



# REDcert

System principles for the process step  
**(last) interface** for the implementation  
of the Biomass Sustainability Ordinances  
(BioSt-NachV and Biokraft-NachV)

**Version 04**

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# 1 Introduction

To protect the climate and reduce current CO<sub>2</sub> emissions, the sustainable use of biomass for energy is to be encouraged. The 2009/28/EC Directive defines sustainability requirements for the use of biomass for energy. With the Biomass Electricity Sustainability Ordinance (BioSt-NachV) and the Biofuels Sustainability Ordinance (Biokraft-NachV), the framework of the Renewable Energy Sources directive stipulated by the European Union for sustainability criteria for biofuels and liquid fuels is transposed into national law (Germany). The specifications of the Sustainability Ordinances apply for companies along the entire production, processing and supply chain all the way to the plant operator and those responsible for providing proof that they satisfy the requirements pursuant to the Energy Taxation Act and the Federal Immissions Control Act (BImSchG). All operations engaged in the production and supply of biomass in compliance with these regulations must have pledged to comply with an approved certification scheme. REDcert is this type of certification scheme.

## 2 Scope of application

This document describes the requirements as well as the documentation and verification for all interfaces except first gathering points<sup>1</sup> that participate in the REDcert system.

According to the Sustainability Ordinances, interfaces are operations along the production and supply chain that require certification. A distinction is made between:

- first gathering points – these are operations that accept the biomass harvested by the farm for the first time for the purpose of resale (e.g. dealers or agricultural cooperatives)
- oil mills
- other operations that prepare liquid or gaseous biomass for final use at the required quality level

The Sustainability Ordinances define last interfaces as operations in the production chain where no further processing step generally follows, i.e. no other interface is downstream such as, e.g.:

- (1) oil mills in the case of vegetable oil
- (2) esterification facilities in the case of biodiesel
- (3) hydrogenation plants or co-hydrogenation plants in the case of hydrogenated vegetable or animal oils
- (4) bioethanol production facilities in the case of bioethanol (except when the biomass is further processed to ETBE as the last interface)
- (5) biogas processing facilities in the case of biogas for biofuels

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<sup>1</sup> See REDcert system principles for the process step First gathering point

## 3 Documentation requirements

### 3.1 General requirements

Interfaces pledge to satisfy the system requirements upon joining the REDcert system by signing the REDcert system contract.

The interface documents the following:

- the receipt of sustainable biomass
- tracking of sustainable biomass in internal processes
- calculation of the emissions already produced in line with the specifications of the Sustainability Ordinances (each interface must obtain the calculated greenhouse gas emissions (in the case of individual calculations) from the respective upstream interface for this calculation), or
- the use of default values
- the calculation of the greenhouse gas emissions saving (applies for the last interface)
- when sustainable biomass leaves the interface
- the data that is passed on to the downstream operations or operating site
- the information contained in the sustainability certificate (applies for the last interface)
- the data that is passed on to REDcert and
- reporting of any inconsistencies in the mass balance system

The last interface has to document the following:

- that it has pledged to fulfil the requirements of the Sustainability Ordinances in their current versions upon issuance of the sustainability certificates
- to hand over copies of all sustainability certificates that have been issued on the basis of these ordinances immediately to the certification body that issued its certificate and, should duties be transferred by the certification body responsible, also to the competent authority of the biofuel quota office and
- to keep the sustainability certificates and all of the documents required for them to be issued for at least ten years

Verification of the production of sustainably produced biomass using mass balance systems

The traceability of the biomass is ensured by a mass balance system. Records are to be kept at every step in production and supply. The system is to be applied in such a way that the quantity of sustainably produced biomass is identified at every step. Records must ensure that there is always a transparent link between the biomass and the documentation. Ensuring that this link exists is the responsibility of the interfaces, operations, operating sites and suppliers. The traceability of the biomass and the related information must be transparently documented by the operations. The interfaces, operations, operating sites and suppliers are responsible for the burden of proof here. The minimum requirements for the mass balance system can be found in the REDcert document "System principles for mass balancing".

To guarantee the traceability of the biomass, REDcert defines documentation requirements for preparation of incoming biomass and for outgoing biomass that are described in detail in the following section.

### 3.2 Incoming biomass

The interfaces have to document and keep the following information after receipt of sustainable biomass:

- delivery documents for every quantity of sustainable biomass (e.g. delivery slip)

and if not listed in the delivery documents, the following for every quantity of biomass to comply with the ordinances

- the name and address of the upstream interface, operation or operating site
- a copy of the certificate of the upstream interface that is recognised in accordance with the Biofuels Sustainability Ordinance (Biokraft-NachV) and was valid at the time the production, processing or other step was carried out in the interface for the biomass
- the purchase contract for sustainable biomass between the operation or the operating site and the upstream operation or operating site
- contracts with third-parties (e.g. external providers, sub-contractors, warehouse operators, etc.) that were commissioned to handle the sustainable biomass
- for each quantity of sustainable biomass
  - (1) the type of incoming sustainable biomass
  - (2) the date the sustainable biomass was received
  - (3) the quantity of sustainable biomass [in tonnes]

- (4) grams of carbon dioxide equivalents as an absolute value (cumulative across all upstream operations) in g CO<sub>2</sub>eq per kilogram of the incoming sustainable biomass (for individual calculation or if requested by the recipient of the biomass) OR it is indicated which (partial) default values, NUTS 2 values or estimates are to be used for the incoming sustainable biomass
- (5) country where it was farmed or country of origin
- (6) confirmation statement of the employee responsible for the incoming goods

### 3.3 Internal company information

The following data is also to be recorded for internal processes:

- the quantity of sustainable biomass that went into the process
- the type of internal process (e.g. pressing, refining, mixing of the sustainable biomass in tank storage, issuance of a sustainability certificate, etc.)
- conversion rates
- GHG emissions (in the case of individual calculations)
- allocation of the GHG emissions (in the case of individual calculations)
- balancing of the GHG emissions (in the case of individual calculations)
- mass balance incl. the biomass quantity resulting from the internal process
- the confirmation statement of the employee responsible who verified the accuracy of the internal process and the recorded and documented mass balance attributes

### 3.4 Outgoing biomass

The interface is required to document the following upon sale of sustainable liquid biomass or biofuels:

- name and address of the buyer for every quantity of sustainably produced liquid biomass or biofuel
- type of supplied sustainable liquid biomass or biofuel
- date the sustainable liquid biomass or biofuel left the premises
- quantity of sustainable liquid biomass or biofuels (in tonnes or m<sup>3</sup>)

- the GHG emissions produced in this step (cumulative across all upstream operations) as an absolute value in grams of carbon dioxide equivalents per kilogram of the outgoing sustainable liquid biomass or biofuel (for individual calculation or if requested by the recipient of the biomass) OR it is indicated which (partial) default values, NUTS 2 values or estimates are to be used (e.g. GHG calculation in accordance with default value)
- country where it was farmed or country of origin
- issuance of sustainability certificates (applies for last interfaces)

The weight (t) or volume (m<sup>3</sup>) of the biofuels/liquid biomass specified in the sustainability certificates is to be determined at 15°C because it is on this basis that the entry is made in Nabisy.

When the volume is physically determined, the measured volume has to be converted using the generally applicable conversion table to 15° C by the throughput counter calibrated to the process temperature.

Invoices and delivery notes issued must be kept and available on request. In the REDcert certification system, the last interface, when forwarding sustainable biomass, is required to supply the data required for the downstream operation's documentation pursuant to the Sustainability Ordinances and to report any inconsistencies in the documentation of the upstream operations and operating sites immediately vis-à-vis the REDcert certification system and the contracted certification body. There is also a general obligation to provide data to REDcert upon request (e.g. if this is necessary to ensure seamless traceability of the sustainable biomass). When providing sensitive company data, proof must be provided that this data is handled confidentially.



## **4 Calculating the greenhouse gas emission savings**

The last interfaces are generally required to calculate the greenhouse gas emission savings, i.e. the savings in greenhouse gas emissions expressed as a percentage if liquid biomass is used instead of fossil fuels. The details of the calculation are explained in the REDcert document "System principles for the GHG calculation".

## 5 Issuing sustainability certificates

Sustainability certificates are documents that verify that the requirements of the Sustainability Ordinances are satisfied for a quantity of biomass or biofuel at the time they are issued by the **last interface**. Under the scope of the Biokraft-NachV, a sustainability certificate is necessary to be eligible for a tax reduction pursuant to Article 50 of the Energy Taxation Act (EnergieStG) or for the biofuel to be credited to the biofuel quota pursuant to Articles 37a ff. of the Federal Immission Control Act (BImSchG) or to be entitled to compensation in the bioelectricity sector pursuant to Article 27 of the Renewable Energies Act (EEG). Sustainability certificates are only issued by the last interfaces in the value chain. To make it easier to create sustainability certificates, REDcert provides system participants with a tool that can be accessed in the participant area on the REDcert website <https://www.redcert.eu>. This tool creates CSV files.

The BLE has provided the web-based "Nabisy" database to manage sustainability and partial sustainability certificates. Sustainability certificates can be placed directly online and edited in the database (file upload). The CSV files created with the REDcert tool can also be uploaded to the Nabisy database. An application must be submitted to the BLE to gain access to Nabisy. The application for access to Nabisy can be found on the REDcert website at <http://www.redcert.de> and must be presented to REDcert to be checked and passed on to the BLE.

If liquid biomass or biofuel quantities for which sustainability certificates exist in Nabisy are not sold on the German market or they are used to produce electricity, the certificates must be removed from or invalidated in Nabisy. Country-specific accounts, called retirement accounts, can be used to remove certificates within the Nabisy system. You can find a list of the retirement accounts on the REDcert website under Documents/Material.

### 5.1 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 the Sustainability Ordinances which is valid at the time the sustainability certificate is issued
- (2) Interfaces directly upstream from last interfaces must provide a copy of the certificates recognised under the Sustainability Ordinances and that were valid at the time that the production, processing or other production step was carried out at the respective interface for the biomass.
- (3) Confirmation must be provided that the requirements pursuant to Articles 4 to 7 of the Sustainability Ordinances were satisfied upon production (this can be verified by the farmer's self-declaration)

- (4) The greenhouse gas emissions caused by interfaces in the supply chain and all of the operations directly or indirectly involved in the production or supply of the biomass which are not themselves interfaces must be specified in g CO<sub>2</sub>eq/MJ as long as they have to be included in the calculation of the greenhouse gas emission saving.
- (5) It must be possible to continuously trace the origin of the biomass from its cultivation through to the last interface using a mass balance system that satisfies the REDcert requirements and
- (6) The liquid biomass or biofuel must have the legally required greenhouse gas emission saving

Sustainability certificates may only be issued for biomass if it originates from upstream interfaces that have already been certified.

## 5.2 Contents of sustainability certificates

The contents of the sustainability certificates are regulated by a template supplied by the BLE. This form can be found on the REDcert website <http://www.redcert.de/> under Documents/Material. There is also information available here on the creation of sustainability certificates (e.g. BLE manual on sustainability certificates, data record for creating CSV files, biomass codes, etc.).

Sustainability certificates have to be issued in written format using the predefined template and sent within 48 hours to the respective competent authority and certification body in csv format. The use of the predefined sample forms and formats is mandatory. The tool provided by REDcert can be used to create sustainability certificates and CSV files. The generated CSV file can be uploaded directly to Nabisy and does not need to be sent to the BLE by e-mail.

Sustainability certificates have to be provided to the grid operator or the biofuel quota office or the chief customs office in German. The sustainability certificates and all documents and records required for their issuance have to be kept for a minimum of 10 years.

### 5.3 Rules for providing missing information at a later time

Missing information can only be submitted at a later time by:

- the interface that issued the sustainability certificate or
- a certification body that is recognised by the sustainability ordinances

### 5.4 How sustainability certificates become invalid

Sustainability certificates are invalid when:

- they do not contain one or more of the required entries described in 5.2 Contents of sustainability certificates (with the exception of the information about the countries or states in which the biomass or biofuels can be used)
- they are falsified or contain incorrect information, the certificate of the interface that issued the certificate was not or no longer valid when the sustainability certificate was issued (**exception:** if the person required to provide proof is not aware that the information is incorrect and he would not have become aware of the inaccuracy exercising standard due diligence, and the certificate of the interface that issued the certificate was valid when the sustainability certificate was issued)
- the sustainability certificate or the certificate of the issuing interface was issued in a certification system that was not or was no longer recognised under the ordinance at the time the sustainability certificate or the certificate was issued
- the certificate of the issuing interface was issued by a certification body that was not or was no longer recognised under the ordinance at the time that certificate was issued

If there are sustainability certificates to which one or more of these invalidity criteria above apply, their invalidity can be applied for with the BLE. This form can be found on the REDcert website <http://www.redcert.de/> under Documents/Material.