


**System Certyfikacji**



**KZR INiG**


**System KZR INiG/2**

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## **Definitions**


by the Oil and Gas Institute-National Research Institute

The KZR INiG System/2

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## **1. Introduction**

This document defines the terminology to be used in the field of certification of sustainable biofuels, biomass fuels and bioliquids production. It specifically considers some relevant terms and definitions used in the 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 and the KZR INiG System. Definitions are arranged in alphabetical order.

## **2. Normative references**

The normative references, covering all aspects of the KZR INiG System, are the following linked documents, which should be read in conjunction.

*KZR INiG System /1/ Description of INiG System of Sustainability Criteria – general rules*

*KZR INiG System /2/ Definitions*

*KZR INiG System /3/ Reference with national legislation*

*KZR INiG System /4/ Land use for raw materials production – lands with high carbon stock*

*KZR INiG System /5/ Land use for raw materials production – biodiversity*

*KZR INiG System /6/ Land use for raw materials production – agricultural and environmental requirements and standards*


*KZR INiG System /7/ Guidance for proper functioning of mass balance system*

*KZR INiG System /8/ Guidelines for the determination of the life cycle per unit values of GHG emissions for biofuels, biomass fuels and bioliquids*

*KZR INiG System /9/ Requirements for certification bodies*

*KZR INiG System /10/ Guidelines for auditor and conduct of audit*

*KZR INiG System /11/ Forest biomass*

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### **3. Definitions**

#### **Actual value**

means the greenhouse gas (GHG) emissions savings for some or all of the steps of a specific biofuel, bioliquid or biomass fuel production process, calculated in accordance with the methodology laid down in Part C of Annex V or Part B of Annex VI of RED II.

#### **Advanced biofuels**

means biofuels that are produced from the feedstock listed in Part A of Annex IX of RED II.

#### **Agricultural area**

means any area taken up by arable land, permanent pasture or permanent crops (based on Regulation No. 73/2009/EC<sup>i</sup>).

#### **Agricultural, aquaculture, fisheries and forestry residues**

means residues that are directly generated by agriculture, aquaculture, fisheries and forestry; they do not include residues from related industries or processing.


#### **Agricultural biomass**

means biomass produced from agriculture.

#### **Agriculture, Forestry and Other Land Use**

This refers to the Land Use, Land-Use Change and Forestry (LULUCF) and Agriculture emission sectors. These are two greenhouse gas inventory sectors defined by the Intergovernmental Panel on Climate Change (IPCC) and are also known as Agriculture, Forestry and Other Land Use (AFOLU).

<sup>i</sup> Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003.

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### **Agricultural land**

means whole areas within a farm or a given region used for plant, horticultural or animal production. Agricultural lands include<sup>i</sup>:

- arable lands,
- permanent orchards, meadows,
- permanent pastures,
- agricultural lands built over,
- lands under ponds and under ditches.

Agricultural lands do not include forested lands, forested nurseries or inland waters.

### **Agricultural producer (farmer)**

means a natural person, legal person, or an organizational unit without the status of a legal person, being an owner of a farm or an animal farm.

### **Agroforestry**

Agroforestry systems which include land-use systems where trees are managed together with crops or animal production systems in agricultural settings.


### **Allocation**

means partitioning the input or output streams of a process or a product system between the product system under study and one or more other product systems.

### **Ambient energy**

means naturally occurring thermal energy and energy accumulated in the environment with constrained boundaries, which can be stored in the ambient air, excluding in exhaust air, or in surface or sewage water.

<sup>i</sup> Acts on shaping the agricultural structure of 11.04.2003 (J. of Laws 2003 No. 64 item 592 as amended).

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## Arable land

beyond agricultural lands this also includes land:

- under fish ponds and other water reservoirs used solely for agriculture;
- under dwelling-houses on a farm and other buildings and structures used solely for agricultural production and agricultural-food processing;
- under buildings and structures used directly for agricultural production considered a special type of economic activity, according to the income tax laws on natural persons and legal persons;
- of rural parks and under field arboreal sites and field bush sites, including those under wind-break zones and anti-erosion systems;
- of allotment gardens and botanical gardens;
- under melioration, flood control and firefighting systems, agricultural water supply systems, sewage, wastewater and solid waste treatment systems for agriculture;
- of peatlands and ponds;
- under roads leading to agricultural lands  
(definition according to Act on Protection of Agricultural and Forest Lands<sup>i</sup>)<sup>ii</sup>.

## Audit

means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively by auditee, included in the scope of certification (EN ISO 19011).


## Auditor

means a person with competence to conduct an audit, in accordance with the certification system used.

<sup>i</sup> Act on protection of agricultural and forest lands of 03.02.1995 (J. of Laws 1995 No. 16 item 78 as amended)

<sup>ii</sup> Agricultural land protection consists of:

- limitation of allocating them for non-agricultural and non-forest purposes,
- prevention of degradation and devastation processes of agricultural lands and damages in agricultural production, arising from non-agricultural activity,
- reclamation and allocation of lands for agricultural purposes,
- preservation of peatlands and ponds as natural water reservoirs.

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### **Biodiversity**

means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems (according to Convention on Biological Diversity<sup>i</sup>).

### **Biofuels**

means liquid fuel for transport produced from biomass.

### **Biogas**

means gaseous fuels produced from biomass.

### **Bioliquids**

means liquid fuel used for energy purposes other than transport, including electricity and heating and cooling, produced from biomass.

### **Biomass**

means the biodegradable fraction of products, wastes and residues from biological origin from agriculture, including vegetal and animal substances, from forestry and related industries, including fisheries and aquaculture, as well as the biodegradable fraction of waste, including industrial and municipal waste of biological origin.

### **Biomass fuels**


means gaseous and solid fuels produced from biomass.

### **Biowaste**

means biowaste as defined in point (4) of Article 3 of Directive 2008/98/EC.

<sup>i</sup> Convention on Biological Diversity, developed in Rio de Janeiro on 05.06.1992, ratified by Poland in 1996 (J. of Laws 2002, No. 184, item 1532)



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### **Consignment**

any amount of material with an identical 'set of sustainability characteristics'. With the exception of greenhouse gas information in certain instances, all characteristics must be identical to be aggregated to a single (administrative) consignment.

### **Country of origin**

the country in which the biomass 'origin' is located. This is the country in which the original material, residue or waste is harvested or produced (e.g. the forest, sawmill or municipal parks). Note the country of origin must refer to where the material originated and not the country where e.g. the pellet plant is located.

### **Carbon stock**

The mass of carbon stored in a carbon pool. Examples of relevant carbon pools are forest biomass (above- and belowground), harvested wood products, deadwood, litter and soil organic carbon.

### **Carbon sink**


Any process, activity or mechanism that removes a greenhouse gas, an aerosol, or a precursor to a greenhouse gas from the atmosphere. This refers to the process of storing the carbon. Once the carbon is stored, it becomes part of a carbon stock (see following definition).

### **Certificate**

means a document issued by an authorized certification body, confirming that a participant in the KZR INiG System meets the RED II and KZR INiG System requirements.

### **Certification body**

means an impartial, independent organization operating within a framework chosen by that body and recognized by the KZR INiG System, and authorized to issue KZR INiG certificates and carry out control and management of processes in conformity with the KZR INiG System requirements of system participants.

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### **Certification body authorization**

means authorization by the KZR INiG Administrator to issue certificates and collect documentation, and to carry out other operations ensuring proper implementation of the KZR INiG System requirements.

### **Certified economic operator** (system participant)

means a participating economic operator who obtained a KZR INiG System certificate issued by an authorized certification body.

### **Chain of custody**

means a method by which a connection is made between information or claims concerning raw materials or intermediate products and claims concerning final products, including all the stages from primary production at the crop harvesting site/waste, residue obtaining to the final user along the supply chain, where progress to the next stage of the supply chain involves a change of legal/physical control of the materials or the products.

### **Co-processing**


means simultaneous conversion of feedstocks of different origins, e.g. biomass and fossil feedstocks.

### **CO<sub>2</sub> equivalent – CO<sub>2eq</sub>**

means the CO<sub>2</sub> concentration that would result in the same level of radiative forcing as a given compared GHG concentration.

### **Cogeneration (CHP)**

means simultaneous generation in one process of thermal energy and electrical and/or mechanical energy.

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### **Continuously forested area**

means land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30 %, or trees able to reach those thresholds *in situ*.

### **Co-product**

means a substance or object resulting from a production process, the primary aim of which is not the production of that item, may be regarded as co-product and not as a waste only if the following conditions are met:

- a) further use of the substance or object is certain;
- b) the substance or object can be used directly without any further processing other than normal industrial practice;
- c) the substance or object is produced as an integral part of a production process; and
- d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

### **Cross compliance**


means the amount of the obtained direct payments that links compliance by the payee with requirements concerning: good agricultural practices; food safety; environmental protection; human, animal and plant health; and animal welfare (based on Regulation No. 73/2009/EC).

### **Default value**

means a value derived from the typical value using predefined factors, and that may, in circumstances specified in the RED II Directive, be used in place of an actual value.

### **Degraded**

A state characterised by long-term loss of biodiversity due to for instance overgrazing, mechanical damage to the vegetation, soil erosion or loss of soil quality.

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### Designated areas/protected areas

means areas designated by law<sup>i</sup> or other equivalent competent legal authority for nature protection or areas designated for protection of rare, endangered or critically endangered ecosystems or species, considered as such by international treaties or included in lists prepared by intergovernmental organizations or the International Union for Conservation of Nature, unless evidence is produced showing that production of raw materials does not infringe the principles of nature protection;

Protected area also means a geographically defined area which is designated or regulated and managed to achieve specific protection purposes (according to the Convention on Biological Diversity)<sup>ii</sup>.


### Disaggregated default value

means a component of the default value that refers to a defined stage of the whole life cycle of a biofuel, bioliquid, biomass fuels defined in Annex V of the RED II.

<sup>i</sup> Act on Nature Conservation of 16.04.2004 (J. of Laws 2004, No. 92, item 880 as amended)

<sup>ii</sup> NOTE: According to art. 6 par. 1 of Act on Nature Conservation, forms of nature protection are as follows:

- **national parks** (zones distinguished by particular natural, scientific, social, cultural and educational values, with area of at least 1 000 ha, where all nature and landscape qualities are protected)
- **nature reserves** (encompasses areas preserved in natural or slightly changed state, ecosystems, refuges and habitats: natural, plant, animal, fungal, and formations and elements of abiotic nature, distinguished by particular natural, scientific, cultural or landscape values)
- **landscape parks** (areas protected for reasons of natural, historical, cultural, and landscape values in order to preserve and popularize these values under conditions of sustained development)
- **protected landscape areas** (areas protected for reasons of distinguished landscape with diverse ecosystems, valuable because of the potential to satisfy needs connected with tourism and recreation or because of the function of ecological corridors)
- **Natura 2000 areas** (includes areas of special protection of birds; special protection of habitats and areas of importance for the EU). Natura 2000 areas may encompass protected areas and objects as a whole or in part. From these it follows that this form of nature protection may integrate the individual forms of nature protection earlier separated.
- **natural monuments** (single formations of biotic, abiotic or mixed nature, with particular natural, scientific, cultural, historical or landscape value, e.g. trees of imposing size, bushes of native or foreign species, etc.)
- **documentation sites** (underground or surface geological formations, complexes of fossils or minerals, caves or rock-clad shelters, and pits and excavations, whether being exploited or closed)
- **ecological grounds** (remnants of ecosystems important for preservation of biodiversity, e.g. water reservoirs, swamps, peatlands, etc. worthy of protection)
- **nature-landscape complexes** (remnants of natural or cultural landscapes, distinguished by their scenic or aesthetic values)
- **protection of plant, animal and fungi species** (includes species, specimens, habitats and refuges of plants, animals and fungi)

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### **Distribution system operator**

means an operator as defined in point (6) of Article 2 of Directive 2009/72/EC and in point (6) of Article 2 of Directive 2009/73/EC of the European Parliament and of the Council<sup>i</sup>.

### **District heating or district cooling**

means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from central or decentralised sources of production through a network to multiple buildings or sites, for the use of space or process heating or cooling.

### **Economic operator**

means anyone (excluding farmers) who participates in economic activity, exists in the supply chain, operates with sustainable raw material (biomass), feedstock (processed biomass), biofuels, bioliquids, biomass fuels, fuels, wastes and residues (first waste collection points), etc. and is interested in obtaining KZR INiG certification.

### **Economically justifiable demand**

shall mean the demand that does not exceed the needs for heat or cooling and which would otherwise be satisfied at market conditions.

### **Ecosystem**


means a dynamic group consisting of plants, animals, microorganisms and their abiotic environment, functioning together as a unit<sup>ii</sup>.

### **Emissions**

Anthropogenic (i.e. originating from human activity) emissions of greenhouse gases into the atmosphere by sources.

<sup>i</sup> Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (OJ L 211, 14.8.2009, p. 94).

<sup>ii</sup> Maria M. Kenig-Witkowska, *Międzynarodowe prawo środowiska*, Wolters Kluwer Polska 2009

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### **Energy from renewable sources**

‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic) and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas.

### **Fallow land**

means arable land spanning at least 0.3 hectares and 20 meters width, cultivated for harvest, now withdrawn from agricultural production or used for non-food production (based on the Act of 25.07.2001 on the national register of farms and farm animals, and amending other acts<sup>i</sup>).

### **Farmer**

economic operator or natural person who owns land and produces crops for biofuels, bioliquids, biomass fuels purposes. He is point of origin of crop based fuels.

### **Feedstock**

means the raw material required for processing or manufacturing during the industrial process.


### **First gathering point**

means an economic operator engaged in the purchase of biomass (grain, sugar beet, etc.) from agricultural producers or/and in the purchase of waste/residue from place of origin.

### **Food and feed crops**

means starch-rich crops, sugar crops or oil crops produced on agricultural land as a main crop excluding residues, waste or ligno-cellulosic material and intermediate crops, such as catch crops and cover crops, provided that the use of such intermediate crops does not trigger demand for additional land.

<sup>i</sup> Acts of 25.07.2001 on national register of farms and farm animals, and on changes in some acts (J. of Laws z 2001 r. No. 125 item 1363)

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### **Forest**

means land spanning more than 0.10 hectares with forest plants (forest plant cultivations; trees, bushes, undergrowth) or temporarily devoid of them; or intended for forest production; or being a natural preserve and included into a national park or entered in a monument register. It also includes land connected with forestry, occupied for forestry structures, amelioration systems, forest zoning lines, forest roads, areas under power lines, nurseries and wood storage sites; and also applies to forest car parks and tourist systems (definition according to Act on Forests<sup>i</sup>).

### **Forest biomass**

means biomass produced from forestry.

### **Forested lands**

means lands:

- defined as forests in Polish regulations on forests,
- retrieved for forestry,
- under roads or pathways leading towards forested lands

(definition according to Act on Protection of Agricultural and Forested Lands).


### **Forest regeneration**

means the re-establishment of a forest stand by natural or artificial means following the removal of the previous stand by felling or as a result of natural causes, including fire or storm.

### **Fuel supplier**

means an entity supplying fuel to the market that is responsible for passing fuel through an excise duty point or, in the case of electricity or where no excise is due or where duly justified, any other relevant entity designated by a Member State.

<sup>i</sup> Act on Forests of 28.09.1991 (J. of Laws 1991, No. 101, item 444 as amended)

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### **Geothermal energy**

means energy stored in the form of heat beneath the surface of solid earth.

### **Good agricultural practices**

Agricultural raw materials cultivated in the Community as well as beyond its borders (in the rest of the world) and used for the production of biofuels and bioliquids must, in compliance with the requirements of KZR INiG, be obtained in accordance with the requirements and standards under the provisions referred to in the section on? "Environment" in part a, in point 9 of Annex II to Regulation (EC) No 73/2009 of 19 January 2009, establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers (OJ L 30, 31.1.2009, p. 16), and in accordance with the minimum requirements for good agricultural and environmental conditions within the meaning of art. 6 paragraph 1 of the Regulation.


### **Good practices in the workplace and good social practices**

These are activities related to maintaining health and safety and the rules of employment according to the recommendations and the Convention of the International Labour Organisation (ILO), documents 29 and 105 (relating to the use of violence at work), 138 and 182 (relating to the employment of minors), 87 and 98 (concerning freedom of association and trade unions), 100, and 111 (discrimination). Included is the observance of good social principles, namely mutual respect for the rights of co-existence of economic operators and local communities and other entities.

### **Grassland**

means terrestrial ecosystems dominated by herbaceous or shrub vegetation for at least 5 years continuously. It includes meadows or pasture that is cropped for hay but excludes land cultivated for other crop production and cropland lying temporarily fallow. It further excludes continuously forested areas as defined in Article 29(4b) of Directive 2018/2001 'canopy cover of more than 30 %, or trees able to reach those thresholds in situ' unless these are agroforestry systems which include land-use systems where trees are managed together with crops or animal production systems in agricultural settings. The dominance of herbaceous or shrub vegetation means that their combined ground cover is larger than the canopy cover of trees.



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### **Greenhouse gas emission savings**

means the ratio (expressed as a percentage) of (1) the difference between total GHG emissions in the life cycle of a fossil equivalent of a biofuel/bioliquid/biomass fuel and total GHG emissions in the life cycle of the biofuel/bioliquid/biomass fuel, and (2) total GHG emissions in the life cycle of the fossil equivalent of a biofuel/bioliquid/biomass fuel.

### **Greenhouse gases, CO<sub>2</sub> equivalent (CO<sub>2eq</sub>)**

include carbon dioxide (CO<sub>2</sub>), dinitrogen oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>). Total emission expressed as CO<sub>2</sub> equivalent is calculated according to the equation:

$$massCO_{2eq} = mass CO_2 + GWP_{CH_4} * mass CH_4 + GWP_{N_2O} * mass N_2O$$

where:


GWP<sub>CH<sub>4</sub></sub> and GWP<sub>N<sub>2</sub>O</sub> mean global warming potential of the gases, relative to carbon dioxide. GWP<sub>CH<sub>4</sub></sub> amounts to 25, and GWP<sub>N<sub>2</sub>O</sub> 298.

### **Group Audit**

means audit of an agricultural producer group with similar production systems to verify compliance with the KZR INiG System requirements or audit of a group of places of origin of wastes/residues. Group audit is not applied to economic operators further down the supply chain.

### **Gross final consumption of energy**

means the energy commodities delivered for energy purposes to industry, transport, households, services including public services, agriculture, forestry and fisheries, the consumption of electricity and heat by the energy branch for electricity, heat and transport fuel production, and losses of electricity and heat in distribution and transmission.

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### **Highly biodiverse natural grassland**

means grassland that would remain grassland in the absence of human intervention; and maintains the natural species composition and ecological characteristics and processes<sup>1</sup>.

### **Highly biodiverse non-natural grassland**

namely grassland that would cease to be grassland in the absence of human intervention and that is species-rich and not degraded and has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the harvesting of the raw material is necessary to preserve its status as highly biodiverse grassland.

### **Human intervention**

means managed grazing, mowing, cutting, harvesting or burning.

### **Intermediate producer**

means an economic operator (undertaking business activity involving the processing and sale of biomass and its processed products).

### **Land status**

means the characteristics of the land, taking into consideration its physical features and categories.


### **Land with high carbon stock**

means wetlands, continuously forested areas, forested areas with 10-30% canopy cover and peatlands.

### **Land with temporary fallow**

Land that is not seeded for one or more growing seasons. The maximum idle period is usually less than five years. This land may be in the form sown for the exclusive production of green

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manure. Land remaining fallow for too long may acquire characteristics requiring it to be re-classified, as for instance “Permanent meadows and pastures” if used for grazing or haying.

### **Life cycle greenhouse gas emissions**

means all net emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O that can be assigned to the fuel (including any blended components) or the energy supplied. This includes all relevant stages from extraction or cultivation onward, including land-use changes, transport and distribution, processing, and combustion, irrespective of where those emissions occur.

### **Ligno-cellulosic material**

means material composed of lignin, cellulose and hemicellulose, such as biomass sourced from forests, woody energy crops and forest-based industries' residues and wastes.

### **Location**


means a site with precise boundaries equipped with containers, processing or logistical facilities, transmission and distribution infrastructure etc. where products are stored, can be mixed, a mixture can be split.

### **Low indirect land-use change-risk biofuels, bioliquids and biomass fuels**

means biofuels, bioliquids and biomass fuels, the feedstock of which was produced within schemes which avoid displacement effects of food and feed-crop based biofuels, bioliquids and biomass fuels through improved agricultural practices as well as through the cultivation of crops on areas which were previously not used for cultivation of crops, and which were produced in accordance with the sustainability criteria for biofuels, bioliquids and biomass fuels laid down in Article 29.

### **Lower heating value**

means the amount of heat released by complete combustion, in an atmosphere of oxygen, of a unit of fuel mass (containing only carbon, hydrogen, nitrogen, and sulfur) whose combustion

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products are gaseous carbon dioxide, sulfur dioxide, nitrogen and water vapor, with both the material and all combustion products being under standard conditions<sup>i</sup>.

### **LULUCF - Land Use, Land-Use Change and Forestry**

A greenhouse gas inventory sector defined by UNFCCC that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities.

### **Management system**

The term ‘management system’ means an information management system run by an economic operator to demonstrate that biomass sourcing is in compliance with the sustainability criteria at forest sourcing area level defined in Articles 29.6(b) and 29.7(b). The management system shall include all criteria and makes reference to the information sources that are checked to demonstrate compliance. In addition, a decision tree can be used that helps with the assessment of the available information. The management system ensures that information necessary to demonstrate compliance, is collected, verified, assessed and durably stored by the economic operator.

### **Manufacture/Processing**


means a production process in which feedstock is converted into the product(s) by physical or chemical methods.

**Maintenance of soil quality** means keeping the physical, chemical, biological and ecological state of the soil after an intervention at comparable level as before the harvesting intervention.

### **Mass balance system**

means a tracking system, in which the sustainability characteristic is attributed to a given batch of the product. In the system, every economic operator monitors and records: the quantities of: biomass, biofuels, bioliquids, biomass fuels, complying with the sustainability criteria, recording both purchased and sold quantities.

<sup>i</sup> based on PN-86 C-04062

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### **Mixture**

means a mixture of substances (e.g. agricultural products, intermediate products, biofuels, bioliquids, biomass fuels) coming from various batches of the product.

### **Nationally determined contribution (NDC)**


Nationally determined contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. More specifically NDCs cover emissions and removals from agriculture, forestry and land use (AFOLU) which ensures that changes in carbon stock associated with biomass harvest are accounted towards the country's commitment to reduce or limit greenhouse gas emissions as specified in the NDC.

### **National or sub-national laws in accordance with Article 5 of the Paris Agreement**

One of the criteria, which, when fulfilled, can in part assure national-level compliance with the requirements of REDII Article 29.7(a), stipulates that national or sub-national laws need to be in place, in accordance with Article 5 of the Paris Agreement, applicable in the area of harvest, to conserve and enhance carbon stocks and sinks, and evidence is provided that reported LULUCF-sector emissions do not exceed removals. This implies that comprehensive national or sub-national monitoring frameworks need to be in place to report on carbon emissions and removals by the LULUCF sector. This could be checked for example from a country's annual greenhouse gas inventory report submitted to the UNFCCC. Greenhouse gas inventory data can be checked e.g. from [https://di.unfccc.int/detailed\\_data\\_by\\_party](https://di.unfccc.int/detailed_data_by_party).

### **Non-food cellulosic material**

means feedstocks mainly composed of cellulose and hemicellulose, and having a lower lignin content than ligno-cellulosic material; it includes food and feed crop residues (such as straw, stover, husks and shells), grassy energy crops with a low starch content (such as ryegrass, switchgrass, miscanthus, giant cane and cover crops before and after main crops), industrial residues (including those from food and feed crops after vegetal oils, sugars, starches and protein have been extracted), and material from biowaste. Where ley and cover crops are understood to be temporary, short-term sown pastures comprising grass-legume mixture with a low starch content to obtain fodder for livestock and improve soil fertility for obtaining higher yields of arable main crops.

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## Origin

The origin of the material is the forest/farm/plantation where biomass is produced/harvested, or the site/processing facility that generated the waste or residue. The origin of the material is where the chain of custody needs to start. For example, in the case of forestry residues, the origin and therefore the first point in the chain of custody is the forest. In the case of sawmill residues, the origin and first point in the chain is the sawmill. If wastes or residues are collected across multiple sites, the first point in the chain can be the first collection point (also called first gathering point FGP).

## Other wooded land (OWL)

Land not classified as “Forest”, spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.


## Paris Agreement

The Paris Agreement, inter alia, sets out a long-term goal in line with the objective to keep the global temperature increase well below 2°C above pre-industrial levels and to pursue efforts to keep it to 1,5°C above pre-industrial levels. Forests, agricultural land and wetlands will play a central role in achieving this goal. The Paris Agreement entered into force on 4 November 2016. The Paris Agreement was concluded on behalf of the Union on 5 October 2016 by Council Decision (EU) 2016/1841.

## Peatlands

mean area of peat presence. According to the Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme, and taking into account rules for biofuels<sup>i</sup>, *peat itself is not considered as biomass*, because it does not fall within the definition of biomass, i.e. biodegradable fraction of products, wastes and residues of biological origin from agriculture (including vegetal and animal substances), forestry and related industries, including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.

<sup>i</sup> 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).

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### **Permanent pasture**

means lands taken up for cultivation of grass or other herbaceous natural crops (self-seeding) or formed as a result of agricultural activity (sown), not included into crop rotation for five years or longer<sup>i</sup> (definition based on information materials published by the Agency for Restructuring and Modernisation of Agriculture<sup>ii</sup>).

### **Primary data**

mean the quantified value of a unit process or other activity within the product system, obtained from a direct measurement (or a calculation based on direct measurement) at its original source.

### **Primary forest and other wooded land**

means forest and other wooded land of native species where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed.

### **Processing**


means a production process in which biomass is processed using physical or chemical methods, in order to change or adapt its energetic status, aggregation state and properties, in accordance with the requirements of the biofuel/bioliquid/biomass fuel generation process itself; in contrast, processes aimed at maintaining the proper physico-chemical parameters of biomass for its storage and transport are not considered processing.

### **Processing unit**

means a plant or installation for the processing and/or sale of biomass and its processed products.

<sup>i</sup> At the same time, “grasses or other herbaceous natural crops”, mean all herbaceous crops, growing on natural pastures or usually contained in seed mixtures intended for sowing on pastures or meadow in a Member State.

<sup>ii</sup> [http://www.arimr.gov.pl/fileadmin/pliki/zdjecia\\_strony/366/zarz\\_TUZ\\_180209.pdf](http://www.arimr.gov.pl/fileadmin/pliki/zdjecia_strony/366/zarz_TUZ_180209.pdf)

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### **Product group**

refers to biomass with similar physical or chemical characteristics, heating values and/or conversion factors and can therefore be physically mixed in the supply chain, for example wood pellets, wood chips, sawdust etc. Material within the same product group can have different sustainability characteristics and may also have some small physical differences, e.g. moisture content, as long as the product can still be mixed.

### **Product life cycle**

means the consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources, to final disposal.

### **Recycled carbon fuels**

means liquid and gaseous fuels that are produced from liquid or solid waste streams of non-renewable origin which are not suitable for material recovery in accordance with Article 4 of Directive 2008/98/EC, or from waste processing gas and exhaust gas of non-renewable origin which are produced as an unavoidable and unintentional consequence of the production process in industrial installations.

### **Removals**

Anthropogenic (originating from human activity) removals of greenhouse gases from the atmosphere by sinks.


### **RED II**

means DIRECTIVE (EU) 2018/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2018 on the promotion of the use of energy from renewable sources. Official Journal of the European Union L 328/82.

### **Regional economic integration organization**

A regional economic integration organization maintains a process of overcoming barriers that divide neighbouring countries, by common accord, and of jointly managing shared resources and assets. Regional integration essentially is a process by which groups of countries liberalize



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trade, creating a common market for goods, people, capital and services. For example, the European Union advocates regional integration as an effective means of achieving prosperity, peace and security.

### **Renewable liquid and gaseous transport fuels of non-biological origin**

means liquid or gaseous fuels which are used in the transport sector other than biofuels or biogas, the energy content of which is derived from renewable sources other than biomass.

### **Repowering**

means renewing power plants that produce renewable energy, including the full or partial replacement of installations or operation systems and equipment for the purposes of replacing capacity or increasing the efficiency or capacity of the installation.

### **Residue**

means a substance that is not the end product(s) that a production process directly seeks to produce; it is not a primary aim of the production process and the process has not been deliberately modified to produce it.

### **Secondary data**


mean the quantified value of a unit process or other activity within the product system, obtained other than by direct measurement at its original source or by a calculation based on such measurement.

### **Self-declaration for agricultural producer**

means a document in which an agricultural producer describes the origin, identification data and sustainability characteristic of biomass at the initial step in the chain of custody.

### **Sourcing area**

means the geographically defined area from which the forest biomass feedstock is sourced, from which reliable and independent information is available and where conditions are suffi-

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ciently homogeneous to evaluate the risk of the sustainability and legality characteristics of the forest biomass.

### **Species-rich**

1. A habitat of significant importance to critically endangered, endangered or vulnerable species as classified by the International Union for the Conservation of Nature Red List of Threatened Species or other lists with a similar purpose for species or habitats laid down in national legislation or recognised by a competent national authority in the country of origin of the raw material; or
2. A habitat of significant importance to endemic or restricted-range species; or
3. A habitat of significant importance to intra-species genetic diversity; or
4. A habitat of significant importance to globally significant concentrations of migratory species or congregatory species; or
5. A regionally or nationally significant or highly threatened or unique ecosystem.

### **Supply chain**


means a sequence of interconnected operations in the flow of raw material, feedstock, products, residues and wastes, carried out by the System's participants in order to obtain the final product.

### **Starch-rich crops**

means crops comprising mainly cereals, regardless of whether the grains alone or the whole plant, such as in the case of green maize, are used; tubers and root crops, such as potatoes, Jerusalem artichokes, sweet potatoes, cassava and yams; and corm crops, such as taro and cocoyam.

### **System Administrator**

means an economic operator or a contractor having the right to administer the certification system. In the case of the KZR INiG System, the Oil and Gas Institute – National Research Institute in Cracow is the System Administrator.

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### **System boundaries**

means a set of criteria defining which elementary processes shall be included in the product system and in a mass balance system and how detailed the examination of these processes must be.

### **Typical value**

means an estimate of the greenhouse gas emissions and greenhouse gas emissions savings for a particular biofuel, bioliquid or biomass fuel production pathway, which is representative of the Union consumption.

### **Traceability**

means the ability to identify each product and its origin at all stages of the supply chain. This makes it possible to obtain information from previous stages of the chain and link the information it to the next stage.

### **Undrained peatland**

means peatland not drained before 1st January 2008 or not affected by previous drainage on 1<sup>st</sup> January 2008 (based on EN 16214-1).

### **Useful heat**


shall mean heat generated to satisfy an economical justifiable demand for heat, for heating or cooling purposes.

### **Waste**

means waste as defined in point (1) of Article 3 of Directive 2008/98/EC, excluding substances that have been intentionally modified or contaminated in order to meet this definition.

### **Waste heat and cold**

means unavoidable heat or cold generated as by-product in industrial or power generation installations, or in the tertiary sector, which would be dissipated unused in air or water without

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access to a district heating or cooling system, where a cogeneration process has been used or will be used or where cogeneration is not feasible.

#### **Wetlands (water & swamp areas)<sup>i</sup>**

land that is covered with or saturated by water permanently or for a significant part of the year. For the agriculture producer, they are a transition zone between terrestrial ecosystems located on higher elevation, and typically aquatic ecosystems.

Areas included on the List of Wetlands of International Importance, according to regulations of art. 2 Convention on Wetlands of International Importance especially as waterfowl habitat<sup>ii</sup>, are of particular significance.

#### **4. Changes compared to the previous edition**

<b>Date</b>	<b>Issue No.</b>	<b>Section</b>	<b>Previous requirement</b>	<b>Current requirement</b>

<sup>i</sup> ATTENTION: A detailed definition of wetlands is contained in the Convention on Wetlands of International Importance especially as waterfowl habitat (J. of Laws 1978 No. 7 item 24), where wetlands are defined as *areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.*

<sup>ii</sup> Convention on Wetlands of International Importance especially as waterfowl habitat (J. of Laws 1978 No. 7 item 24).