applies to plants with an application for an SDE decision predating 21 December 2018. This requirement concerns a combination of two requirements. The first part relates to a definition of 'controlled biomass' that must be defined and verified at source. As such, this part is not a chain criterion. The second part does, however, constitute a chain criterion. These two elements require two individual assessments:

a. Safeguarding the controlled biomass. Does the controlled biomass comply with the defined set of requirements?
b. Chain of Custody management for controlled biomass. Does the chain of custody handle the controlled biomass correctly?

The practical impact of this split is elaborated below.

Re A) Safeguarding the controlled biomass

The first part of C12.6 relates to the definition of controlled biomass and is made up of three components:

1. Category 1 and 2 consignments that only comply with requirements 1.1, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 7.1 and 7.3;
2. the First Collection Point (referred to as the 'biomass producer' in the former criterion) is the first link in the Chain of Custody;
3. the source is the FMU or defined supply area.

Practical application:

- Verification and determination that biomass from an FMU (or defined supply area) complies with Part 1 and, as such, may be referred to as controlled biomass is only relevant to the First Collection Point, not to the rest of the Chain of Custody.
- The Dutch definition of controlled biomass does not need to coincide with the requirements that certification schemes apply to biomass with a 'controlled' claim. In practice, these certification schemes will have to have their 'controlled' claim approved to demonstrate use of Dutch controlled biomass.
- In the event that a 'controlled' claim of a certification scheme does not cover all the requirements above, the other requirements may be guaranteed through verification. The approach as outlined in Section 2.3 of the verification protocol for the combination of certification and verification to ensure sustainability also applies to any 'controlled biomass' claim. Incidentally, this only applies to the first point, where multiple requirements are assessed.

Re B) Chain of Custody management for controlled biomass

In regard to the above, Requirement 12.6 states the following: when being mixed with other consignments, controlled biomass is designated as such on the mass balance.

For economic operators, after the First Collection Point, it is only this part of the requirement that is relevant. The SDE scheme, after all, restricts the amount of controlled biomass that may be used by the EP with the subsidy. For that reason, this information must be distributed across the Chain of Custody. Therefore, in the event that controlled biomass enters the Chain of Custody, this must be designated as such on the mass balance.
Accordingly, information on the use of controlled biomass qualifies as relevant sustainability information as defined in 12.4.
Controlled biomass is a specialisation of Category 1 and 2 materials. All Chain of Custody requirements that apply to Category 1 and 2 also apply to controlled biomass.

Systems/chains without controlled biomass:

If a statement relates to a group of consignments that do not contain any controlled biomass, former criterion 12.6 will not apply and as such does not require verification. In that case, verification of Principle 12 without requirement 12.6 is possible.

7.2.2 Determining the first link in the Chain of Custody.

The 'Regulation on the Conformity Assessment of Solid Biomass for Energy Applications' sets out definitions, per biomass category, of the source and the first link in the Chain of Custody, namely:

Category of solid biomass	Source	First link in the Chain of Custody
1. Woody biomass from FMUs	Forest Management Unit	Forest manager
2. Woody biomass from small FMUs (<500 hectares)	FMU or sourcing area of which the FMU forms a part	Forest manager or First Collection Point
3. Residues from nature and landscape management	Sourcing area	First Collection Point
4. Agricultural residues	Sourcing area	First Collection Point
5. Biogenic residues and waste flows	Company that generates the residual product	First Collection Point

7.2.3 Mixing with RED II compliant biomass at the EP

With regard to the 30% RED II compliant biomass, the Chain of Custody requirements under RED II will be safeguarded in the chain by means of the EC-recognised certification scheme. Only the conformity year statement for the EP is still subject to a number of requirements under this protocol. These are the requirements in 7.5 in relation to the GHG information and calculations.

7.3 Biomass supply information

This section describes requirements for economic operators in the chain that are subject to verification. These requirements shall be used to ensure compliance with the criteria and will safeguard, in each step of the Chain of Custody, the availability of the information required for the verification statements.

7.3.1 Supply chain and biomass information (applies to all economic operators subject to verification)

Economic operators that are subject to verification shall establish and maintain records that are required at the end of the chain to demonstrate compliance with the requirements of this protocol.

- The first link in the Chain of Custody shall have information available on the origin of the biomass (the source), on the basis of which the categories and sustainability characteristics may be determined (see also Table 3).
- The subsequent links shall ensure that this information is passed on with the consignments through the chain up to the EPs, in accordance with the Chain of Custody requirements.
- Upon verification at the end of the chain, the auditor shall establish whether the five categories have been applied correctly. When verifying these claims, the auditor may use the reports that have been drawn up by an accountant for the company under the Dutch Guarantee of Origin regulations. In these statements, the biomass used is specified by NTA 8003 coding. The auditor will include this information in their assessment of whether the EP has applied the categories correctly, but is not required to evaluate the NTA 8003 coding itself.

All economic operators in the chain subject to verification shall, therefore, have the following up-to-date applicable information available for all consignments of biomass that pass through the Chain of Custody and are included in the conformity year statement by the EP:

- information that demonstrates to which category the biomass being verified belongs;
- for controlled biomass:
  - for the First Collection Point, information demonstrating that the requirements for controlled biomass have been met;
- for other economic operators, information regarding Category 1 and 2 biomass that shows which consignments consist of controlled biomass;
- country of origin (source) of the biomass subject to verification;
- for the application of the RBA for Category 2 biomass:
  - for the First Collection Point, risk assessment records from the sourcing area demonstrating that supplying FMUs meet the requirements in Chapters 4 and 5;
  - For the other economic operators, information that can be used to identify consignments in which the RBA was used to demonstrate the sustainability of this Category 2 biomass;
- for First Collection Points (FCPs), in the case of Category 3 and 4 biomass, information demonstrating that the POs from which the FCPs receive Category 3 and 4 biomass meet the criteria and indicators of Principle 2;
- for FCPs, in the case of Category 5 biomass, information showing that the POs from which the FCPs receive Category 5 biomass are in fact the economic operators that generate the Category 5 biomass;
- GHG emission data for biomass as needed by the EP to determine the GHG emissions of the biomass at the end of the supply chain; In the case of individual GHG calculations, the GHG calculation itself as well as the input data used for the calculation must be available (see 7.5.1);

- a list containing the names and addresses of suppliers and recipients of sustainable or controlled biomass;
- information regarding the claims of approved schemes for biomass consignments and/or approved certificates of the relevant economic operator;
- if applicable, the verification statements corresponding to biomass consignments;
- contracts with relevant subcontractors/service providers and all suppliers and recipients of biomass;
- weighbridge tickets, bills of lading or other documentation for all incoming and outgoing biomass;
- mass balance calculations.

Economic operators shall keep all above documentary evidence and all records to demonstrate compliance available for a minimum period of five years.

7.3.2 Use of verification statements and delivery documentation (applies to economic operators subject to verification up to and including the EP)

Economic operators up to and including the EP that are subject to verification shall provide (under verification) their recipients of consignments of biomass with all the necessary sustainability information concerning the supplied biomass by means of a verification statement. The verification statement must contain the information as indicated in 2.5. Claims that are transferred via certification schemes fall beyond the scope of these statements.
Economic operators may also aggregate a number of consignments into a single contract and a single verification statement, which then cover several consignments. In this case, the verification statement will give details of the entire delivery period.

7.3.3 Timely issuing of verification statements (applies to economic operators subject to verification up to and including the EP)

The timely issuing and receipt of a consignment's sustainability characteristics is vital for documentation, for calculating the mass balance, and for verification by the Conformity Assessment Body. For this reason, verification statements or delivery documentation that contain information for the drawing up of a verification statement should follow the physical delivery of the biomass as soon as possible. Economic operators shall provide the recipient of biomass with a copy of the verification statement no later than 15 days following the date of issue by the Conformity Assessment Body.

7.3.4 Check verification statements (applies to economic operators subject to verification up to and including EP, except FMUs)

The recipient of the sustainable biomass shall check whether all the information required by this protocol is both available and consistent in the verification statement as handed over by the supplying economic operator. Verification statements that are obviously lacking information or contain inconsistent information should not be accepted by the recipient.

7.4 Mass balance

The mass balance method (requirements included under Criterion C12.5) allows consignments of biomass (which may have different sustainability characteristics) and controlled biomass to be physically mixed within internal company processes. Within the mass balance period, consignments of biomass with the same sustainability characteristics (raw material, biomass category, country of origin, GHG emissions, etc.) can be arbitrarily merged or split within the bookkeeping, as long as the total amount does not exceed the quantity credit. This section describes the requirements for economic operators subject to verification that apply a mass balance for the mixing of consignments with different sustainability characteristics.

7.4.1 Mass balance calculation method (applies to economic operators subject to verification up to and including the EP, except FMUs)

When consignments of biomass with different (or limited, or no) sustainability characteristics are mixed, the separate sizes and sustainability characteristics of each consignment remain assigned to the mixture. If a mixture is split up, any consignment taken out of the mixture may be assigned any of the sets of sustainability characteristics (accompanied with sizes), as long as the combination of all consignments taken out of the mixture has the same sizes for each of the sets of sustainability characteristics that were in the mixture. It is necessary for appropriate arrangements to be in place to ensure that the mass balance is respected. The amount of compliant biomass drawn from a mixture shall be equal to the amount of compliant material going into the mixture, provided that corresponding conversion values have been applied in the event of processing or disposal.

The mass balance is calculated using the information in the delivery documentation and shall (if necessary) be corrected after a biomass inventory and the receipt of verification statements (or equivalent underlying documentation) from suppliers. A mass balance calculation is required for each geographical site (location).

7.4.2 Mass balance calculation period and credits (applies to economic operators subject to verification up to and including the EP, except FMUs)

The mass balance may relate to a period of no more than 12 months. If a positive balance (credit) remains, that surplus may be transferred to the following period. The same 'account' may be opened in the following period, at which point the remaining balance is transferred from the previous period. Credit can only be retained for a maximum of 12 months. Accrued credit older than 12 months will expire and cannot be transferred to the next mass balance period.
A negative mass balance (negative credits) is not permitted.

7.5 Greenhouse gas information and calculation

All economic operators up to and including the EP must have sufficient and valid GHG information available concerning the biomass up to that point in the supply chain and must provide this information to the next biomass recipient. With regard to the GHG information that is to be provided to the sustainable biomass recipient, there are four options:

1. use of disaggregated (or other) default values (as reflected in RED II Annex VI);
2. use of actual values (individually calculated values), including information that enables the recipient or ultimate recipient to determine the correct values and/or category (RED II Annex VI);
3. use of a combination of disaggregated (or other) default values and actual values (in accordance with the BioGrace-II calculation rules), including information that enables the recipient or ultimate recipient to determine the correct values and/or category (RED II Annex VI);
4. information that enables the recipient to determine the correct values and/or category (RED II Annex VI C and D). (For example, a trader can provide information on transport distance and mode that the EP can use to calculate the actual GHG value.)

7.5.1 Use of total or disaggregated default values

In all cases, the most recent version of the default values should be used. If the total default value is applied, the supplying economic operator shall report 'Use of total default value' in its verification statement (or equivalent delivery documentation), combined with the following information:

- biomass energy carrier (RED II Annex VI D);
- biomass type (feedstock in RED II Annex VI D);
- transport distance (km) up to the location of the economic operator from which the biomass was dispatched, and;
- the configuration of the pellet mill, to enable selection of the correct default value (if applicable).

In the case of a verification statement (or equivalent delivery document) for a consignment to an economic operator earlier in the chain than the EP where default values are used, the term 'cumulative value' should be used. The foregoing information must also be included in this case.
When a disaggregated default value is applied for a certain element in the supply chain (extraction/

cultivation, processing and transport and distribution), the supplying economic operator shall report 'Use of disaggregated default value' for that particular element in its verification statement, combined with the following information:

- biomass energy carrier (RED II Annex VI C);
- biomass type (feedstock in RED II Annex VI C);
- transport distance (km) up to the site of the economic operator from which the biomass was dispatched (if a disaggregated default for transport and distribution is used); and
- the configuration of the pellet mill, to enable selection of the correct default value (if applicable).

If the actual data do not enable a choice of the right default value (RED II Annex VI C and D), the most conservative value shall be taken, e.g. the value for the longest transport distance and/or a configuration using a natural gas boiler.

7.5.2 Use of actual (individually calculated) values

Individually calculated GHG values, or 'actual values', are calculated based on the calculation methodology laid down in RED II Annex VI B. The BioGrace-II tool or another comparable calculation tool should be used to calculate actual values, provided the calculation method in RED II Annex VI B is applied. The calculation rules laid down in BioGrace-II are compulsory.
Emissions Factors and Lower Heating Value (when not available from BioGrace-II) shall be gathered from official sources. The Lower Heating Value can also be measured by means of laboratory analyses performed by an ISO 17025 accredited laboratory.

Economic operators performing an actual GHG calculation must state the calculated GHG values for their product in the verification statement, in kg CO_2-EQ/tonne or in CO_2-EQ/MJ of sustainable product. Information on actual GHG emission values must be provided for all relevant elements of the GHG emission calculation formula. This means that it may be necessary to report separately on emissions from extraction/cultivation, processing, and transport and distribution (where relevant). Alternatively, the economic operator can provide the actual information as input to enable the biomass recipient to calculate the actual GHG values or determine the default values.

BioGrace-II stipulates that, if actual values are used for one parameter in a step, then actual values must be used for all other parameters in that step as well, including the parameters of the other steps within the same part of the bioenergy production chain (extraction/cultivation, processing, or transport and distribution).

When using actual values, the BioGrace-II rules shall be followed.
The calculation is conducted for a full 12-month period and must be as up to date as possible. As an alternative, it must cover the previous calendar or financial year. The relevant period for data gathering and hus for the calculation of GHG emissions must be transparently indicated in the calculation.

7.6 Management system requirements

Economic operators up to and including the EP shall have a management system to prove they can comply with the Chain of Custody requirements.

7.6.1 Procedures and instructions

The economic operator shall have documented and implemented procedures containing at least the following elements:

- description of internal material flows;
- organisational structure, responsibilities and authorities with respect to traceability and Chain of Custody;
- procedures for complying with this protocol's traceability and Chain of Custody requirements;
- in the event that subcontractors are engaged, the economic operator shall ensure that these parties meet all applicable requirements.

7.6.2 Qualified employees

The management of the economic operator shall identify and nominate competent employees who have key tasks with respect to the implementation and maintenance of this protocol's traceability and Chain of Custody requirements. Those key tasks include:

- sourcing, first gathering/collecting or registration of incoming sustainable products and evaluation of the quantity of sustainable products and related sustainability characteristics;
- processing of sustainable biomass and/or evaluation of the portion of sustainability characteristics;
- delivery, storage, sales and distribution of sustainable products and evaluation of the quantity of sustainable products and related sustainability characteristics;
- calculation of GHG emissions and reductions;
- issuing of verification statements;
- planning and/or execution of internal audits.

The economic operator shall ensure that all employees charged with the above tasks have received appropriate training and/or instruction, and keep records of the training and instruction provided.

7.6.3 Technical equipment

The economic operator shall identify, provide and maintain the technical facilities needed to ensure that this protocol's traceability and Chain of Custody requirements are met. The quantities of biomass consignments shall be determined using measuring devices and methods that comply with relevant regulatory requirements (including local ones).

7.6.4 Internal audits

The economic operator shall conduct internal audits at least once a year covering all the relevant requirements of this protocol and establish corrective and preventive measures if required.

8 The Risk Based Approach

The requirements in this chapter apply to First Collection Points that wish to demonstrate compliance with the applicable requirements in Chapter 6, by means of the RBA. By following the procedures in this Chapter, small-scale FMUs (<500 ha) in a defined sourcing area do not need to undergo individual verification in order to demonstrate compliance with the SFM criteria. The First Collection Point (usually a pellet mill) shall have evidence available to demonstrate that, for each of the SFM criteria, the mitigated residual risk level (or other type of risk level) is 'low'. The RBA can also be used to demonstrate compliance with the controlled biomass criteria.

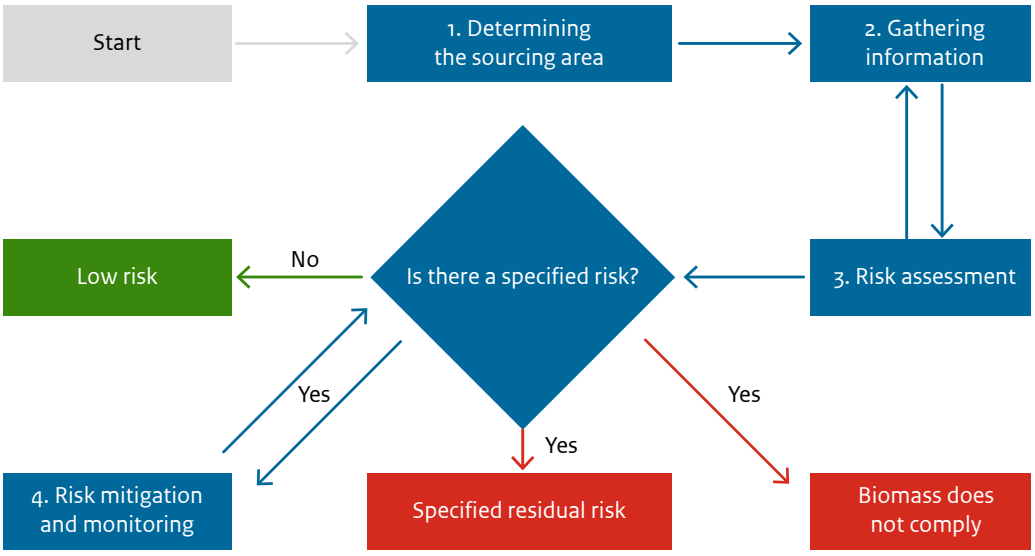
During verification, the First Collection Point shows the Conformity Assessment Body that the RBA was conducted in accordance with the requirements in this chapter, that all required information is available, that the boundaries of the sourcing area are clear and applied accurately and that the mitigation measures are adequate and effective. As part of the verification, the Conformity Assessment Body needs to consult relevant stakeholders. Which stakeholders are to be consulted depends on the information in the risk assessment and is up to the professional judgement of the verification team. When applying an RBA for small-scale FMUs, the First Collection Point must keep an administration in which the FMUs from which biomass is sourced are registered, showing that they each cover no more than 500 ha.

The RBA can be performed by the First Collection Point (or by another organisation on behalf of the First Collection Point), and may cover the supply areas of several First Collection Points (often biomass producers) together, resulting in a risk assessment for the sourcing area. In any case, the First Collection Point must demonstrate that all materials subject to the Risk Based Approach, as determined by the chosen scope of the statement, are comprehensively addressed in the risk assessment, and that the assessment was performed in a manner as indicated in this chapter.
Additionally, as part of the verification, the First Collection Point must supply the Conformity Assessment Body with the required information on how the RBA was performed. The RBA involves the following process steps (see Figure 5):

- determination of the sourcing area;
- gathering information related to the SFM criteria in Chapter 6[4];
- risk assessment;
- establishment and regular monitoring of measures to prevent the sourcing of biomass with a specified risk (mitigation measures);
- regular monitoring of the risk assessment and the mitigation measures put in place.

[4] When carrying out a risk assessment for controlled biomass, the criteria for controlled biomass apply.

Figure 5 *Successive steps for the First Collection Point in the context of the RBA*



8.1 Determination of sourcing areas

The First Collection Point shall identify one or more homogeneous areas (sourcing areas) from which to source biomass. These sourcing areas can be determined both on a geographical scale (e.g. states, counties, provinces) and on a functional scale (forest type, ownership, scope of management, type/quality of forest). In any case, consistent legislation and regulations and the SFM requirements specified in Chapter 6 play a key role in determining the homogeneity of a sourcing area.

The boundaries of an area shall be clearly identified on maps and in other relevant documentation. Boundaries may be described as a reference to the existing administrative or environmental divisions, whilst functional boundaries can refer to characteristics that determine land use, e.g. plantations vs natural forests.

8.2 Gathering information

The First Collection Point shall gather specific information that is relevant for a risk analysis with respect to the SFM requirements.

8.2.1 Documents

Gathering relevant documentation, such as legislation and regulations, government statistics, NGO reports, expert studies and maps, is part of the information gathering exercise. The biomass producer assesses the relevance and reliability of the information using objective criteria, such as date of publication, reliability and independence of the source (academic institutions, international agencies, NGOs and government bodies), methodology, etc.

Data sources shall be referenced so that they can be verified by the Conformity Assessment Body and other external parties.

8.2.2 Consultation of stakeholders and experts

The outcomes of consultations with stakeholders and experts are an important source of information for the risk assessment. A stakeholder is any individual or group that has an interest in any decision or activity (e.g. logging, forest management) of an organisation (in this case, the First Collection Point or FMU involved). Examples of stakeholders are NGOs, local residents or communities, workers or unions, local or regional government, companies and company associations and contractors. While collecting information, the First Collection Point must establish and implement effective procedures for the involvement of stakeholders for the defined sourcing area, as well as relevant SFM requirements that ensure that the rights and opinions of these stakeholders in relation to their interests are taken into account when assessing the risks.
The procedures shall at least include:

- responsibilities for the stakeholder consultation process;
- a description of the various stages in the consultation process;
- identification of the stakeholders to be involved;
- a proactive approach by stakeholders, who must be given sufficient time to respond (at least one month);
- the consultation of qualified and independent experts where specialised knowledge is required.

The First Collection Point shall retain the reports and the contributions and comments from stakeholders and experts, including responses and any measures taken in response.
The First Collection Point shall make the results of the RBA (risk assessment and mitigating measures taken) publicly available as part of the stakeholder consultation.

8.3 Risk assessment

8.3.1 Risk assessment methods

The First Collection Point shall conduct a risk assessment for each identified sourcing area (Step 1), based on the information gathered (Step 2).
The risk of non-compliance shall be assessed for each SFM criterion in Chapter 6, using adequate risk analysis methods. If possible, the underlying indicators in this protocol should be used. Where indicators are not suitable for a risk assessment in respect of a sourcing area (e.g. indicators can only be used at an FMU level), other means of verification are permitted, provided that this is properly substantiated by the First Collection Point for assessment by the Conformity Assessment Body.

Using a list of the qualifications of the persons involved, the First Collection Point shall demonstrate that the persons performing the risk analyses are qualified (through training and experience) to perform risk analyses tailored to the complexity of the processes and information being assessed, and the country or sourcing area under assessment. A peer review by experts can provide additional assurance as to the quality of the risk assessment.

8.3.2 Risk assessment

The risk of non-compliance for each SFM criterion is expressed as ‘specified risk’ or ‘low risk’, based on the information analysed and application of the indicators set out in this protocol. For each SFM criterion, the rationale for risk designation shall be provided in relation to the sources used. A ‘low risk’ is identified when there are clear indications that the risk of non-compliance with the relevant sustainability criterion in combination with the consequences is small and the risk analysis has yielded no information that leads to a ‘specified risk’ designation. A ‘specified risk’ is identified when there is not enough information for the risk assessment to establish whether the risk is low or when the mitigating measures are not sufficiently effective in reducing the likelihood or effects of specified risks. In case of doubt, a precautionary approach shall always be applied.

8.4 Risk mitigation and measures

For a sourcing area designated as a 'specified risk' with regard to the risk of non-compliance with SFM criteria, mitigating measures must be defined in order to reduce the risk level to 'low risk'. In the absence of sufficient information, mitigation measures can comprise additional information gathering (e.g. through on-site verification by the biomass producer), reduction of the sourcing area by excluding risk areas or other appropriate measures. In the event that the risk of non-compliance with one or more SFM criteria remains a 'specified risk' even after the introduction of mitigation measures, biomass from that sourcing area cannot be classified as sustainable.

8.5 Regular monitoring of the risk assessment

The First Collection Point shall conduct a review of the risk assessment and the mitigation measures at least once per year, and in the event of any relevant developments in the sourcing area from which biomass is sourced and/or relevant changes in the information gathered for a particular sourcing area or criterion.

Final remark

On the approval application form, certification schemes applying for approval for their RBAs are asked to specify how these five steps are to be implemented. Final approval will always relate to the approach as a whole. As such, a certification scheme cannot receive approval for a component of the RBA. Consequently, partial verification in addition to certification is not relevant in this regard.

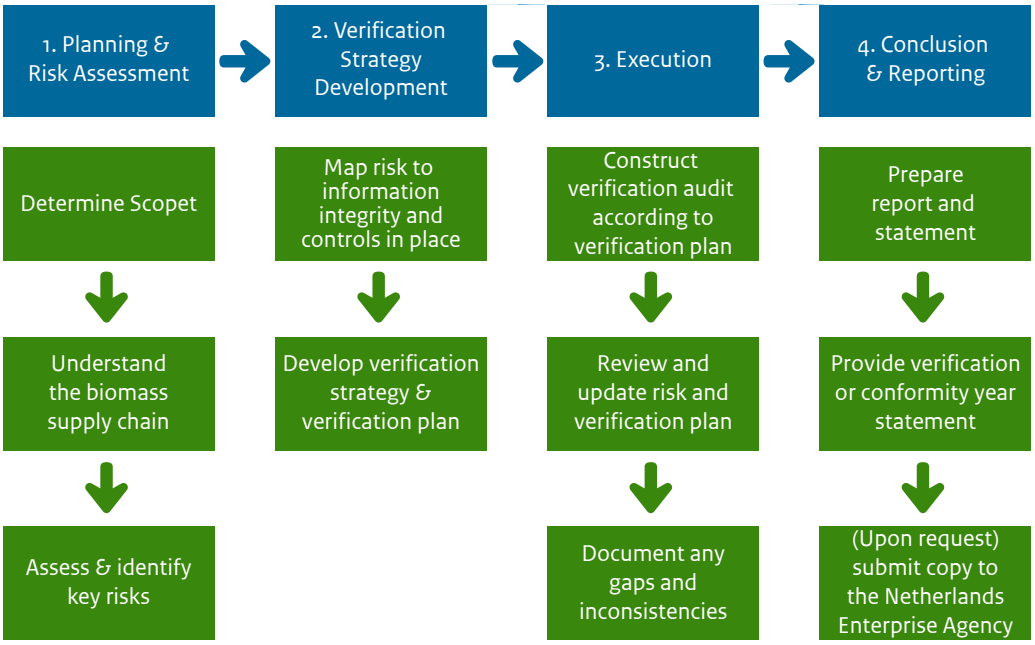
9 Verification procedures

9.1 Introduction

In addition to competent auditors, clear requirements on how to conduct verification audits are key factors for ensuring integrity, reliability, credibility and a high quality of verification. Furthermore, they facilitate a consistent verification of the requirements laid down in the Regulation.
The verification requirements specified in this chapter describe the aspects to be considered and the procedures to be followed when conducting verification audits.

An economic operator seeking verification leading to a verification statement or a conformity year statement must already be in possession of the biomass and, if it is not the first link in the Chain of Custody, must be in possession of one or more verification statements/certificates from its suppliers for that biomass. The verification process consists of four key steps, as described below in Figure 6.

Figure 6 *The verification process*



By definition, verifications to demonstrate conformity with the sustainability requirements for solid biomass always take place retrospectively. Nevertheless, energy companies may wish to have more security regarding the expected conformity with the requirements prior to the purchase of biomass. They are free to commission a Conformity Assessment Body to carry out an investigation within the envisaged supply chain. However, this does not discharge the auditors from their duty to carry out a full investigation. If verifications are conducted retrospectively by the same Conformity Assessment Bodies that conducted the preliminary investigation, independent assessment must be safeguarded.

9.2 Planning and risk assessment

The first step in the verification process is to determine the verification scope, understand the process of risk assessment and identify the verification activities that are likely to be required in order to provide verification conclusions.

9.2.1 Understanding the scope and the biomass supply chain

The Conformity Assessment Body shall consult the economic operator in order to gain an understanding of the latter's activities, certifications and supply chains, for example by reviewing the company's Chain of Custody. It is here that the scope of verification is established. The appointment of a competent team of auditors is entirely contingent on this scope (please see Chapter 10). This consultation logically takes place before entering into a contract for the verification.

9.2.2 Strategic Risk Assessment

A risk assessment must be carried out for every verification. Accordingly, Conformity Assessment Bodies shall adopt and apply Strategic Risk Assessment (SRA) methodologies. An SRA is a systematic and continual process for assessing significant risks of non-compliance with the requirements of this protocol. The main objective of the SRA is to identify which compliance aspects need to be given more attention during verification and what verification activities are likely to be required.

The SRA shall take the following verified information into consideration:

a. country of verification;
b. product types and categories of biomass being processed;
c. national and local legislation and status of enforcement;
d. the economic operator's supply chain (type and amount of suppliers/sustainable biomass received) and operations (including detailed information about the forest areas/geo-coordinates);
e. certifications;
f. expected quantities (amount of sustainable biomass consignments) to be verified;
g. statements issued for the economic operator under verification and verification statements received from suppliers.

In the case of verification of FMUs and First Collection Points:

h. scale: large (≥500 ha) or small (<500 ha) and, where relevant, information regarding the sourcing area;
i. intensity of the (expected) forest management activities;

information from reliable sources concerning the evaluation of risks of non-compliance with SFM criteria. The scale and intensity of forest management might also influence the risk of non-compliance or the actions required of a forest manager or an economic operator. Aspects of scale, intensity and risks of non-compliance (SIR) are relevant for, amongst other things, activities with regard to identifying, monitoring and protecting areas with high conservation value and endangered species and the scope of the existing forest management plans and systems. Reliable sources can be Country Risk Assessments, the Corruption Perception Index, impact studies and forest management practices in the area;

j. the risk assessment for the sourcing area (where the supply areas for the First Collection Point are located);
k. use of actual (calculated) GHG values or default values;
l. presence of reports from previous audits.

The SRA may be conducted based on a desk audit and shall be conducted by auditors/experts proficient in such risk assessments in the relevant context. The Conformity Assessment Body shall document the results of the SRA and the information (including sources) on which the SRA was based.

9.3 Verification strategy development

The second step in the verification process is the design of the verification strategy. This involves auditors (1) mapping out the risk of errors in the compliance evidence and claims submitted by the economic operator (control risks) and (2) developing a verification plan based on the control risks identified.

9.3.1 Maturity of the control framework/mapping control risks

Based on the results of the SRA, auditors will obtain an understanding of the nature and extent of the economic operator's control framework for compliance evidence. If this control framework is place, auditors shall develop procedures to test its effectiveness. Where information is being provided but no control measures are in place, auditors shall develop procedures for substantive testing to determine the reliability and accuracy of this information.

The control measures for the economic operator's information fall into three main categories:

1. Internal control mechanisms
Economic operators are required to have an internal audit process in place for assessing and reviewing compliance-related processes and controls relating to the requirements of this protocol. This process may focus on just the economic operator's internal systems and processes, or it may extend to supply chain audits. Auditors shall develop testing procedures to assess the reliance that can be placed on the output of internal controls (e.g. audit reports). Where such internal control mechanisms are mature and functioning effectively, auditors may be able to place a significant degree of reliance on the output of these controls. However, where such systems are relatively immature or are not functioning effectively, auditors will be unable to rely on the output and will have to undertake substantive testing (sampling) in order to obtain sufficient appropriate evidence.

2. Documentation to support compliance evidence
Documentation to support the economic operator's claims, such as declarations from suppliers or requirements written into suppliers' contracts, is a form of control over compliance evidence that is used by many economic operators. Auditors need to understand the availability of this documentation and develop procedures to assess the reliability of such documentation and determine whether it provides sufficient appropriate evidence to support the information being provided, or whether further substantive testing is required.

3. External control mechanisms
The third category of controls that economic operators may have over compliance evidence information is external assurance. External assurance may be provided in the form of certificates on sustainability or Chain of Custody standards or in the form of previous audits or other third-party audits of aspects of the requirements of this protocol. Auditors should not seek to duplicate other forms of external assurance that an economic operator has in place. They should instead develop procedures that enable them to determine whether third-party assurance can be relied upon and, if this is indeed the case, to specify the requirements involved (e.g. review of external audit reports to ensure there are no outstanding issues, review of available benchmarks with this protocol).

Insight into the economic operator's control framework and control risks may be obtained through a desk review, but is preferably acquired on-site or through a combination of an on-site audit and a desk review.

9.3.2 Verification plan and assurance level

The reliance that auditors place on existing controls for compliance information needs to be considered in light of the materiality of that information and the results of the SRA.
It is up to the professional assessment and discretion of an auditor to determine whether a control may be regarded as reliable. This assessment will be provided following an evaluation of the evidence showing that a control is effective. Based on the results of the SRA and the mapped control risks, the auditors shall set up a verification plan. It is expected that substantive procedures should be undertaken on the provided compliance evidence information and quantities and characteristics of sustainable biomass, as well as

controls testing. However, the SRA and the mapped control risks guide the verification strategy.
The execution stage has to be conducted on-site at the economic operator's location (or locations), although particular aspects of a verification (e.g. verification of a greenhouse gas calculation methodology) can be based on a desk audit. Compliance with the SFM criteria may be verified based on a desk audit by using appropriate tools providing at least the same level of assurance as an on-site audit. For example, the analysis of land use change after 2008 for a specific area may be conducted on-site, or by using tools that may provide an even more reliable level of assurance than an on-site audit, or through a combination of an on-site audit and a desk audit.

9.3.2.1 Assurance level

The CAB must establish at least a 'reasonable assurance level' when conducting a verification audit leading to a verification statement. A 'reasonable assurance level' requires evidence gathering activities that enable a CAB to issue a positive statement regarding compliance with the requirements laid down.

The materiality limit to be applied by a CAB is set at 2%. A materiality limit is defined as 'a quantitative threshold above which inaccuracies, either separately or in combination with other inaccuracies, are viewed by the auditor as significant'.
A material deviation is defined as an inaccuracy that, either separately or in combination with other inaccuracies, exceeds the materiality limit imposed.

9.3.2.2 Acceptance of material deviations during a full check

The aspects listed under 2.6 and 2.7 in this protocol will always be audited in full by the CAB. In line with the aforementioned materiality limit, material deviations found during a full audit can be accepted up to a maximum of 2% of the total quantity (in tonnes) of biomass used during the period that is being verified.

In other words, it is permissible for the accredited sustainability certificates or verification of individual consignments making up no more than 2% of the total volume of biomass to be missing or incomplete.

Example 1 for a full audit

- The incoming biomass amounts to a total of 100,000 tonnes.
- The full audit reveals that two consignments of 1,500 tonnes of biomass each do not meet the imposed requirements (e.g. due to a lack of proof of certification).
- The non-compliant biomass therefore comes to a total of 3,000 tonnes, equivalent to 3% of the total volume.

It must, therefore, be concluded that the applicable requirements have not been met.

Example 2 for a full audit

- The incoming biomass amounts to a total of 100,000 tonnes.
- The full audit reveals that two consignments of 750 tonnes do not meet the imposed requirements (e.g. due to a lack of proof of certification).
- The non-compliant biomass comes to a total of 1,500 tonnes, which is equivalent to 1.5% of the total volume.
- It must therefore be concluded that the applicable requirements have been met.

9.3.2.3 Verification plan

The verification plan shall be forwarded to the economic operator prior to the execution stage and shall contain at least:

- verification objectives and scope;
- name, role and responsibilities of the verification team members;
- language of the audit and any translator requirement if necessary;
- sites to visit;
- a verification programme describing the nature and scope of the verification activities, as well as the time and manner in which these activities are to be carried out (e.g. documents to review, staff to interview, stakeholders to consult and methods of consultation).

9.4 Execution

The third phase is the execution of the verification activities. This will include:

- testing controls for compliance information and performing substantive testing of the reliability of information provided where controls have not been developed or are not functioning correctly;
- reviewing/assessing available compliance evidence;

the auditor will document any evidence found during the verification process and will identify any material gaps/nonconformities.

9.4.1 Quality and nature of the evidence

Auditors are required to obtain sufficient appropriate compliance evidence upon which to base their conclusions. Here, 'sufficient' refers to the quantity of evidence needed to reach a conclusion. 'Appropriate' denotes the relevance and reliability of this evidence. Auditors must use their professional judgement and exercise professional scepticism when evaluating the quantity and quality of evidence, and thus its sufficiency and appropriateness, to support the verification findings. Evidence will be assessed based on its nature and source.

Some sources are more reliable than others:

- Audit evidence from independent external sources (e.g. an external auditor or research body) is more reliable than that generated internally by the economic operator or its suppliers.
- Evidence in the form of physical (visual) verification is more reliable than documentary or oral representations.
- Evidence in the form of documents and written representations is more reliable than oral representations.
- Evidence is more persuasive when items from different sources or of a different nature are consistent.

9.5 Conclusion and reporting

In the final phase of the verification process, the auditor will discuss with the economic operator any corrections/adjustments (including time frame) that may be necessary in order to issue a statement. The Conformity Assessment Body shall also appoint an independent person who will be charged with reviewing all information and results related to the verification. This person cannot have been involved in the verification process. Recommendations issuing from this review must be documented, and the findings must be taken into account in the final assessment of the verification. The auditor may also conclude that consignments of biomass cannot be verified as conforming to the requirements of this protocol. In the event that compliance with all requirements is demonstrated, the Conformity Assessment Body shall issue a statement and submit a more detailed verification report to the management of the economic operator. The statement and the verification report shall be issued to the economic operator within two (2) weeks (ten working days) after completing the verification audit. The Conformity Assessment Body shall only send a copy of the issued statement to the Netherlands Enterprise Agency if the latter so requests. In the case of a conformity year statement, this shall be annexed to the sustainability report requested by the Netherlands Enterprise Agency for the SDE subsidy.

As a minimum, the following information shall be included in the verification report:

- name and address of the economic operator;
- scope of the verification;
- audit date and report date;
- names of auditors;
- result of the verification audit;
- quantity of biomass verified and supply period;
- strengths and weaknesses in the economic operator's processes for collecting and collating compliance evidence information, and recommendations for improvements to these processes.

10 Requirements for Conformity Assessment Bodies

10.1 General requirements for Conformity Assessment Bodies

Conformity Assessment Bodies conducting verifications under the Regulation, using this protocol, are required to hold accreditation from the Dutch Accreditation Council (RVA) for ISO/IEC 17065, 'Conformity assessment – Requirements for bodies certifying products, processes and services', for the scope of this protocol.

Conformity Assessment Bodies must be accredited for one or more of the following five fields of application:

Verification statements

1. Sustainable Forest Management (extraction/cultivation of Category 1 and 2 biomass);
2. Chain of Custody for Category 1 and 2 biomass (treatment of Category 1 and 2 biomass up to the EP);
3. Chain of Custody for Category 3 and 4 biomass including Criterion 2.1 for the quality of the soil (origin and treatment of Category 3 and 4 biomass up to the EP);
4. Chain of Custody for Category 5 biomass (treatment of Category 5 biomass up to the EP).

Conformity year statement

5. Reporting on sustainability for consignments to the EP and conversion into renewable electricity and/or heat from biomass of all categories.

Conformity Assessment Bodies conducting verification for First Collection Points (Category 2) (where compliance with SFM criteria is demonstrated via the RBA) need to be accredited for both the scope under 1 (Forest Management) and the scope under 2.

10.2 Competence requirements for auditors

Auditors conducting verifications using this protocol must have the appropriate (and demonstrable) knowledge, skills and qualifications to evaluate conformity with the criteria and indicators, with due regard for the scale and complexity of the area to be assessed and the country/region where the verification will be conducted. Key considerations for the selection of auditors include their knowledge and competences in relation to risk assessment, Chain of Custody (mass balance and data processing), GHG verification, Sustainable Forest Management and environmental issues.

The Conformity Assessment Body shall guarantee that the scope is represented in the skills and qualifications of the team's auditors. If, during the verification process, it is found that the required qualifications cannot be met, the audit team shall be expanded until it meets all the required qualifications during the verification. The following competence requirements apply to auditors conducting verifications using this protocol.

10.2.1 General competence requirements

A verification team shall consist of a lead auditor and, where necessary, a suitable number of assessors or technical experts for a specific scope and the regions involved.
Regardless of their specific field of work, all auditors have to meet the following general audit requirements:

- at least five years of general work experience and at least two years of work experience in a relevant field;
- at least 40 hours of audit training (e.g. according to ISO 19011);
- at least 20 days of audit completed in a relevant area within the last consecutive two years, as an audit team leader or as an auditor in an audit team (not as a trainee). This could include audits for EC-recognised certification schemes or entry certifications for the Energy for Transport Registry (REV);
- demonstrable knowledge of this protocol and the underlying statutory framework.

10.2.2 Conducting a risk analysis

The audit team must consist of auditors who have the knowledge and competences required to conduct professional risk analyses tailored to the complexity of the processes and information being assessed and the country/area where the verification is conducted and who are able to define the focal points and intensity of the verification process on that basis.

10.2.3 diting Sustainable Forest Management

To conduct verifications in forests, the team consists of auditors with demonstrable knowledge of forestry and Sustainable Forest Management (SFM). The team must demonstrably be sufficiently competent to assess the forest management of a location on a scale and with a complexity similar to the one where verification is to take place. For example, for the assessment of a large Forest Management Unit (≥500 hectares), the audit team will consist of auditors who have personal experience conducting audits of large FMUs or who have worked as paid consultants regarding SFM for these types of forests, and in comparable regions.

A knowledge of SFM includes, at the very least:

- areas with high conservation values;
- the involvement of stakeholders when assessing SFM;
- forest ecology (natural or planted forest);
- the management of rare or endangered species that are likely to be present in the forest area;
- the key environmental impacts of forest management on the water or soil;
- the impact of forest management on the climate (such as ILUC and carbon debt).

10.2.4 Auditing the Chain of Custody and GHG information

The audit team shall consist of members with demonstrable knowledge of:

- the method and traceability of the mass balance;
- greenhouse gases (e.g. ISO 14064, PAS 2050, Greenhouse Gas Protocol, voluntary regulations under the Renewable Energy Directive);
- accounting and verification with regard to greenhouse gases;
- technical knowledge of the processes at the location (or locations) of the economic operator being verified.

10.2.5 Auditing energy producers (conformity year statement)

Auditors conducting a verification at EPs (conformity year statement) must:

- have successfully completed specific in-house or external training courses in how to perform verifications in accordance with this protocol*;
- have gained work experience in the past two years with schemes or protocols based on ISAE 3000 or similar, either as an audit team leader or as an auditor working within an audit team (not as a trainee);
- have demonstrable technical and other knowledge of processes at the energy producer's site (or sites);
- have demonstrable knowledge of the requirements imposed by the SDE scheme and EU ETS on the energy producer's administration (for example, mass balance of consignments, energy production and energy supply). This must be demonstrated in the form of proof of relevant in-house or external training*;
- have demonstrable knowledge of the scopes of the approved certification schemes associated with this protocol and the corresponding mass balance.

* *In-house or external training is required to acquire and maintain relevant knowledge. This training must cover various relevant verification topics as outlined above. If desired, the various topics can be combined in one and the same training*

course. The length of the initial training course must be at least one day. A follow-up training course must be completed each year before verifications are carried out. Alternatively, an in-house harmonisation meeting must be attended, with participation by all auditors involved in the verification of conformity year statements.

10.3 Internal reviewer competences

The knowledge and skills of the internal reviewer shall be comparable to those of the lead auditors.
In addition, it is vital that the internal reviewer is aware of the impact of the statement in terms of the funds involved in subsidy awards and the impact on the climate and the environment.

11 List of definitions

Supply area	The entirety of the individual Forest Management Units covered by existing management plans and from which biomass is taken to supply the pellet mill.
Non-timber forest products	All forest products other than wood, including materials harvested from trees.
Audit	Systematic, documented process for obtaining records, statements of facts or other relevant information and assessing them objectively to determine the extent to which specified requirements are fulfilled (adapted from ISO 17000).
Auditor (inspector, verifier, assessor)	Person appointed by a Conformity Assessment Body to conduct an audit.
Stakeholders (interested parties)	Any person, group of persons or entity who or which has established it has an interest in the activities of the FMU, or who or which is known to have this. This could be an NGO, trade union, government body, or representative of a certification scheme, for example. In the verification protocol, the term 'stakeholder' is also used for the term 'interested/affected party'.
Stakeholders (affected parties)	Any person, group of persons or entity who or which is, or probably will be, affected by activities being carried out in an FMU. This could be local residents, the local population, indigenous people, downstream landowners, owners of land rights or user rights and organisations acting on behalf of the affected stakeholders. In the verification protocol, the term 'stakeholder' is also used for the term 'interested/affected party'.
Endangered species	Plant and animal species that are at least classified as 'endangered' in the international Red List of the IUCN and in the IUCN's guidelines for the regional application of the Red List.
Co-gasification	Method where a separate gasifier is used to convert biomass into a flammable gas mixture of carbon monoxide and hydrogen. This gas mixture is then blown into the plant and burned. Co-gasification is possible in coal-fired power plants as well as in gas-fired power plants.
Biodiversity	The variability amongst living organisms from all sources, including diversity within species, between species and of ecosystems.
Biogenic raw materials	Materials of biological or organic origin, as defined in the biomass categories.

BioGrace-II tooll	The 'BioGrace-II GHG calculation tool' can be found at www.BioGrace.net. It includes an Excel calculation tool, calculation rules, a methodological background document, a list of additional standard conversion values and a user manual. When using the Excel calculation tool, the user is required to apply the calculation rules.
Biomass	The biodegradable fraction of products, waste and residues from agriculture (including vegetable and animal substances), forestry, fishery and aquaculture and related processing industries, as well as biodegradable fractions of industrial and domestic waste.
Forest	Land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of over 10%, or with trees able to reach these thresholds in situ, not including land that is predominately under urban or agricultural use.
Forest management	Planning and operational activities aimed at the management and use of forests and other forested areas in order to achieve predefined economic, social, cultural or environmental objectives.
Forest manager	The owner, concessionaire or person who is otherwise legally responsible for the management and exploitation of an Forest Management Unit.
Forest Management Unit (FMU)	One or more forest stands containing natural forest, planted forest or another type of forest that are managed as a single unit in accordance with a forest management plan as referred to in Criterion 10.2. Forest Management Units produce Category 1 or 2 biomass.
Certification	Conformity assessment, conducted by a Conformity Assessment Body according to the applicable certification scheme, and the related conformity assessment statement.
Certification scheme	Document describing how the conformity assessment process is to be performed.
Chain of Custody (CoC)	A set of rules, procedures and documents (demonstrably at company level) that are used to provide a link between the source of a material and the point in the chain where a claim is made on the characteristics of that material. Also termed the 'commercial chain'.
Chemicals	Substances that are potentially hazardous to health and/or the environment and/or that might cause material damage.

Conformity Assessment Body	A body that issues verification and/or conformity year statements based on this verification protocol.
Conformity year statement	Statement to be issued by the Conformity Assessment Body, reporting on the findings of the conformity assessment it carried out at the energy producer. The statement serves to substantiate the annual sustainability report provided by the SDE subsidy recipient to the Netherlands Enterprise Agency.
Thinnings	The selective or systematic harvesting of trees from a more or less uniformly aged forest with the aim of increasing the health and growth – including the stem diameter – of the remaining forest stand.
Forest degradation	Long-term degradation of the natural capital of a forest.
Soil degradation	Changes in the soil quality that reduce the capacity of the ecosystem to deliver goods and services.
Sustainable biomass	Biomass that complies with all applicable criteria according to the protocol.
Ecological functions	The functions that the forest fulfils and that are linked to ecology, including climate regulation, erosion control, soil formation, water retention, carbon storage, water purification, pollination and the development and maintenance of biological diversity.
Ecological cycles	Natural processes in which elements that occur in various forms are constantly interchanged between distinct compartments of the ecosystem, including nutrient, carbon and water cycles.
First Collection Point (FCP)	The first legal owner of the material subsequent to the company where a solid biomass residual flow was created.
Energy producer (EP)	Economic operator receiving a subsidy for running a plant where sustainable solid biomass is converted into renewable electricity and/or renewable heat. In the case of a company that is subject to the EU ETS but that does not have an SDE subsidy decision: economic operator that burns pellets and wishes to report zero emissions in that context.
Bioenergy plantation systems	Plantation systems that are developed specifically for the production of biomass for energy generation, whereby very fast-growing tree species are planted in dense plantations and harvested in short rotation periods.

Controlled biomass	Biomass Category 1 or 2 (woody, from forest) that meets Criteria 1.1, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 7.1 and 7.3. For controlled biomass, compliance can be proven by the economic operator purchasing the biomass from the Forest Management Unit using a Risk Based Approach.
Group	Legal entity involving several forest management enterprises that cooperate in a certain area, or companies that work together in a certain segment of the Chain of Custody.
Habitat	An area or type of area where an organism or population occurs naturally.
Trader/Warehouse operator	Economic operator that trades and/or stores one of the biomass categories, without any processing.
Renewable energy	Energy from renewable non-fossil sources, such as wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, gas from sewage treatment and biogas.
Harvest (or timber harvest)	The volume (including bark) of all trees, living or dead, with a diameter of more than 10 cm at chest height (DBH >10 cm), that is harvested in a forest or forested area. This includes all harvested trees.
Wood plantation	A forest consisting of one or more tree species of a uniform age class, exotic or native species, established through planting and/or seeding at a regular distance for the purposes of wood production.
Indigenous peoples	People and groups of people that can be identified or characterised as follows: - self-identification as an indigenous person at the individual level and acceptance by the community as a member as the key characteristic; - historical continuity with pre-colonial and/or pre-settler societies; - strong link to a certain territory and surrounding natural resources; - distinct social, economic or political systems; - distinct language, culture and beliefs; - form non-dominant groups within society; - resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities. Source: Source: FSC-STD-01-002, adapted from the United Nations Permanent Forum on Indigenous Issues, *'Who are Indigenous Peoples' fact sheet, October 2007; United Nations Development Group, 'Guidelines on Indigenous Peoples' Issues', 2009, from the United Nations Development Group, UN Declaration on the Rights of Indigenous Peoples, 13 September 2007*

Annual Allowable Cut	The average volume of wood that is allowed to be harvested annually within a predefined area, expressed in cubic metres of wood per year. Also abbreviated to AAC.
Legal user right	The right granted by a government authority or legally authorised body or person to carry out forestry operations in a certain area.
Industrial boiler steam from wood pellets	The production of renewable steam generated by the combustion of wood pellets, in a boiler with a capacity of ≥5 MW.
Consignment	An amount of biomass used for energy production where the entire consignment has identical physical and sustainability characteristics. It is possible for a single consignment to consist of several shipments or truck loads, as long as all physical and sustainability characteristics are the same.
Location	An economic operator's geographical unit or combination of units situated in a place that is geographically separated from other units of the same economic operator.
Economic operator	Any company or organisation (legal entity) that handles (e.g. harvests, transports, trades, stores, processes) and holds legal ownership of the sustainable biomass.
Mass balance	The mass balance is the Chain of Custody system under which the sustainability characteristics remain assigned to consignments of biomass on a bookkeeping basis while the physical mixing of biomass with different sustainability characteristics is allowed.
Materiality	The concept of materiality recognises that some matters, either individually or in the aggregate, are important for an accurate representation of total supplied quantity of biomass. A materiality limit is a quantitative threshold above which inaccuracies, either separately or in combination with other inaccuracies, are viewed by the auditor as significant.
Co-firing	Method in which a part of the coal (ground to grit) used for the production of electricity and/or heat is substituted by biomass. The biomass is inserted into the incinerator of the coal-fired power plant, together with the coal. The proportionate share of the caloric value of the biomass can be counted as renewable energy.
Environmental Impact Assessment (EIA)	Systematic process to evaluate the potential impact on the environment of proposed projects, to evaluate alternative approaches and to develop and include suitable measures for prevention, mitigation, management and monitoring.

Mitigation measures	Actions taken in order to decrease the probability of occurrence or the negative impacts, or both, related to a risk to an acceptable level as described in this verification protocol.
Nature conservation area	An area under legal protection, with few, if any, human inhabitants or influences of human behaviour, which has been designated because of its special nature qualities or potential.
Natural forest	Forest that has a natural origin and is developed naturally with many of the original characteristics and key elements of native ecosystems.
Natural capital	The stock of all natural renewable and non-renewable resources, such as air, minerals and plant and/or animal species, which together provide the supply of services required to support the prosperity and welfare of humans.
Sourcing area	A geographically defined area from which the forest biomass feedstock is sourced, from which reliable and independent information is available and where conditions are sufficiently homogeneous to evaluate risks concerning the sustainability and legality characteristics of the forest biomass.
Local population	A community of any size in or nearby the Forest Management Unit (FMU). This includes anyone who, because of their proximity, has a significant impact on the economy or the environment of the FMU, or whose economy, rights or living environment are significantly influenced by management activities in the FMU.
Point of Origin (PO)	Economic operators where Category 3, 4 or 5 biomass occurs or is generated (first economic operator in the supply chain of Category 3, 4 and 5 biomass). Points of Origin are not subject to verification, but may be audited during the First Collection Point verification based on identified risks.
Reduced Impact Logging (RIL)	Harvesting techniques and methods developed to minimise undue damage to the forest, environment and the wood to be harvested, as well as to encourage safe working conditions.

Residual flows or residues	Biomass generated in the production of other products (including main products) or in a process other than a production process. Here, a distinction is drawn between primary, secondary and tertiary residual flows. The primary residual flow concerns parts of plants that are left behind on the field or in the forest after the harvest. The secondary residual flow concerns all forms of biomass that remain behind in a production process, such as wood waste and sawdust in a sawmill. Tertiary residual flows concern biomass products that are usually interpreted as waste materials, such as organic waste from fruit, vegetables and gardens, waste wood and other post-consumer material.
Residual flows from nature and landscape management	Residual products from the management of urban green spaces, landscapes or nature other than forests, aiming at the preservation, recovery or strengthening of specific natural, recreational or landscape functions. This also includes biomass waste products from the regular maintenance of public green areas and parks.
Risk	The likelihood that something will occur that has an effect on objectives. This is measured as a combination of the probability that the event will occur and the seriousness of its consequences (risk = probability x effect).
Risk Based Approach (RBA)	Approach that includes measures and procedures to minimise the risk of sourcing material from unsustainable sources. The Risk Based Approach contains an assessment of the risk of non-compliance for a specific sourcing area, followed by the definition of mitigation measures to qualify identified specified risks as low.
Round wood	Unprocessed wood from a tree trunk.
Rotation period of a production forest	Period between the planting and the harvesting and/or subsequent logging of a forest stand, taking the optimal current growth into account.
Stakeholder	See interested/affected party.
Strategic Risk Assessment (SRA)	A systematic and continuous process of assessing significant risks of non-compliance with the requirements of this protocol, which is part of each verification. The main objective of the Strategic Risk Assessment is to identify which compliance aspects need to be given more attention during the verification and what verification activities are likely to be required (information source for the verification strategy).
Stump	The part of the tree that remains attached to the roots after felling.

Areas with High Conservation Value (HCV)	diversity of species. Concentrations diversity, including indigenous species and endangered species that are of importance on a global, regional or national level; 1. ecosystems and habitats. Rare or endangered ecosystems or habitats; 2. ecosystem services. Basic ecosystem services in critical situations, such as protection of important water sources and control of erosion of vulnerable soils and slopes; 3. ecosystems at landscape level. Intact forest landscapes or other major intact ecosystems, or mosaics of ecosystems at landscape level that are important at global, regional or national level. They contain viable populations of the vast majority of the naturally occurring species in natural patterns with regard to distribution and numbers; 4. cultural values. Areas or means of living that are of global or national cultural, archaeological or historical importance and/or fundamental to the traditional cultures/beliefs of local populations or indigenous peoples.
Peatland	Areas with soil containing at least a 40 cm deep continuous layer of peaty material in the top 80 cm of soil.
Verification	Compliance (conformity) assessment, conducted by a Conformity Assessment Body according to the applicable verification protocol and the underlying regulatory requirements.
Verification statement	Statement of conformity (compliance) of supplied biomass, issued by an accredited and recognised Conformity Assessment Body for an economic operator up to the energy producer.
Processing Unit (PU)	Economic operator that converts received biomass by changing its physical and/or chemical properties (e.g. pellet mills).
Wetlands	Land that is permanently or for a large part of the year covered or saturated with water.

Annex 1

Explanation of relevant normative ISO standards

Steps in operational execution process	Activity	ISO	Onderbouwing keuze ISO-standaard
Step 1: Planning & risk analysis	Insight in scope and extent Drafting the tender	ISO 17065, sections 7.2 and 7.3	Application of ISO 17965 was chosen for the final assessment, report and conformity statement (step 4) because the CAB declares that the product (the biomass used by the energy producer in a specific calendar year) meets the requirements of the protocol. For this reason, ISO 17065 will have to be deemed the guideline when the quote (and prior insight in scope and extent of the verification) is drawn up.
	Carrying out a risk analysis based on an administrative inspection (with the objective of establishing whether a sampling method can or cannot be used).	ISO 1720, sections 7.1 to 7.4	The check concerns an inspection of some physical administrative elements, administration processes and control measures. This is why an inspection method based on ISO 17020 has been chosen. It does not check or assess a Management System (or Quality Management System) and ISO 17021 is not relevant.
Step 2: Development of the verification plan	Drawing up the verification plan	ISO 17020, section 7.1 ISO 17029, section 9.4	See further explanation for the choice of ISO 17020 and ISO 17029 below under Step 3: Execution. The verification plan must be drawn up before the execution; it therefore refers to both relevant standards.
Step 3: Execution	Execution of verification Section 9.4 (applicable to initial verification and also to any additional verifications or repeat verifications that may have to be carried out after corrections and/or adjustments have been made).	ISO 17020, sections 7.1 to 7.4	Check concerns a full inspection of the valid certificate present (only in the case of 4.2.1), mass balance, overview list and evidence solely for use under the SDE scheme (only in the case of 4.2.2). This is why these elements have been chosen for an inspection method based on ISO 17020.
	Execution of verification Section 9.4 (applicable to initial verification and also to any additional verifications or repeat verifications that may have to be carried out after corrections and/or adjustments have been made).	ISO 17029, section 9.5	The check concerns a verification of the presence of evidence for individual incoming consignments. It may be possible to use a sampling method here. Because this case clearly concerns a verification (of reported data) a verification method based on ISO 17029 was selected.

Steps in operational execution process	Activity	ISO	Onderbouwing keuze ISO-standaard
Step 4: Conclusion and reporting	Establish the results of the verification and discuss them with the operator	ISO 17020, section 7.1 to 7.4 ISO 17029, section 9.5	See further explanation for the choice of ISO 17020 and ISO 17029 for Step 3: Execution. When establishing the results and in the discussion with the operator, both relevant standards are referred to for this reason.
	Review of results by internal reviewer	ISO 17020, section 7.1 to 7.4 ISO 17029, section 9.5	See further explanation for the choice of ISO 17020 and ISO 17029 for Step 3: Execution
	Drawing up the final assessment	ISO 17065, section 7.6	A final assessment and conformity statement under ISO 17065 was opted for because the CAB declares that the product (the biomass used at the energy producer's site in a specific calendar year) meets the requirements of the protocol. The CAB also declares that the list of consignments and sustainability characteristics has been reported correctly to the Netherlands Enterprise Agency.
	Drawing up the report	ISO 17065, section 7.7	
	Drawing up the statement	ISO 17065, section 7.7	

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This publication was commissioned by the Ministry of Economic Affairs and Climate Policy

Publication number: RVO-036-2023/BR-DUZA
Cover photo: Bart Willemsen

The Netherlands Enterprise Agency (RVO) promotes entrepreneurship in sustainable, agricultural, innovative and international business, offering assistance with subsidies, finding business partners, know-how and compliance with legislation and regulations. RVO works for the Dutch government and the European Union.

RVO is an agency of the Ministry of Economic Affairs and Climate Policy.