Why have the rules on the production of sustainable biomass been introduced?

Promoting the sustainable use of biomass for energy is an objective pursued by the European Union and also corresponds to the sustainability strategy of the Federal Government. Sustainable use of biomass for energy means that use of biomass shall not be made at the expense of man and nature.

Which are the ordinances governing the production of sustainable biomass?

The following legal foundations apply to the production of sustainable biomass:

**European legislation:**

- Directive 2009/28/EC on the promotion of the use of energy from renewable sources (Renewable energies directive)

**National legislation:**

- Law giving preferential treatment to renewable sources of energy (Renewable Energies Sources Act) (Erneuerbare-Energien-Gesetz-EEG)
- Energy Tax Act (Energiesteuergesetz - EnergieStG)
- Law on the protection from harmful environmental impacts
caused by air pollution, noise, concussion and similar harmful effects (Federal Immission Control Act (Bundes-Immissionsschutzgesetz- BImSchG))

- Ordinance on the production of electricity from biomass (Biomass ordinance – BiomasseV)
- Ordinance on the requirements for sustainable production of liquid biomass for electricity production (Biomass-electricity-sustainability ordinance - BioSt-NachV)
- Ordinance on the requirements for sustainable production of biofuels (Biofuel- sustainability ordinance – Biokraft-NachV)

**What is the sustainable production of biomass a prerequisite for?**

In the **field of biofuels** a proof that the biofuels have been sustainably produced must be provided in order to be able to claim a tax relief according to Art. 50 of the EnergieStG, or to credit the biofuels to the biofuel targets pursuant to Art. 37 letter a, et al. of the BImSchG.

In the **field of bio-electricity** the operator of an installation must provide a proof that the liquid biomass has been sustainably produced in order to be able to claim a remuneration in accordance with Art. 27 para. 1 EEG, and for claiming the NawaRo-Bonus (grant for renewable raw materials) pursuant to Art. 27 para. 4 EEG, from the network operator.
Who do the ordinances on the production of sustainable biomass pertain to?

The sustainability ordinances apply to all operations or operational sites along the entire production and supply chain, from the farmer through to the party under the obligation to provide proof respectively the operator of an installation in the field of bioenergy.

When do the ordinances come into force?

The ordinances apply to biomass that is to be used for biofuels or bioelectricity as from January 1, 2011. This means that biomass from the 2010 harvest must comply with the sustainability criteria, if it is going to be used as biofuel or bioelectricity as from January 1, 2011. When using biomass from the 2010 harvest as bioenergy in 2011, interfaces, operations or operational sites along the entire value chain before the last interface must already comply with the sustainability requirements in 2010.

When is proof of sustainable biomass production considered to have been provided?

Proof of sustainable biomass production is considered to have been provided, if area-related requirements and requirements as
to the greenhouse gas emission saving have been complied with along the entire production and supply chain, and if these are traceable by means of a mass balance system.

**How shall parties under the obligation to provide proof or operators of installations provide proof of sustainable biomass production?**

The party under the obligation to provide proof or installation operators provide proof by means of submitting a proof of compliance with sustainability requirements or partial proof of compliance with sustainability to the competent main customs office, or the biofuels quota control body respectively his network operator.

**What is a mass balance system?**

A mass balance system contains records allowing for traceability, both quantitative and in terms of value, at all stages of the production and supply of biomass along the entire value chain.

Mass balance systems in principle allow for the blending of sustainable biomass with other raw materials and fuels. In cases in which the biomass is mixed with other biomass that does not fulfil the sustainability requirements the mass balance
system must record, pursuant to Art. 16 para. 2, of the biofuel sustainability ordinance or the biomass electricity sustainability ordinance, the quantity of sustainable biomass to be added to the mixture in advance. The mass balance system must furthermore ensure that the quantity of biomass that is withdrawn from such mixture and is to serve as biomass pursuant the Ordinances is not higher than the quantity previously added.

Apart from blending, Art. 16 para. 2, no. 2 of the biofuel sustainability ordinance and the biomass electricity sustainability ordinance also allow for a settlement of different greenhouse gas emission values. However, the key prerequisite for balancing is that each individual quantity of biomass included in the balancing has already previously and on its own complied with the requirements of the sustainability ordinances. Thus, after the last interface only biomass with a greenhouse gas savings potential amounting to at least 35% must be taken into consideration for balancing. Biomass which either does not meet this value, or for which greenhouse gas emissions have not been calculated, for example because of the ordinance applying to old installations, is not allowed to be taken into account for balancing.

It has to be taken into account that trade in sustainable biomass also requires that it actually exists in the respective location. If therefore a company operates in two locations A and B but the sustainable biomass exists only in location A, then the product in location B may not be sold as sustainable product.
This must be ensured by means of a mass balance system. Balancing according to a mass balancing system ensures that the quantity of sustainable biomass extracted from a mixture does not exceed the amount of sustainable biomass that has previously been added to the mixture. The type, quantity and other important attributes of sustainable biomass are regularly documented in the mass balance system. The physical biomass which is forwarded together with the quantity registered in the mass balance system does therefore not correspond to the initial, original, sustainable biomass but only to an equivalent quantity of biomass. Quantities of sustainable biomass received must be balanced on a daily, monthly or quarterly basis. A balancing period of three months may not be exceeded. Within the respective balancing period the quantities of biomass delivered from a specific location may not exceed the quantities of biomass actually physically received at that same location. Where sustainable biomass is physically existent in a location at the end of the balancing period it may be brought forward to the subsequent balancing period. It is not permitted to have “still unused” proofs for sustainable products at the end of a balancing period and then buy merchandise for a location standing empty, with the intention of selling this very products as sustainable. Where there are several silos in the same premises, these are regarded as one store situated in one location. Where these silos are not situated in the same premises, or where they belong to different companies, it is not permitted to rebook merchandise from one silo to another and then qualify this products as being sustainable, for these silos shall not be considered to be one and the same store or location.
Certification systems shall ensure that the traceability of biomass up to the last interface is guaranteed by a mass balance system. For this purpose each stage of production and supply shall be documented as laid down by a mass balance system. The system is to be applied in such a way that the quantities of sustainable biomass may be identified at all stages. The records must at all times allow for an easy to follow connection between the biomass and the documentation. It is the responsibility of the interfaces, operations and operational sites that this connection can be made at all times. The interfaces, operations, operating units and suppliers shall document the traceability of biomass and the relevant information in a comprehensible manner. The duty to provide explanations rests with the interfaces, operations, operating units and suppliers. In order to guarantee traceability, certification systems make exacting requirements on those who apply their standards.

Moreover, certification systems also lay down requirements as to the traceability of liquid biomass or biofuels from the last interface through to the installation operator or the operator under the obligation to provide proof. It should be noted that in the field of biofuels suppliers after the last interface onwards have no obligation to comply with the requirements of a certification system, if they comply with the requirements pursuant to Art. 17 para. 3, of the biofuel sustainability ordinance. Requirements pursuant to Art. 17 para. 3, of the biofuel sustainability ordinance have been complied with, if all suppliers document receipt and forwarding of the
biofuels, including the information provided on the proof of sustainability, the place, and the date when they have received or forwarded these biofuels in an electronic and usually internal database, and if the mass balance system of all suppliers is subject to regular controls by the main customs offices. In these cases, detailed features of the suppliers’ mass balance systems shall be agreed upon in coordination with the competent main customs offices. Where applicable, the BLE’s web application may be used in order to comply with Art. 17 para. 3 no. 1 of the biofuel sustainability ordinance.

Certification bodies control whether the mass balance systems applied fully document the origins of the biomass.

**What are interfaces?**

Interfaces are operations or operational sites along the production and supply chain that require certification. We distinguish between first gathering points (first interface) and oil mills and other operations which process bioliquids or gaseous biomass for final use up to the required quality class (last interface).

For further information please refer to the information leaflets on interfaces, first gathering points and last interface.
Who is the contact partner for operators?

In accordance with the sustainability ordinances, the competent contacts for operators are the recognized certification systems and certification bodies. **Recognized certification systems** organisationally ensure that the sustainability requirements for the production and supply of biomass are complied with. They lay down detailed provisions as to sustainability requirements, to providing proof that these have been complied with and to controlling these proofs. Every operation or operational site engaged in the production or supply of sustainable biomass must engage to comply with the provisions as laid down by a recognized certification system.

Where biofuels are concerned, suppliers who are subject to regular checks by the main customs offices for reason of tax controls pursuant to the Energy Tax Act, or who are monitored with regard to the Federal Immission Control Act do not need to fulfil the requirements laid down by a certification system. However, they shall fulfil the requirements of the sustainability ordinances in all other respects.

**Recognized certification bodies** are independent natural or legal persons that issue certificates for interfaces and control whether or not all operations and operational sites along the production and supply chain fulfil the requirements as laid down in the sustainability ordinances.
Which tasks are within the area of competence of the Federal Office for Agriculture and Food (BLE)?

Among other things, the BLE is the competent authority for:

- recognizing and monitoring certification systems and certification bodies,
- keeping of a central register of installations that convert liquid biomass into electricity,
- balancing the proofs of sustainability and issuing partial proofs of sustainability through its web-application Sustainable Biomass System (Nachhaltige Biomasse System – nabisy),
- storing data for the biofuel quota body and the main customs offices respectively network operators that are relevant for the crediting against the biofuels quota or for a tax relief and/or remuneration pursuant to Art. 27 para. 1, of the EEG and the NawaRo-Bonus pursuant to Art. 27 para. 4, of the EEG and,
- evaluating Directive 2009/20/EC on the promotion of the use of energy from renewable sources in accordance with the sustainability ordinances.
Biomass flow

Production
- Agricultural operation
- First gathering point
- Oil mill
- Refinery

Supply
- Supplier
- Renewable energies plant

Use
- Party under the obligation to provide proof

Sustainability Requirements
1. Compliance with sustainability requirements
2. Greenhouse gas reduction
3. Proof of origin according to a mass balance system

Certification Systems:
- Detailed definition of sustainability requirements

Certification bodies:
- Monitoring and certification

Recognition Monitoring

Federal Office for Agriculture and Food (BLE)
- Disposing of an Installations Register and the web application (nabisy) for partial proofs.
### Who takes part in the procedure, and what are his tasks?

<table>
<thead>
<tr>
<th>Operator</th>
<th>Tasks</th>
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<tbody>
<tr>
<td><strong>Agricultural operation</strong></td>
<td>• Fulfil requirements of a certification system</td>
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<td></td>
<td>• Cultivate and forward sustainable biomass to the production and supply chain</td>
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<td></td>
<td>• Transmit relevant data as to traceability and greenhouse gas emissions to the next operator in the production and supply chain</td>
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<tr>
<td><strong>First gathering point - first interface -</strong></td>
<td>• Participate in a recognized certification system and fulfil the sustainability requirements as stated therein</td>
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<td></td>
<td>• Certification by a recognized certification body</td>
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<td></td>
<td>• Gather and forward sustainable biomass</td>
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<tr>
<td></td>
<td>• Calculate and forward the relevant data on traceability and greenhouse gas emissions to the next operator in the production and supply chain, in accordance with a mass balance system</td>
</tr>
<tr>
<td><strong>Suppliers before the last interface</strong></td>
<td>• Fulfil requirements of a certification system</td>
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<td>• Transport sustainable biomass</td>
</tr>
<tr>
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<td>• Calculate and forward the relevant data as regards traceability and greenhouse gas emissions to the next operator in the production and supply chain, in accordance with a mass balance system</td>
</tr>
<tr>
<td>Operator</td>
<td>Tasks</td>
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| Last interface  
(e.g. oil mills, vegetable oil refineries, esterification plants, hydrogenation and/or co-hydrogenation plants, bioethanol production plants or biogas plants) | • Participate in a recognized certification system and fulfil the sustainability requirements in accordance with its specifications  
• Gather and process sustainable biomass  
• Calculate greenhouse gas emission saving  
• Calculate and forward the relevant data as regards traceability and greenhouse gas emissions to the next operator in the production and supply chain  
• Issue proofs of sustainability and forward copies to the competent certification system and to the BLE |
| Suppliers after the last interface | • Transport biofuels and/or liquid biomass for which proofs of sustainability have been issued  
• Split up or bring together quantities of biofuels and/or liquid biomass  
• Apply for and receive partial proofs of sustainability through the BLE web-application nabisy |
| Operator under the obligation to provide proof in the field of fuels (operator bringing fuels into circulation) | • Forward the proofs of sustainability and partial proofs of sustainability to the biofuels quota control body or the competent main customs office  
• Forward copies of the proofs of sustainability and partial proofs of sustainability to the BLE |
| Biofuels quota control body and main customs offices in the field of fuels | • Process the proofs of sustainability or partial proofs of sustainability for claiming tax relief or forcrediting against the biofuel quota  
• Check data with the BLE  
• Control suppliers after the last interface in accordance with the checking of data with the BLE |
<table>
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<tr>
<th>Operator</th>
<th>Tasks</th>
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</table>
| Installation operators who convert the liquid biomass into electricity  | • Register with the BLE  
• Submit the proof of registration, the proofs of sustainability or partial proofs of sustainability to the network operator  
• Forward copies of the proofs of sustainability and partial proofs of sustainability to the BLE |
| Network operators in the electricity sector                              | • Pay a remuneration pursuant to Art. 27 para. 1, of the EEG, and pay the NawaRo-Bonus pursuant to Art. 27 para. 4, of the EEG in accordance with the proofs of sustainability or partial proofs of sustainability to installation operators who convert the liquid biomass into electricity  
• Check data with the BLE |

**Where do I get which information from?**

Operators obtain concrete information from the recognised certification systems and certification bodies, the specifications of which they apply or by which they have themselves controlled.

Further general information about sustainable biomass production are contained in the Guidelines Sustainable Biomass Production of BLE or on the internet site [www.ble.de](http://www.ble.de) under Kontrolle und Zulassung/nachhaltige Biomasseherstellung (control and accreditation/sustainable biomass production).

Information concerning the web application of BLE can be taken from the manual for the web application Sustainable Biomass Systems - Nabisy- and from the internet site [http://nabisy.ble.de](http://nabisy.ble.de).