



**SUSTAINABLE RESOURCES**  
Verification Scheme GmbH

# Scheme principles for the use, processing and distribution/trade of biomass fuels and their conversion to electricity and heat

---

Version: SSP-USE-en-1.0

Date: 15.10.2020

© SUSTAINABLE RESOURCES Verification Scheme GmbH

This document is publicly accessible at: [www.sure-system.org](http://www.sure-system.org).

Our documents are protected by copyright and may not be modified. Nor may our documents or parts thereof be reproduced or copied without our consent.

**Document title: Scheme principles for the use, processing and distribution/trade of biomass fuels and their conversion to electricity and heat**

Version: SSP-USE-en-1.0

Date: 15.10.2020

# Contents

<b>1</b>	<b>Introduction .....</b>	<b>5</b>
<b>2</b>	<b>Scope of application .....</b>	<b>5</b>
<b>3</b>	<b>Definitions and scope of the SURE requirements .....</b>	<b>6</b>
<b>4</b>	<b>Generally applicable principles and requirements .....</b>	<b>7</b>
	4.1 Verifying and monitoring scheme conformity.....	7
	4.1.1 Individual certification.....	7
	4.2 Traceability and documentation .....	8
	4.3 Management system and operational structure .....	9
	4.3.1 Proof of a scheme-compliant organisational structure .....	10
	4.3.2 Proof of a scheme-compliant quality management system .....	10
	4.3.3 Defining a transshipment point in the SURE-EU system .....	11
	4.4 Employee qualifications.....	12
	4.5 Greenhouse gas accounting .....	12
	4.6 Social responsibility .....	13
<b>5</b>	<b>Phase-specific requirements for conversion plants for the generation of electricity or heat from biomass fuels .....</b>	<b>15</b>
	5.1. Requirements for electricity production from biomass fuels .....	16
	5.2 GHG saving requirements.....	17
	5.3 Requirements for emissions of air pollutants .....	18
	5.4 Requirements for proper operation of installations .....	19
<b>6</b>	<b>Documentation requirements .....</b>	<b>19</b>
	6.1 Documentation requirements for first gathering points/collection points .....	19
	6.1.1 Requirements for incoming biomass .....	20
	6.1.2 Requirements for internal processes .....	22
	6.1.3 Requirements for sales/outgoing biomass .....	23
	6.2 Documentation requirements for processing plants .....	25
	6.2.1 Requirements for incoming biomass .....	25
	6.2.2 Requirements for internal processes .....	26
	6.2.3 Requirements for sales/outgoing biomass .....	27
	6.3 Documentation requirements for suppliers before the last interface.....	28

6.3.1	Requirements for incoming biomass .....	28
6.3.2	Requirements for sales/outgoing biomass .....	29
6.4	Documentation requirements for last interfaces.....	31
6.4.1	Requirements for incoming biomass .....	31
6.4.2	Requirements for internal processes .....	32
6.4.3	Requirements for outgoing quantities of electricity or heat produced.....	33
6.5	Documentation requirements for service providers after the last interface.....	34
6.5.1	Requirements for sourcing generated electricity or heat.....	34
6.5.2	Requirements for outgoing quantities of electricity or heat .....	35
<b>7</b>	<b>Issuing proof of sustainability .....</b>	<b>36</b>
7.1.	Prerequisites for issuing sustainability certificates .....	36
7.2	Contents of sustainability certificates .....	37
7.3	How sustainability certificates become invalid .....	37
7.4	Issuing partial sustainability certificates.....	38
<b>8</b>	<b>Acceptance of other certification schemes .....</b>	<b>38</b>
<b>9</b>	<b>Relevant documents .....</b>	<b>38</b>
<b>10</b>	<b>References.....</b>	<b>39</b>

## 1 Introduction

The use of biomass fuels for the climate-neutral production of electricity and heat is expected to make a considerable contribution to achieving the targets set by the EU member states in Directive (EU) 2018/2001 to increase the share of renewable energy.

Even though biomass is a renewable energy source, there is not an infinite supply. If the energy transition is to succeed, biomass fuels must be produced sustainably and used responsibly to generate electricity and heat. This includes ensuring highly efficient resource use to meet demand, guaranteeing a minimum level of greenhouse gas savings from the use of biomass fuels compared to fossil fuels and monitoring and reducing emissions of air pollutants.

This requires clearly defined regulations and specifications to be complied with by all economic operators that use, process, transport or convert biomass fuels to electricity and heat. The European Union has defined and adopted these sustainability requirements in Directive (EU) 2018/2001. Voluntary certification schemes are regarded here as a particularly suitable way of providing this evidence of compliance in an objective, transparent and credible manner.

The SURE-EU system is this kind of certification scheme, which translates the requirements of RED II into a practical verification scheme for the market and ensures compliance.

## 2 Scope of application

The requirements set out in this document apply to all economic operators downstream of the phase of production of agricultural and forest biomass, in the case of waste and residues, downstream of their collection, who, as participants in the SURE-EU scheme in accordance with Directive (EU) 2018/2001<sup>1</sup>, receive/collect, process or trade/distribute biomass or biomass fuels for the generation of electricity and/or heat or cooling (known as “interfaces”) and generate electricity and/or heat or cooling from sustainable biomass fuels (known as “last interfaces”)

These economic operators are:

- ✓ **Interfaces:** All economic operators along the production and supply chain, starting with the operations where biomass enters the processing chain. A distinction is made between first gathering points and collectors (collection points) and processing plants.

- ✓ **First gathering points** are operations that accept agricultural or forest biomass for the first time from the supplying producers
- ✓ **Collectors/collection points:** In the case of waste and residues from biomass, the first gathering points are called collectors/collection points. Collection points are operations that receive waste and residues from biomass for the first time from the supplying producers and where at most the waste and residues are subject to mechanical processing only (shredding or separation).  
*Processing plants* are interfaces where biomass is processed and treated to reach the required quality for use as biomass fuel.
- ✓ **Last interfaces:** Conversion plants are referred to as “last interfaces” (corresponds to an “end producer”) if they convert solid or gaseous biomass fuels into electricity or heat/cooling and fall under the scope of Article 29 (1) of Directive (EU) 2018/2001.
- ✓ **Suppliers before the last interface:** Economic operators who supply biomass or biomass fuels to the next recipient after they have been collected up through the last interface.
- ✓ **Service providers after the last interface:** Service providers after the last interface are economic operators who supply the electricity and/or heat/cooling produced from sustainable biomass fuels to the next recipient after production by the last interface.

In addition, this document defines traceability and mass balancing requirements for distributors/traders who supply all or part of the electricity or heat/cooling produced sustainably in the SURE-EU system to the next recipient (known as “service providers after the last interface”).

The neutral inspection of the last interfaces and service providers after the last interface includes all requirements outlined below in this document. In addition, all relevant SURE documents as well as Directive (EU) 2018/2001 apply to the scope of this scheme.

### 3 Definitions and scope of the SURE requirements

In order to establish a common understanding of the terms and definitions used in these scheme principles, reference is made to the SURE document “Definitions in the SURE system”. All SURE scheme principles relate to this document.



## 4 Generally applicable principles and requirements

Economic operators who receive/collect, trade/distribute or process biomass or biomass fuels or use them to generate electricity or heat must demonstrate that they comply with the requirements of Directive (EU) 2018/2001 and the SURE-EU system. In the SURE-EU system, all interfaces are therefore *subject to inspection*.

Interfaces and service providers after the last interface are *subject to inspection* in the SURE-EU system. With regard to the inspection of transshipment points, special conditions apply, which can be found in the SURE document “Scheme principles for neutral inspections”.

Certification bodies approved in the SURE-EU system and accredited by national authorities verify compliance with the scheme requirements along the entire production, processing and supply chain as part of a neutral inspection.

### 4.1 Verifying and monitoring scheme conformity

Economic operators undertake to comply with the requirements of the SURE-EU system and to report any discrepancies or inconsistencies immediately to SURE and the contracted certification body. To this end, economic operators publish a publicly accessible, unambiguous declaration based on an annual audit in compliance with the SURE-EU scheme requirements.

Publicly accessible means that the declaration is made available at least upon request. The declaration of compliance with the SURE-EU scheme requirements may take the form of a valid contract with SURE or a certificate issued during the annual audit and is required for each of the economic operator’s operations/operating sites.

#### 4.1.1 Individual certification

Economic operators who want to be certified under the SURE-EU system as part of a neutral inspection must first register with SURE. This can be done online at [www.sure-system.org](http://www.sure-system.org). The individual steps for joining the scheme are described in detail in the SURE document “Scope and basic scheme requirements”.

A detailed description of the requirements for neutral inspection can be found in the document “Scheme principles for neutral inspections”.

Upon conclusion of the scheme contract with the SURE-EU system, the economic operator indicates the scope for which the operation is to be certified. In the SURE-EU system, the scope describes the permissible area of activity in the production chain for sustainable biomass.

More than one scope may be specified in this context (e.g. first gathering point, processing plant and conversion plant). Biomass that is collected, traded/distributed, processed or converted outside the specified scope may not be declared sustainable biomass in the SURE-EU system.

During the on-site audit, the scope to be certified has to be verified and compared with the details of the economic operator's approved scope in the database of the SURE-EU system and confirmed.

## 4.2 Traceability and documentation

The traceability of the biomass or biomass fuels used must be ensured by a *mass balance system* (for more information, see the SURE document "Technical guidance for mass balancing"). This means that the process and the existing technical equipment that ensure material flows are correctly documented and traceable must be described in a way that can be verified.

Operations where waste and residues are processed by purely mechanical methods must document changes in quantities (ratio of input/output). This must be checked by the auditor and verified during the audit.

It must be kept in mind that for the last interfaces, i.e. operations that convert sustainable biomass fuels to electricity or heat, special attention should be paid to internal processes to enable the mass of fuel used in the conversion process, its energy content and the sustainability attributes assigned to the fuel batch used to be correctly documented. The amount of final energy produced must be plausibly verified in relation to the biomass fuels used to produce it.

The general requirements of a scheme-compliant mass balance system and the possibilities for verification are described in detail in the document "Technical guidance for mass balancing" of the SURE-EU system.

The SURE-EU system requires all economic operators to have a *document management system* in place, which is appropriate and verifiable during audits. All relevant documents and procedures are stored and kept during valid audit intervals and can be presented during audits.

All documents and records must be checked for readability by the person/people responsible, and care must be taken to ensure that all details are complete and correct, especially when receiving fuel.



It must be ensured at all times that the documents and records for every biomass consignment can be clearly assigned. This can be ensured, for example, if the suppliers assign delivery slip numbers and also weighing slip numbers when the consignment is weighed.

All documents kept in the document management system (such as mass balances or sustainability certificates) must be kept for at least 5 years, regardless of other legal requirements for the archiving period (in Germany, for example, an archiving period of at least 10 years applies to fiscally relevant documents related to purchase and sale). Delivery or weighing slips used as the basis for the mass balances to be checked annually by the auditor must be kept to document compliance with the SURE-EU scheme requirements at least until the next audit of the mass balance.

All consignments to or services for other economic operators must be contractually defined and accompanied by appropriate supporting documents. The flow of goods or the service provided must be documented accordingly.

All economic operators in the SURE-EU system must report any inconsistencies in the documentation of the upstream interface immediately to SURE and the contracted certification body. In addition, there is a general requirement to provide data to SURE on request (e.g. if this is necessary to verify the continuous traceability of sustainable biomass and biomass fuels).

When transmitting sensitive company data, proof must be provided that this data is handled confidentially.

### 4.3 Management system and operational structure

Economic operators must plausibly demonstrate in the SURE-EU system that they are able to reliably and verifiably implement the scheme requirements for biomass traceability, mass balancing (see the SURE document “Technical guidance for mass balancing”), greenhouse gas calculation (see SURE document “Technical guidance for GHG calculation”) and other requirements described in this document.

This includes the *documentation of relevant procedures* and process flows in the company, such as internal material flows or processing steps, the *description of the organisational structure* of the company/operation, including the names of the employees responsible for compliance with the SURE requirements and the *measures to ensure compliance with the SURE-EU scheme requirements* and to mitigate the risk of potential non-compliance with the SURE-EU scheme requirements.

### 4.3.1 Proof of a scheme-compliant organisational structure

The following documents can be provided as proof of the scheme-compliant organisational and operational structure (examples, but not exhaustive):

- ✓ a written document identifying the employee responsible for scheme compliance, and
- ✓ an organisational chart which lists and identifies the employees responsible and accountable for sustainability certification for all process steps in the company and shows the relevant hierarchical levels with associated powers of direction, in combination with
- ✓ a comprehensive process description of the economic operator's activities, with specific procedural or operational instructions for the respective process steps, clearly indicating the tasks and duties of the employees responsible

Work instructions can be used to document that the company's employees are aware of their tasks, duties and responsibilities. Moreover, these should already be part of the employment contracts and verifiable instructions should ensure that they are properly implemented. Appropriate signs or notices in the company may supplement the measures taken.

Existing contracts with third parties, such as subcontractors, service providers or intermediaries, must be provided when the company is inspected. They must show that all relevant information to meet the SURE-EU scheme requirements is passed on. It must be kept in mind here that plants operated through agency agreements for the owner of the plant, which is a common management model for bioenergy, are deemed to be "contracts with third parties" for the purposes of inspection. The agency agreements must set out all rights and duties to ensure compliance with the SURE-EU scheme requirements and must define all relevant information flows and decision-making powers.

### 4.3.2 Proof of a scheme-compliant quality management system

Under the scope of a quality management system, operations are required to proactively identify undesirable incidents that may result in non-compliance with the requirements of the SURE-EU system and to take preventive measures.

One possible way to deal with non-conformities is to record and document all potential incidents in the operation that could lead to non-conformities, carried out as part of a predictive vulnerability analysis, in combination with procedural instructions and measures which, if they occur, take effect so that scheme conformity is restored immediately.

This documentation includes:

- ✓ correct documentation of the non-conformity (who reported it, what happened, when and where)
- ✓ complete information about the person in charge
- ✓ which corrective measures have been defined
- ✓ which employees have been assigned responsibility for these measures
- ✓ feedback on the effectiveness of the corrective measures
- ✓ who completed and approved the corrective measure and when

Based on the vulnerability analysis, preventive measures also need to be defined which help to mitigate possible negative impacts that could lead to non-fulfilment of a sustainability requirement. The employees of the company must be made aware of the preventive measures, for example in the form of regular instructions and signs at suitable locations in the company.

#### 4.3.3 Defining a transhipment point in the SURE-EU system

Transhipment points are defined in the SURE-EU system as locations where

- ✓ biomass is only provided for transport,
- ✓ short-term storage for the purpose of transhipment does not generally exceed 24 hours.
- ✓ no incoming and outgoing goods are documented,
- ✓ no incoming biomass is weighed,
- ✓ the containers and product itself are not changed/mixed (or filled into new containers) and/or
- ✓ delivered biomass is not processed/treated.

Transhipment points that meet the above-mentioned criteria are not subject to (sample) inspections or certification.

The certification body must be notified of the use of transhipment points for the transhipment of sustainable biomass pursuant to Directive (EU) 2018/2001. The certification body verifies compliance with the requirements above on site at the next opportunity and records this in the audit report. The continued use of the transhipment point must be verified by the certification body in every subsequent audit (e.g. by providing transport documents from or to the transhipment point). In case of doubt, the certification body is authorised to inspect transhipment points at any time.

## 4.4 Employee qualifications

All interfaces must have qualified (expert) personnel. The employees responsible must be identified and appointed for *key positions* in the company/operation that are essential for compliance with the SURE requirements.

Key positions include, for example, but not limited to:

- ✓ incoming biomass (check of the biomass type, quantity and characteristics, confirmation of data, etc.)
- ✓ internal processing steps (mass balancing and material flows, conversion rates, allocation of sustainability characteristics, etc.)
- ✓ outgoing biomass (mass balancing and material flows, storage, sale, delivery of sustainable biomass, etc.)
- ✓ greenhouse gas calculation and accounting (EU GHG calculation methodology, data collection, information gathering, etc.), if required
- ✓ sustainability management (contact person for certification bodies, issuance of relevant documents and certificates, etc.)

The *expertise* requires at least knowledge of the requirements of Directive (EU) 2018/2001 and the obligations described therein regarding the traceability of biomass, mass balancing, GHG calculation and accounting (if relevant) and other methods and processes, as well as the regional laws for handling the biomass in question and its implementation and application in operations. This includes, for example, knowledge of waste or permit law, immission regulations or other relevant laws or regulations.<sup>2</sup>

In addition to a relevant degree course or training, proof of expertise can also be provided as part of an initial training plan or through successful participation in a relevant course/training programme.

The economic operator ensures that all employees entrusted with key tasks in the company have received appropriate *training* and/or instruction and keeps records of the training and instruction provided.

## 4.5 Greenhouse gas accounting

Economic operators who receive/collect, trade/distribute or process biomass fuels or use them to generate electricity or heat (cooling) are required under the SURE-EU system to provide specific information on the greenhouse gas emissions generated in the respective operation and to transmit the data to the downstream interface, provided that greenhouse gas

accounting pursuant to the requirements of Directive (EU) 2018/2001 is mandatory for the conversion plant using the biomass or is created voluntarily.

The calculation of the total GHG emissions and the greenhouse gas emission saving resulting from the use of biomass fuels must be calculated as specified in the European regulations.<sup>3</sup> The provisions listed here for biofuels apply to biomass fuels as well.

Detailed specifications for determining greenhouse gas emissions and calculating the greenhouse gas emission saving can be found in the document “Technical guidance for greenhouse gas calculation” of the SURE-EU system.

## 4.6 Social responsibility

Participants in the SURE-EU system assume social responsibility and undertake to comply with at least the Core Labour Standards of the International Labour Organisation (ILO<sup>4</sup>), based on the fundamental principles of:

- ✓ freedom of association and collective bargaining
- ✓ elimination of forced labour
- ✓ abolition of child labour
- ✓ elimination of discrimination in respect of employment and occupation

which in turn are reflected in eight conventions and have been ratified by currently 139 states<sup>5</sup>:

- ✓ ***Convention 87 concerning Freedom of Association and Protection of the Right to Organise, 1948***

Convention 87 concerning Freedom of Association and Protection of the Right to Organise of 1948 guarantees the right of workers and employers to form associations without previous authorisation. These organisations must have the right to draw up their constitutions and rules, to elect their representatives in full freedom, to organise their administration and activities and to formulate their programmes.

- ✓ ***Convention 98 concerning the Application of the Principles of the Right to Organise and to Bargain Collectively, 1949***

Convention 87 is supplemented by Convention 98 concerning the Application of the Principles of the Right to Organise and to Bargain Collectively, 1949. It calls for adequate protection of workers against any discrimination contrary to freedom of association in respect of their employment. This includes, in particular, acts calculated to make the employment of a worker subject to the condition that he shall not join a union or that cause the dismissal of a worker by reason of union membership or

because of participation in union activities. The possibility of concluding collective labour agreements between employers or organisations of employers and organisations of employees to regulate pay and working conditions shall be encouraged.

✓ ***Convention 29 - Forced Labour, 1930***

Convention 29 on forced labour calls for the elimination of forced and compulsory labour as soon as possible, whereby forced and compulsory labour for the benefit of private individuals is completely prohibited, especially products in which they trade. If forced or compulsory labour cannot be eliminated immediately, it is subject to certain conditions and must be remunerated at the prevailing rates.

✓ ***Convention 105 concerning the Abolition of Forced Labour, 1957***

Convention 105 on the Abolition of Forced Labour adds that forced or compulsory labour shall not be used as a means of political coercion or education or as a punishment for holding views ideologically opposed to the established system, as a method of mobilising and using labour for purposes of economic development, as a means of labour discipline, as a punishment for having participated in strikes or as a means of racial, social, national or religious discrimination.

✓ ***Convention 100 concerning Equal Remuneration of Men and Women Workers for Work of Equal Value, 1951***

Convention 100 seeks to promote and, where possible, ensure equal pay for men and women for work of equal value.

✓ ***Convention 111: concerning Discrimination in Respect of Employment and Occupation, 1958***

According to Convention 111, all forms of discrimination must be eliminated. Discrimination means any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin. It also includes any such other distinction, exclusion or preference which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation.

✓ ***Convention 138 concerning Minimum Age for Admission to Employment, 1973***

Convention 138 on the minimum age is designed to ensure the effective abolition of child labour and to raise progressively the minimum age for admission to employment or work to a level consistent with the fullest physical and mental development of young persons. The minimum age for less developed countries is 14 years, otherwise 15 years, and 18 years for jobs that are likely to jeopardise the health, safety or morals of young persons. Considerable derogations from these principles are permitted, firstly for less developed countries, secondly for persons aged 14 years or over for training purposes and finally for persons aged 13 to 15 years who perform

light work which is not likely to be harmful to their health or development or prejudice their attendance at school, their participation in vocational orientation or training programmes.

✓ ***Convention 182 concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, 1999***

The most recent ILO core labour standard on child labour supplements Convention 138 and covers all persons under 18 years of age. States ratifying the Convention shall ensure that all forms of slavery and practices similar to slavery (such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour), the use, procuring or offering of a child for prostitution, for the production of pornography or for illicit activities, in particular for the trafficking of drugs, and work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children are prohibited and eliminated.

The social responsibility requirements of the scheme participant can be considered fulfilled if the country where the economic operator operates has ratified ILO core labour standards 29, 87, 98, 100, 105, 111, 138 and 182. An overview of the states that have ratified the ILO core labour standards is available on the ILO website<sup>6</sup>. This list is updated on a regular basis.

## 5 Phase-specific requirements for conversion plants for the generation of electricity or heat from biomass fuels

Conversion plants for the generation of electricity or heat from biomass fuels are all facilities that use biomass fuels (such as wood fuel, straw, biogas, etc. but also those that absorb temporarily stored energy) and convert it to electrical energy and/or heat.

In the SURE-EU system, “installation” is defined as the totality of all functionally related technical and structural facilities required to generate electricity and/or heat. This means that all facilities installed in (immediate) physical proximity to each other, such as combined heat and power plants connected to the same fermenter or several boiler systems using the same steam turbine, form a single unit. Investments in expansion, such as the connection of an additional combined heat and power plant to an existing biogas plant, are also considered to be a single installation and not a second, newly commissioned installation.

In the SURE-EU system, the date the installation became operational must be checked and validated. An installation is deemed to be operational if it generates electricity and/or heat for the first time after establishing that it is technically ready for operation. The date the



installation became operational does not change if the generator or other technical or structure parts are replaced after the initial start-up as a replacement or rationalisation investment.

A replacement investment is deemed to exist if installations or installation parts are replaced due to wear and tear or advances in technology.

If, for economic reasons, an existing installation which has not reached the end of its technical service life is replaced by a new installation, a rationalisation investment is deemed to be made if the capacity of the installation is not increased at the same time. However, if the investment increases the capacity of the installation (rated output of the installation) and if the invested costs have exceeded at least 50% of the notional new production costs of the entire installation, the installation is considered to be newly operational once it begins to produce electricity or heat for the first time after the investment is completed.

## 5.1. Requirements for electricity production from biomass fuels

Electricity generated in installations with a rated thermal input of 50 MW or more must be produced in cogeneration plants under the SURE-EU system unless the installation operator can objectively and transparently document that the assessment of the cogeneration potential has been carried out in accordance with Article 14 of Directive (EU) 2012/27 (Directive of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives (EU) 2009/125 and (EU) 2010/30 and repealing Directives (EU) 2004/8 and (EU) 2006/32<sup>7</sup>) shows that there is no cost-effective way to use high-efficiency cogeneration technology. This cost-benefit analysis may be part of an environmental assessment.

If the assessment does not identify a potential where the benefits exceed the costs, the installations may be exempted from the requirements to produce heat and power. The electricity fed into the grid and the heat supplied can be used as proof of cogeneration operation.

In addition, installations with a thermal input of no more than 50 MW are exempt from the cogeneration requirement, unless otherwise specified in the country the electricity is generated in.

Similarly, installations that are the subject of a specific communication by a Member State to the Commission on the basis of a duly substantiated threat to the security of electricity supply and where the European Commission has taken a decision to this effect are exempted from the cogeneration requirement.

Electricity produced in installations with a total rated thermal input of 50 MW or more which first became operational after 25 December 2021 must be produced using high-efficiency cogeneration technology, unless the installations are exempted from the cogeneration requirement under the above criteria.

Installations exempted from the requirement to cogenerate electricity and that

- ✓ became operational after 25 December 2021 and
- ✓ meet the above requirements and
- ✓ only generate electricity,

are only recognised in the SURE-EU system if they either meet certain minimum energy efficiency values or capture and safely store the carbon dioxide emissions generated during electricity production (carbon capture and storage, CCS).

As a minimum energy efficiency level

- ✓ for installations with a total rated thermal input of between 50 and 100 MW, the energy efficiency values associated with best available techniques (“BAT-associated energy efficiency levels”) as defined in Commission Decision<sup>8</sup> (EU) 2017/1442 are required as the assessment basis in the SURE-EU system, and
- ✓ for installations with a total rated thermal input greater than 100 MW, net electrical efficiency of at least 36%.

The co-incineration of biomass fuels and fossil-based energy sources in installations for pure electricity generation is only permitted in the SURE-EU system if the share of sustainable biomass in energy production is at least 51%, measured at the lower calorific value of the fuel [H<sub>u</sub>]. A complete fuel logbook can be submitted as proof.

## 5.2 GHG saving requirements

The greenhouse gas emission saving is part of the SURE-EU scheme requirements for economic operators who have an obligation to do so under Directive (EU) 2018/2001 or who want to voluntarily provide proof of greenhouse gas emission savings.

The minimum greenhouse gas emission saving for the production of electricity and heat from biomass fuels in the SURE-EU system for installations starting operation from 1 January 2021 is 70%. This limit for the greenhouse gas emission savings increases to at least 80% for installations starting operation from 1 January 2026. The last interface that converts biomass fuels into electricity and/or heat must provide information on the date the installation became operational.

The greenhouse gas emission saving (GHG) is the savings of greenhouse gas (GHG) emissions expressed as a percentage from the use of biomass fuels compared to fossil fuels for the production of electricity or heat<sup>9</sup>. The calculation of the total GHG emissions and the greenhouse gas emission saving resulting from the use of biomass fuels must be calculated as specified in

the European regulations of Directive (EU) 2018/2001.<sup>10</sup> The provisions listed here for biofuels apply to biomass fuels as well.

Details for calculating and providing proof of the required greenhouse gas emission saving can be found in the document “Technical guidance for greenhouse gas calculation” of the SURE-EU system.

### 5.3 Requirements for emissions of air pollutants

When biomass fuels are converted to electricity or heat, the emissions of air pollutants, in particular nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulphur dioxide (SO<sub>2</sub>) and particles must be minimised using the best available technology. The limit values are defined by the respective immission regulations of the countries in which the conversion plant is operated (e.g. in Germany under the 44th Ordinance for the Implementation of the Federal Immission Control Act), but at a minimum

- ✓ for installations with a rated thermal input of 1 to 50 MW, the limit values of Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants<sup>11</sup> and
- ✓ for installations with a rated thermal input above 50 MW, the limit values of Directive (EU) 2010/75 of the European Parliament and of the Council of 24 November 2010 on industrial emissions<sup>12</sup>.

Compliance with the valid measurement and reporting requirements of the installation operator must be verified in the SURE-EU system during the inspection. To this end, the installation operator is required to record, document and present the measurement and monitoring results in such a way that compliance with the emission limit values and the inspection requirements can be assessed.

If secondary emissions reduction equipment is used to comply with the emission limit values, the installation operator must keep records of the effective continuous operation of the secondary emissions reduction equipment and of any malfunctions or failures of this equipment. If the emission limit values are not complied with, the installation operator must provide a transparent account of the measures taken to restore compliance with the requirements as soon as possible.

## 5.4 Requirements for proper operation of installations

In the SURE-EU system, the operating permit or certificate of registration is verified by the competent authority of the country in which the installation is in operation. The most up-to-date documents and related information such as application forms and approval decisions must be submitted to the auditor for this purpose.

During the audit, it must also be checked that the biomass fuels used have been authorised or approved by the competent authority – if required– or it must be verified that the use of the biomass fuels complies with the installation’s operating licence. To this end, the installation operator must provide the auditor with a detailed record of the biomass fuels used, which clearly shows the type and classification of the biomass fuels and enables the information to be checked against the operating licence, if one exists.

# 6 Documentation requirements

The SURE-EU system requires all economic operators to have a document management system that can be checked as part of an audit. Proper documentation is mandatory for compliance with the legal requirements for sustainable electricity and heat production from solid or gaseous biomass fuels.

All of the documents in the document management system must be kept for at least 5 years regardless of any other legal requirements relating to retention period.

The traceability of the biomass is ensured by a mass balance system. Records must be kept during every phase of production and supply. The system must be applied in such a way that the quantity of sustainably produced biomass is identified for every phase. Where (disaggregated) default values are used to demonstrate minimum greenhouse gas savings, the transport distances between economic operators must be passed on and documented. Records must ensure that there is always a transparent link between the biomass and the documentation.

## 6.1 Documentation requirements for first gathering points/collection points

First gathering points and collectors/collection points must document that they have undertaken to meet the requirements of the SURE-EU system when handling (e.g. storage, processing, mixing) biomass under the scope of Directive (EU) 2018/2001.

Verification can be provided in the form of, for example, the certificate (valid for 12 months) or the scheme contract with SURE.

First gathering points/collectors also have to ensure that all of the operations directly or indirectly involved in the production or supply of biomass which are not themselves interfaces have at least undertaken to meet the requirements of the SURE-EU system for the production of biomass or the collection of waste and residues from biomass and have actually met these requirements. Proof can be provided to the first gathering point/collectors in the form of the self-declarations filled out and signed by the biomass suppliers. In case of doubt, the contractual documents between the producer/waste and residues producer and the first collector/collection point can also be used for this purpose.

Collectors/collection points must also document that the waste declaration of the outgoing biomass is identical to the waste declaration of the incoming biomass.

The collector/collection point does not need a self-declaration for waste and residues from biomass that originates from private households. Waste and residual materials from private households can still fall under the scope of certification according to Directive (EU) 2018/2001.

The collector/collection point must keep records on the quantities of waste and residues from biomass collected from private households. These records must clearly show which quantities were collected in the defined collection period. The collection period can be defined by the collection point up to a maximum of 1 month – this must be documented accordingly. The records must be kept in such a way that the documentation clearly delineates the quantities of waste and residues from biomass collected in the same period by waste and residues producers.

### 6.1.1 Requirements for incoming biomass

The first gathering points and collection points must document the following in their records of *incoming biomass*:

- 1) *Number and name of all operations* that supply agricultural or forest biomass (in the case of first gathering points) or waste and residues from biomass (in the case of collection points) to the supply chain for the first time. A list must be kept that is provided to the certification body responsible upon request to perform sample inspections.
- 2) For every consignment of sustainable biomass, the agricultural or forest biomass producers or collectors/producers of waste and residues from biomass must confirm that they *comply with the requirements* under Article 29 of Directive (EU) 2018/2001 using the respective *self-declaration form for the SURE-EU system*. Compliance with

the requirements is checked in sample inspections by the responsible certification body of the first gathering point or collection point.

Alternatively, proof can be provided by a valid certificate recognised by SURE from the agricultural or forest biomass producers or producers/collectors of biomass from waste and residues. In this case, a *copy of the certificate* that was valid at the time the biomass was received must be clearly legible and documented for each quantity of sustainable biomass recorded.

Contractual documents may also be used as proof, provided they contain information identical to the self-declarations of the SURE-EU system.

- 3) For every consignment of sustainable biomass, the *country of origin* of the biomass must be indicated and, in the case of agricultural and forest biomass, the location of *cultivation* as a polygon in geographic coordinates with a resolution of 20 metres for each individual point (this is not necessary if the producer confirms in the self-declaration that he has appropriate proof of the location of cultivation).
- 4) Non-certified producers must indicate whether the operation is subject to the inspections laid down in Regulation (EU) 1307/2013 (*cross compliance*) in the case of agricultural biomass or a *risk assessment* recognised by the SURE-EU scheme in the case of forest biomass.
- 5) For every quantity of sustainable biomass recorded, *delivery documents*, for example in the form of delivery slips or weighing slips, and clear and unambiguous *labeling*, for example a unique identification number, must be available.
- 6) Every consignment of scheme-compliant biomass must include clear information on the *type of* all biomass delivered and its correct *designation* or *code* (waste or residue).
- 7) For every consignment of scheme-compliant biomass, the *date* the biomass was received and the quantity of sustainable biomass delivered must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 8) If proof of a greenhouse gas emission saving is to be provided, the consignment of sustainable biomass must, in the case of agricultural or forest biomass, include information on *greenhouse gas emissions* in the upstream chain. The emissions for feedstocks or intermediate products can be provided as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

To be able to use disaggregated default values, the biomass producer must make a corresponding statement in the self-declaration and, if applicable, the information on the actual *distance* of biomass transport in kilometres [km] in the incoming

biomass of the first gathering point or the collection point, if required to determine the distance-dependent default value classes in Annex VI of Directive (EU) 2018/2001.

If no statement is made in the self-declaration on the use of (disaggregated) default values, the GHG emissions must be calculated individually.

It should be noted that only *actual* GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant). If (disaggregated) default values are applied, “(Disaggregated) default value used” must be indicated or similar wording provided.

Greenhouse gas emissions from the production of waste and residues are set to zero at the level of the collection points.

- 9) For every consignment of scheme-compliant biomass, proof must be provided and documented that a standard *contractual relationship* exists between the operation supplying the biomass and the first gathering point or collection point, for example in the form of a purchasing contract or disposal contract. This documentation requirement also includes contracts with third parties that have been contracted to handle the sustainable biomass (e.g. subcontractors, brokers, storage facility operators).
- 10) For every consignment of scheme-compliant biomass, the *name of the person* who accepted the quantity of sustainable biomass and the *confirmation statement* of the employee responsible who verified the accuracy of the transmitted and documented data from the upstream operation or operating site when the sustainable biomass was received in the operation must be clearly legible and documented.

### 6.1.2 Requirements for internal processes

First gathering points and collectors/collection points must keep the following records in relation to *internal processes*:

- 1) All sustainable biomass in internal processes must have clear and unambiguous *labelling*, for example a unique identification number, allowing it to be assigned to a specific consignment of incoming scheme-compliant biomass at any time.
- 2) The *quantity* of sustainable biomass in internal processes must be correctly recorded (in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass).
- 3) The *type, designation* or code and *country of origin* of the biomass must be indicated in the documentation.



- 4) The type of internal process must be described in a way that is clear, comprehensible and transparent.
- 5) Any *conversion rates* within the internal process must be specified, i.e.
  - in the case of *feedstocks or intermediate products*, the *feedstock factor* [kg/kg] related to the dry matter content and the *allocation factor* for the intermediate product
  - in the case of *solid or gaseous biomass fuels*, the *feedstock factor* for the biomass fuel [MJ/MJ] and the *allocation factor* for solid or gaseous biomass fuels
- 6) A complete *mass balance* pursuant to Directive (EU) 2018/2001 must also be available at all times for internal processes.
- 7) If the *greenhouse gas emissions* generated by the internal process are calculated individually, the emissions for feedstocks and intermediate products must be specified as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] for each specific element of the greenhouse gas calculation methodology according to Directive (EU) 2018/2001, if relevant.  
  
Specifications for determining GHG emissions are set out in the SURE document “Technical guidance for greenhouse gas calculation”.
- 8) The *name of the person* who verified the accuracy of the information about the internal process and the recorded and documented mass balance attributes must be clearly legible and documented.

### 6.1.3 Requirements for sales/outgoing biomass

Pursuant to Directive (EU) 2018/2001, first gathering points and collection points are required when supplying sustainable biomass to provide the data necessary for the documentation in the downstream operations or in the operating site of the downstream interface and to report inconsistencies in the documentation immediately to the SURE-EU system and the contracted certification body.

For sales or *outgoing consignments* of sustainably produced biomass, the following data must be passed on to the next interface by the first gathering or collection point:

- 1) For every outgoing quantity of sustainable biomass, a valid *certificate number* and the name of the affiliated *certification scheme* (in this case: SURE-EU) must be indicated.
- 2) The consignment of sustainably produced biomass must include information on the *type, designation* or code of the biomass and its *country of origin*.

- 3) *Delivery documents* must be available for every outgoing quantity of sustainably produced biomass, and every consignment must have clear and unambiguous *labelling*, for example a unique identification number.
- 4) For every outgoing quantity of scheme-compliant biomass, the *date* the biomass was dispatched and the quantity of sustainable biomass delivered must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 5) It must be possible at any time to present a correct *mass balance* pursuant to Directive (EU) 2018/2001, including batch formation for every new batch resulting from the internal process.
- 6) For every outgoing quantity of sustainable biomass, information on *greenhouse gas emissions* must be provided where relevant. This can be provided as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

It should be noted that *only actual* GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant).

If (disaggregated) default values are applied, “(Disaggregated) default value used” must be indicated or similar wording provided. In addition, all *transport distances* of the biomass must be added up and passed on to the downstream interface.

Specifications for determining GHG emissions are set out in the SURE document “Technical guidance for greenhouse gas calculation”.

- 7) The *name and address* of the recipient must be clearly legible and documented for every outgoing quantity of sustainable biomass.
- 8) For every outgoing quantity of sustainable biomass, proof must be provided and documented that a standard *contractual relationship* exists between the collection point and the receiving operation, for example in the form of a purchasing contract or disposal contract. This documentation requirement also includes contracts with third parties that have been contracted to handle the sustainable biomass (e.g. sub-contractors, brokers, storage facility operators).

## 6.2 Documentation requirements for processing plants

### 6.2.1 Requirements for incoming biomass

Processing plants after the first interface (first gathering point or collector/collection points) must document and store the following in the *incoming goods* of scheme -compliant biomass or biomass fuels according to Directive (EU) 2018/2001:

- 1) For every quantity of sustainable biomass recorded, *delivery documents*, for example in the form of delivery slips or weighing slips, and clear and unambiguous *labeling*, for example a unique identification number, must be available.
- 2) *Name and address* of the upstream interface and a *copy of the certificate* of the upstream interface valid at the time of the biomass production, processing or other operation carried out in the interface must be clearly legible and documented for every quantity of sustainable biomass recorded.
- 3) For every consignment of sustainable biomass, the *country of origin* of the biomass must be indicated.
- 4) Every consignment of scheme-compliant biomass must include clear information on the *type of* all biomass delivered and its correct *designation* or *code* (waste or residue).
- 5) For every consignment of scheme-compliant biomass, the *date* the biomass was received and the *quantity of* sustainable biomass supplied must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 6) To the extent that proof of a greenhouse gas emission saving is to be provided, the incoming sustainable biomass must include information about the *greenhouse gas emissions*. This must be provided for feedstocks or intermediate products as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

It should be noted that *only actual* GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant).

If (disaggregated) default values are applied, only the statement “(Disaggregated) default value used” or similar wording must be provided and, where appropriate, the actual *distance* of the biomass transport from the upstream interface to the processing plant in kilometres [km] in the incoming biomass if required to determine

the distance-dependent default value classes in Annex VI of Directive (EU) 2018/2001.

- 7) For every consignment of scheme-compliant biomass, proof must be provided and documented that a standard *contractual relationship* exists between the operation accepting the biomass and the upstream interface, for example in the form of a purchasing contract or disposal contract. This documentation requirement also includes contracts with *third parties* that have been contracted to handle the sustainable biomass (e.g. subcontractors, brokers, storage facility operators).
- 8) For every consignment of scheme-compliant biomass, the *name of the person* who accepted the quantity of sustainable biomass and the *confirmation statement* of the employee responsible who verified the accuracy of the transmitted and documented data from the upstream operation or operating site when the sustainable biomass was received in the operation must be clearly legible and documented.

## 6.2.2 Requirements for internal processes

Processing plants must keep the following records in relation to *internal processes*:

- 1) All quantities of sustainable biomass that find their way into an internal process must have clear and unambiguous *labelling*, for example a unique identification number, allowing it to be assigned to a specific consignment of incoming scheme-compliant biomass at any time.
- 2) The *quantity* of sustainable biomass in internal processes must be correctly recorded (in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass).
- 3) *The type, designation* or code and *country of origin* of the biomass must be indicated in the documentation.
- 4) The *type of internal process* must be described in a way that is clear, comprehensible and transparent.
- 5) Any *conversion rates* within the internal process must be specified, i.e.
  - in the case of *feedstocks or intermediate products*, the *feedstock factor* [kg/kg] related to the dry matter content and the *allocation factor* for the intermediate product
  - in the case of *solid or gaseous biomass fuels*, the *feedstock factor* for the biomass fuel [MJ/MJ] and the *allocation factor* for solid or gaseous biomass fuels
- 6) A complete *mass balance* pursuant to Directive (EU) 2018/2001 must also be available at all times for internal processes.

- 7) If the *greenhouse gas emissions* generated by the internal process are calculated individually, the emissions for feedstocks and intermediate products must be provided as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] for each specific element of the greenhouse gas calculation methodology according to Directive (EU) 2018/2001, if relevant.

Specifications for determining GHG emissions are set out in the SURE document “Technical guidance for greenhouse gas calculation”.

- 8) The *name of the person* who verified the accuracy of the information about the internal process and the recorded and documented mass balance attributes must be clearly legible and documented.

### 6.2.3 Requirements for sales/outgoing biomass

Pursuant to Directive (EU) 2018/2001, processing plants are required when supplying sustainable biomass to provide the data necessary for the documentation in the downstream operations or in the operating site of the downstream interface and to report inconsistencies in the documentation immediately to the SURE-EU system and the contracted certification body.

For sales or *outgoing consignments* of sustainably produced biomass, the following data must be passed on to the next interface by the processing plant:

- 1) For every outgoing quantity of sustainable biomass, a valid *certificate number* and the name of the affiliated *certification scheme* (in this case: SURE-EU) must be indicated.
- 2) The consignment of sustainably produced biomass must include information on the *type, designation* or code of the biomass and its *country of origin*.
- 3) *Delivery documents* must be available for every outgoing quantity of sustainably produced biomass, and every consignment must have clear and unambiguous *labelling*, for example a unique identification number.
- 4) For every outgoing quantity of scheme-compliant biomass, the *date* the biomass was dispatched and the *quantity of* sustainable biomass delivered must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 5) It must be possible at any time to present a correct *mass balance* pursuant to Directive (EU) 2018/2001, including batching for every new batch resulting from the internal process.
- 6) For every outgoing quantity of sustainable biomass, information on *greenhouse gas emissions* must be provided where relevant. This can be provided as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter

[gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

It should be noted that only actual GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant).

If (disaggregated) default values are applied, “(Disaggregated) default value used” must be indicated or similar wording provided. In addition, all *transport distances* of the biomass must be added up and passed on to the downstream interface.

Specifications for determining GHG emissions are set out in the SURE document “Technical guidance for greenhouse gas calculation”.

- 7) The *name* and *address* of the recipient must be clearly legible and documented for every outgoing quantity of sustainable biomass.
- 8) For every outgoing quantity of sustainable biomass, proof must be provided and documented that a standard *contractual relationship* exists between the collection point and the receiving operation, for example in the form of a purchasing contract or disposal contract. This documentation requirement also includes contracts with third parties that have been contracted to handle the sustainable biomass (e.g. sub-contractors, brokers, storage facility operators).

## 6.3 Documentation requirements for suppliers before the last interface

Suppliers who participate in the SURE-EU system must have a document management system which can be checked as part of an audit to ensure that for every consignment of sustainable biomass or biomass fuels, the data required for the documentation of downstream operations is transmitted. All of the documents in the document management system must be kept for at least 5 years regardless of any other legal requirements relating to retention period.

When transmitting sensitive company data, proof must be provided that this data is handled confidentially by all operations along the supply chain.

### 6.3.1 Requirements for incoming biomass

Suppliers before the last interface must document the following information for *incoming biomass*:

- 1) For every quantity of sustainable biomass recorded, *delivery documents*, for example in the form of delivery slips or weighing slips, and clear and unambiguous *labeling*, for example a unique identification number, must be available.
- 2) *Name* and *address* of the seller (upstream interface, operation, operating site) as well as a *copy of the certificate* of the upstream interface valid at the time of the biomass production, processing or other operation carried out in the interface must be clearly legible and documented for every quantity of sustainable biomass recorded.
- 3) For every consignment of sustainable biomass, the *country of origin* of the biomass must be indicated.
- 4) Every consignment of scheme-compliant biomass must include clear information on the type of all biomass delivered and its correct *designation* or *code* (waste or residue).
- 5) For every consignment of scheme-compliant biomass, the *date* the biomass was received and the *quantity of* sustainable biomass delivered must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 6) To the extent that proof of a greenhouse gas emission saving is to be provided, the incoming sustainable biomass must include information about the *greenhouse gas emissions*. This must be done for feedstocks or intermediate products as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

It should be noted that *only actual* GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant).

If (disaggregated) default values are applied, only the statement “(Disaggregated) default value used” or similar wording must be provided and, where appropriate, the actual *distance* of the biomass transport from the upstream interface to the supplier in kilometres [km] in the incoming biomass if required to determine the distance-dependent default value classes in Annex VI of Directive (EU) 2018/2001.

### 6.3.2 Requirements for sales/outgoing biomass

The following records must be kept by the suppliers before the last interface for sales (*outgoing biomass*) of sustainably produced biomass or biomass fuels:



- 1) For every outgoing quantity of sustainable biomass, a valid *certificate number* and the name of the affiliated *certification scheme* (in this case: SURE-EU) must be indicated.
- 2) The *name* and *address* of the recipient (downstream interface, operation or operating site) of every outgoing quantity of sustainable biomass must be clearly legible and documented.
- 3) Any *reallocations* to other operations/operating sites must be recorded and documented as well as information on *mixing* of different quantities.
- 4) The consignment of sustainably produced biomass must include information on the *type, designation* or code of the biomass and its *country of origin*.
- 5) *Delivery documents* must be available for every outgoing quantity of sustainably produced biomass, and every consignment must have clear and unambiguous *labelling*, for example a unique identification number.
- 6) For every outgoing quantity of scheme-compliant biomass, the *date* the biomass was dispatched and the quantity of sustainable biomass delivered must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 7) A correct *mass balance* pursuant to Directive 2018/2001 must also be available at all times.
- 8) For every outgoing quantity of sustainable biomass, information on *greenhouse gas emissions* must be provided where relevant. This can be provided as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

It should be noted that *only actual* GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant).

If (disaggregated) default values are applied, “(Disaggregated) default value used” must be indicated or similar wording provided. In addition, all *transport distances* of the biomass must be added up and passed on to the downstream interface.

Suppliers in the SURE-EU system must also immediately report inconsistencies in the documentation of the upstream operations or operating sites to the SURE certification scheme and the contracted certification body.

There is also a general requirement to provide data to SURE upon request (e.g. if this is necessary to ensure continuous traceability of the sustainable biomass).

## 6.4 Documentation requirements for last interfaces

### 6.4.1 Requirements for incoming biomass

Last interfaces (conversion plants) must document and store the following in the *incoming goods* of scheme-compliant biomass or biomass fuels in accordance with Directive (EU) 2018/2001:

- 1) For every quantity of sustainable biomass recorded, *delivery documents*, for example in the form of delivery slips or weighing slips, and clear and unambiguous *labeling*, for example a unique identification number, must be available.
- 2) *Name and address* of the upstream interface and a *copy of the certificate* of the upstream interface valid at the time of the biomass production, processing or other operation carried out in the interface must be clearly legible and documented for every quantity of sustainable biomass recorded.
- 3) For every consignment of sustainable biomass, the *country of origin* of the biomass must be indicated.
- 4) Every consignment of scheme-compliant biomass must include clear information on the type of all biomass delivered and its correct *designation* or *code* (waste or residue).
- 5) For every consignment of scheme-compliant biomass, the date the biomass was received and the *quantity* of sustainable biomass delivered must be recorded; in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass.
- 6) To the extent that proof of a greenhouse gas emission saving is to be provided, the incoming sustainable biomass must include information about the *greenhouse gas emissions*. This must be done for feedstocks or intermediate products as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] in the case of an individual calculation or in the form of the statement “disaggregated default value for electricity or heat production” (or similar).

It should be noted that *only actual* GHG emission values along the supply chain must be recorded/transmitted in the appropriate unit (i.e. dry matter for feedstocks and intermediate products, also applies to biogas/biomethane). In addition, the actual values for each specific element must be reported (if relevant).

If (disaggregated) default values are applied, only the statement “(Disaggregated) default value used” or similar wording must be provided and, where appropriate, the actual *distance* of the biomass transport from the upstream interface to the last interface in kilometres [km] in the incoming biomass if required to determine the distance-dependent default value classes in Annex VI of Directive (EU) 2018/2001.

For every consignment of scheme-compliant biomass, proof must be provided and documented that a standard *contractual relationship* exists between the operation receiving the biomass and the upstream interface, for example in the form of a purchasing contract or disposal contract. This documentation requirement also includes contracts with *third parties* that have been contracted to handle the sustainable biomass (e.g. subcontractors, brokers, storage facility operators).

- 7) For every consignment of scheme-compliant biomass, the *name of the person* who accepted the quantity of sustainable biomass and the *confirmation statement* of the employee responsible who verified the accuracy of the transmitted and documented data from the upstream operation or operating site when the sustainable biomass was received in the operation must be clearly legible and documented.

## 6.4.2 Requirements for internal processes

Last interfaces must keep the following records in relation to *internal processes*:

- 1) All quantities of sustainable biomass that enter an internal process must have clear and unambiguous *labelling*, for example a unique identification number, allowing it to be assigned to a specific consignment of incoming scheme-compliant biomass at any time.
- 2) The *quantity* of sustainable biomass in internal processes must be correctly recorded (in tonnes [t] for solid biomass, in cubic metres [m<sup>3</sup>] for gaseous biomass).
- 3) The *type, designation* or code and *country of origin* of the biomass must be indicated in the documentation.
- 4) The *type of internal process* must be described in a way that is clear, comprehensible and transparent.
- 5) Any *conversion rates* within the internal process must be specified, i.e.
  - in the case of *feedstocks or intermediate products*, the *feedstock factor* [kg/kg] related to the dry matter content and the *allocation factor* for the intermediate product
  - in the case of *solid or gaseous biomass fuels*, the *feedstock factor* for the biomass fuel [MJ/MJ] and the *allocation factor* for solid or gaseous biomass fuels
  - in the case of the *generation of electricity and heat*, the *feedstock factor* for the biomass fuel [MJ/MJ] and the allocation factor for the amount of produced electricity and heat

- 6) It must be possible at any time to present a correct *mass balance* pursuant to Directive (EU) 2018/2001, including batching for every new batch resulting from the internal process.
- 7) If the *greenhouse gas emissions* generated by the internal process are calculated individually, the emissions for feedstocks and intermediate products must be provided as an absolute value in grams of carbon dioxide equivalent per kilogram of dry matter [gCO<sub>2</sub>eq/kg<sub>atro</sub>] for each specific element of the greenhouse gas calculation methodology according to Directive (EU) 2018/2001, if relevant.  
  
Specifications for determining GHG emissions are set out in the SURE document “Technical guidance for greenhouse gas calculation”.
- 8) The *name* of the person who verified the accuracy of the information about the internal process and the recorded and documented mass balance attributes must be clearly legible and documented.

### 6.4.3 Requirements for outgoing quantities of electricity or heat produced

For sales (outgoing biomass) of electricity or heat produced from sustainable biomass fuels, the last interface is required to document the following:

- 1) For every outgoing quantity of electricity or heat generated from sustainable biomass, a valid *certificate number* and the name of the affiliated *certification scheme* (in this case: SURE-EU) must be indicated.
- 2) The *name* and *address* of the buyer/recipient of the sold quantity of sustainably produced electricity or heat from biomass fuels.
- 3) Every consignment of electricity or heat must include information about the *product type* (electricity or heat) and must be clearly and unambiguously identified (e.g. a unique *identification number*).
- 4) For all supplied electricity or heat, the *country of origin* of the biomass must be indicated for every quantity of electricity or heat produced and supplied from it.
- 5) For all supplied electricity or heat, documentation must be available about the *date and time* of delivery (e.g. when it is fed into the grid) of the electricity or heat produced from sustainable biomass fuels and the *quantity* of electricity or heat produced and supplied from sustainable biomass fuels in megajoules [MJ].
- 6) For all supplied electricity or heat from sustainable biomass fuels, information must be provided about the type of biomass fuel used, its *designation* and code (waste and residues).

- 7) For every quantity of electricity or heat produced from sustainable biomass fuels, information on the *greenhouse gas emissions* must be available if the energy was produced in installations that are required to reduce greenhouse gas emissions or have demonstrated this on a voluntary basis. In the case of an individual calculation for electricity or heat, this must be an absolute value in grams of carbon dioxide equivalent per megajoule [MJ].

Alternatively, it is also possible to specify “Disaggregated default value for the production of electricity or heat” (or similar). To this end, all *transport distances* of the biomass have to be added up to determine the corresponding distance-dependent standard value class.

Specifications for determining GHG emissions are set out in the SURE document “Technical guidance for greenhouse gas calculation”.

- 8) A *sustainability certificate* must be issued for all electricity or heat supplied. (see section 7)

When transmitting sensitive company data, proof must be provided that this data is handled confidentially.

## 6.5 Documentation requirements for service providers after the last interface

### 6.5.1 Requirements for sourcing generated electricity or heat

- 1) For every sourced quantity of sustainably produced electricity or heat from biomass fuels, *delivery documents* and clear and unambiguous *labelling*, for example a unique identification number, must be available.
- 2) The *name* and *address* of the last interface from which the electricity or heat was sourced and a *copy of its certificate* valid at the time the energy was produced in the last interface must be clearly legible and documented for every quantity of electricity or heat/cold sourced. The name of the *certification scheme* (in this case: SURE-EU) must be indicated.
- 3) For all supplied electricity or heat, the *country of origin* where the conversion took place must be indicated.
- 4) For all supplied scheme-compliant energy (electricity or heat) the *date* and quantity sourced must be recorded in megajoules [MJ].

- 5) For every sourced quantity of sustainably produced electricity or heat from biomass fuels, a corresponding, valid *sustainability certificate* must be available and transferred to the recipient of the supplied electricity or heat.
- 6) Sustainably produced electricity or heat from biomass fuels must include information about *greenhouse gas emissions* when sourced, where relevant. This can be indicated as an absolute value in gCO<sub>2</sub>/MJ or as a default value for the production of electricity or heat.
- 7) For every quantity sourced of sustainably generated electricity or heat/cooling from biomass fuels, proof must be provided and documented that a standard *contractual relationship* exists between the last interface and the energy service provider sourcing energy after the last interface in the form of a purchasing contract. This documentation requirement includes, if applicable, contracts with third parties who have been commissioned to handle energy procurement (e.g. subcontractors, brokers, etc.).
- 8) For every purchase of sustainably produced electricity or heat from biomass fuels, the *name of the person* who verified the completeness and accuracy of the data transmitted and documented upon purchase of the energy must be clearly legible and documented.

### 6.5.2 Requirements for outgoing quantities of electricity or heat

For sales of electricity or heat produced from sustainable biomass fuels, the service provider after the last interface is required to document the following:

- 1) For sales of electricity or heat sourced from last interfaces, a current certificate with a valid *certificate number* is required. The name of the *certification scheme* (in this case: SURE-EU) must be indicated.
- 2) The *name* and *address* of the buyer/recipient of the sold quantity of sustainably produced electricity or heat from biomass fuels.
- 3) Every consignment of electricity or heat must include information about the *product type* (electricity, heat or cooling) and must be clearly and unambiguously identified (e.g. a unique *identification number*).
- 4) For sales of electricity or heat, the *country of origin* where the conversion took place must be indicated.
- 5) For sales of electricity or heat, documentation must be available about the *date and time* of delivery (e.g. when it is fed into the grid) of the electricity or heat produced from sustainable biomass fuels and the *quantity* of electricity or heat produced and supplied from sustainable biomass fuels in megajoules [MJ].

- 6) For sales of sustainably produced electricity or heat/cooling from biomass fuels, a valid *sustainability certificate* must be available for the energy sold and transmitted to the recipient of the electricity or heat delivery. If electricity or heat deliveries are divided or combined, appropriate *sustainability certificates* must be issued or combined.
- 7) If quantities of electricity or heat sourced from different last interfaces are *mixed*, this must be documented, as do *reallocations* to other operations/operating sites.
- 8) The sale of electricity or heat from biomass fuels must include information about *greenhouse gas emissions* when sourced, where relevant. This can be indicated as an absolute value in gCO<sub>2</sub>/MJ or as a default value for the production of electricity or heat.
- 9) For sales of sustainably produced electricity or heat from biomass fuels, proof must be provided and documented that a standard *contractual relationship* must exist between the service provider after the last interface and the recipient of the energy. This documentation requirement also includes, if applicable, *contracts with third parties* who have been commissioned to handle energy procurement (e.g. subcontractors, brokers, etc.).
- 10) For sales of sustainably produced electricity or heat/cooling from biomass fuels, the *name of the person* who verified the completeness and accuracy of the transmitted data and (partial) sustainability certificates upon delivery of the energy must be clearly legible and documented.

When transmitting sensitive company data, proof must be provided that this data is handled confidentially.

## 7 Issuing proof of sustainability

Sustainability certificates are documents that verify that the sustainability requirements are satisfied for a quantity of biomass or electricity or heat from biomass fuels at the time they are issued by the last interface.

### 7.1. Prerequisites for issuing sustainability certificates

The following conditions have to be fulfilled for the last interface to be able to issue sustainability certificates:



- 1) The last interface has to have a certificate recognised under Directive (EU) 2018/2001 which is valid at the time the sustainability certificate is issued.
- 2) The directly upstream interfaces must present a copy of their certificate to the last interface that are recognised in the same way and that were valid at the time the biomass was delivered.
- 3) The last interface must confirm that the requirements of Directive (EU) 2018/2001 have been met for the production of electricity or heat from sustainable biomass fuels.
- 4) The final interface, if it is required to do so or voluntarily provides proof of GHG reduction, must indicate in gCO<sub>2</sub>eq/MJ the GHG emissions caused by it and by all operations directly or indirectly involved in the production or supply of the biomass, other than an interface itself, in the production and supply of the biomass and the quantity of electricity or heat produced from it, as long as they have to be included in the calculation of the greenhouse gas emission saving.
- 5) The last interface must verify the origin of the biomass under a mass balance system.
- 6) The last interface must ensure that the electricity or heat produced from sustainable biomass fuels has the required potential to reduce greenhouse gas emissions.

## 7.2 Contents of sustainability certificates

The contents of the sustainability certificates are determined by a form supplied under the SURE-EU system. The use of this form is mandatory unless no other national requirements exist.

## 7.3 How sustainability certificates become invalid

Sustainability certificates are invalid when:

- ✓ they do not contain one or more of the entries required in the form,
- ✓ they contain falsified or incorrect information,
- ✓ the certificate of the issuing interface was not or was no longer valid at the time the sustainability certificate was issued (exception: if the individual required to provide proof was not aware of the inaccuracy of the information and, even exercising the usual diligence, he would not have been able to notice the inaccuracy and the certificate of the issuing interface was valid at the time the sustainability certificate was issued),

- ✓ the sustainability certificate or the certificate of the issuing interface was issued in a certification scheme that was not or was no longer recognised at the time the sustainability certificate or the certificate was issued or
- ✓ the certificate of the issuing interface was issued by a certification body that was not or was no longer recognised at the time that certificate was issued.

## 7.4 Issuing partial sustainability certificates

Service providers after the last interface can issue partial sustainability certificates for partial quantities of sustainably generated electricity or heat from biomass fuels for which a sustainability certificate has already been issued. In addition, different quantities of sustainably produced electricity or heat for which a sustainability certificate has already been issued can be merged in partial sustainability certificates.

## 8 Acceptance of other certification schemes

For the generation of electricity and heat from biomass fuels, SURE expressly reserves the right to explicitly recognise other certification schemes with regard to the proof of sustainable biomass production, as long as they meet at least equivalent requirements to those defined by SURE and are recognised by the European Commission. The accepted schemes will be published by SURE in the newsletter and on SURE's website.

## 9 Relevant documents

With regard to the documentation (scheme documents) in the SURE-EU system, reference is made here to the document "Scope and basic scheme requirements".

SURE reserves the right to create and publish additional supplementary scheme principles if necessary.

The legal EU regulations and provisions for sustainable biomass and biomass fuels including other relevant references that represent the basis of the SURE documentation are published separately on SURE's website at [www.sure-system.org](http://www.sure-system.org). References to legal regulations always relate to the current version.

## 10 References

1

**EUROPEAN COMMISSION (2018):** Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (new version) to recast and repeal Directives 2009/28/EC, 2013/18/EU and 2015/1513/EU.

2

Knowledge of the following legal principles, for example, may be relevant with regard to the material flow of biomass for the German market (not exhaustive):

- ✓ German Waste Wood Ordinance (Altholzverordnung)
- ✓ permit law (Fourth Ordinance for the Implementation of the Federal Immission Control Act (4th BImSchV), (wood) waste processing, use of wood waste as an energy source)
- ✓ the valid version of the Renewable Energy Directive (RED), if applicable to the installation, together with the valid version of the German Biomass Ordinance (Biomasseverordnung)
- ✓ the Waste Catalogue Ordinance (Abfallverzeichnisverordnung - AVV) (with respect to waste wood and with respect to the classification of waste (ash, coal, etc.) resulting from use for energy purposes and its lawful disposal (recovery or removal)
- ✓ etc.

knowledge of the following, for example, may be required with regard to the material flow of biogas for the German market (not exhaustive):

- ✓ German Biowaste Ordinance (Bioabfallverordnung)
- ✓ permit law (Fourth Ordinance for the Implementation of the Federal Immission Control Act (4th BImSchV), biowaste processing, biogas production from biowaste, etc.)
- ✓ the valid version of the Renewable Energy Directive (RED), if applicable to the installation, together with the valid version of the German Biomass Ordinance (Biomasseverordnung)
- ✓ the Waste Catalogue Ordinance (Abfallverzeichnisverordnung - AVV) (with respect to biowaste and with respect to waste classification (compost, screenings, ferment residues, etc.) resulting from use for energy purposes and its lawful disposal (recovery or removal)

3

**I EUROPEAN COMMISSION (2018):** Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (new version) to recast and repeal Directives 2009/28/EC, 2013/18/EU and 2015/1513/EU. Article 31 (1) to (31)(3) and Annex VI.

**II EUROPEAN COMMISSION (2010):** 2010/335/EC: Commission Decision of 10 June 2010 on guidelines for the calculation of land carbon stocks for the purpose of Annex V to Directive 2009/28/EC. Annex II.

**III EUROPEAN COMMISSION (2010):** Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels (2010/C 160/02), Annex II.

**IV EUROPEAN COMMISSION (2017):** Communication from the Commission “Note on the conducting and verifying of actual calculations of the GHG emission saving”.

4

An overview of all standards adopted by the ILO is available on its website at <https://www.ilo.org/global/standards/lang--en/index.htm> (last accessed on 14.04.2020).

5

An overview of the countries that have ratified the ILO Core Labour Standards can be found at [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:10011:0::NO::P10011\\_DILAY\\_BY,P10011\\_CONVENTION\\_TYPE\\_CODE:2,F](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:10011:0::NO::P10011_DILAY_BY,P10011_CONVENTION_TYPE_CODE:2,F) (last accessed on 14.04.2020).

6

An overview of the countries that have ratified the ILO Core Labour Standards can be found at [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:10011:0::NO::P10011\\_DILAY\\_BY,P10011\\_CONVENTION\\_TYPE\\_CODE:2,F](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:10011:0::NO::P10011_DILAY_BY,P10011_CONVENTION_TYPE_CODE:2,F) (last accessed on 14.04.2020).

7

**EUROPEAN COMMISSION (2012):** Directive 2012/27/EC of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC. Available at: <https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=celex%3A32012L0027> (last accessed on 14.04.2020).

8

**EUROPEAN COMMISSION (2017):** Commission Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants (notified under document C(2017) 5225). Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017D1442> (last accessed on 14.04.2020).

9

Heat or waste heat is also used to generate cooling with absorption chillers. “Heat” in this case therefore also encompasses “cooling” or “refrigeration”, regardless of whether the end use of the heat is actual heating or cooling via absorption machines.

10

**I EUROPEAN COMMISSION (2018):** Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (new version) to recast and repeal Directives 2009/28/EC, 2013/18/EU and 2015/1513/EU. Article 31 (1) to (31)(3) and Annex VI.

**II EUROPEAN COMMISSION (2010):** 2010/335/EC: Commission Decision of 10 June 2010 on guidelines for the calculation of land carbon stocks for the purpose of Annex V to Directive 2009/28/EC. Annex II.

**III EUROPEAN COMMISSION (2017):** Communication from the Commission “Note on the conducting and verifying of actual calculations of the GHG emission saving”.

11

**EUROPEAN COMMISSION (2015):** Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L2193> (last accessed on 14.04.2020).

12

**EUROPEAN COMMISSION (2010):** Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (recast). Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32010L0075> (last accessed on 14.04.2020).

**Publication information**

SUSTAINABLE RESOURCES Verification Scheme GmbH  
Schwertberger Straße 16  
53177 Bonn  
Germany

+49 (0) 228 3506 150  
[www.sure-system.org](http://www.sure-system.org)

**Cover photo**

© SchwörerHaus / J.Lippert