



ISCC
International Sustainability
& Carbon Certification

ISCC 201-1

WASTE AND RESIDUES

Version 3.0



Copyright notice

© 2016 ISCC System GmbH

This ISCC document is protected by copyright. It is freely available from the ISCC website or upon request.

No part of this copyrighted document may be changed or amended. The document may not be duplicated or copied in any form or by any means for commercial purpose without permission of ISCC.

Document Title: ISCC 201-1 Waste and Residues

Version: 3.0

Valid from: 09 August 2016 (Date of Commission Implementing Decision (EU) 2016/1361)

Content

1	Introduction	4
2	Scope and Normative References.....	4
3	Definitions and Regulatory Framework.....	5
3.1	European Union	5
3.1.1	Waste.....	5
3.1.2	Residues.....	5
3.2	Member States.....	6
3.3	ISCC	6
4	Certification Process	7
4.1	Sustainability Requirements	7
4.2	Greenhouse Gas (GHG) Emissions	7
4.3	Traceability and Chain of Custody.....	8
4.3.1	Point of Origin: Agricultural, Aquaculture, Fisheries and Forestry Residues	9
4.3.2	Point of Origin: Waste and Processing Residues	9
4.3.3	Collecting Point and First Gathering Point.....	13
4.4	Application of ISCC Waste and Residue Process.....	14
4.4.1	Overview Verification Process.....	14
4.4.2	Deliberate Production.....	15
4.4.3	Further Use is Certain	15
4.4.4	Direct Use Without Further Processing	17
4.4.5	Integral Part of the Production Process.....	17
4.4.6	Further Use is Lawful	17

1 Introduction

This document provides the principles for the certification of raw materials and feedstocks qualifying as “waste” or “residue” as their supply chains and specific certification requirements may differ from those of the conventional crop-based biomass. The *Renewable Energy Directive 2009/28/EC* amended through *Directive (EU) 2015/1513 (RED)* and *Fuel Quality Directive 2009/30/EC* amended through *Directive (EU) 2015/1513 (FQD)*¹ include definitions of and specific incentives for the promotion of biofuels or bioliquids made from waste and residues. The verification and assessment of a material and its waste or residue status is important as there are no EU-wide harmonised lists defining waste or residues. Only a consistent verification can avoid a deliberate increase in the production of waste or residues. For this purpose it is necessary to ensure traceability of a waste or residue back to its origin, along the entire chain of custody.

Different certification requirements

The sustainability risks for final products that are produced from agricultural crops are different from the ones related to waste and residues. In the case of agricultural crops, the main task at the origin of the feedstock (farm or plantation) is to verify that the criteria for sustainable production of biomass are complied with. In the case of waste and residues, the main task at the origin is to verify the type of raw material used and its status as a genuine waste or residue.

Different risks

The auditing and certification principles under ISCC apply equally to agricultural crops and to waste and residues. However, for waste and residues there is a special focus on the point of origin as this is the supply chain element where the waste or residue status of a material is determined. Furthermore, for points of origin of waste or residues a different risk approach is applied, leading to differences in the frequency and intensity of audits compared to the process for agricultural crops.

Equivalent certification process

The requirements described in this document apply for specific elements of the supply chain, namely points of origin and collecting points, in addition to the other ISCC system documents.

2 Scope and Normative References

The requirements described in this document specify the identification of waste and residues and their certification process. This document is valid in addition to the other ISCC system documents. The principles specified in this document have to be considered for all supply chain elements which are involved in the production, collection or processing of waste and residues.

¹ In the following referred to as RED and FQD.

3 Definitions and Regulatory Framework

3.1 European Union

3.1.1 Waste

“Waste” shall be defined as in Article 3 (1) of the *Waste Framework Directive 2008/98/EC (WFD)*³. According to this definition a “waste” can be understood as “any substance or object which the holder discards or intends or is required to discard”. Raw materials or substances that have been intentionally modified or contaminated to meet this definition are not covered by this definition. This means that substances which are intentionally produced or modified to count as waste (e.g. by adding waste material to a material that was not waste) do not qualify as waste.⁴ The concept of “discarding” a material according to the WFD requires a consideration of all relevant circumstances at the point of origin of a material.

Definition waste

3.1.2 Residues

In the context of the RED and FQD, “residues” are substances not being the end product(s) that a production process directly seeks to produce. Residues include:

Definition residues

- 1 Agricultural, aquaculture, fisheries and forestry residues: Residues directly deriving from or generated by agriculture (agricultural crop residues, e.g. straw, bagasse, husks), aquaculture, fisheries and forestry. These residues do not include residues from related industries or processing.⁵
- 2 Processing residue: A substance that is not the end product that a production process directly seeks to produce; the production of the residue or substance is not the primary aim of the production process and the process has not been deliberately modified to produce it. Examples of processing residues include crude glycerine, tall oil pitch and manure.⁶

“By-products” or “co-products” (in the following only referred to as co-products) in the context of ISCC and within the framework of the RED are treated similarly to main or primary products with regards to the certification process and the greenhouse gas (GHG) calculation. This means that co-products require upstream certification and GHG emissions are allocated to them. Even though the wording in the RED and FQD and in the WFD differs slightly, the general principles laid down in the WFD, and especially those laid down in Article 5 (1) WFD respectively, can be applied to distinguish between agricultural, aquaculture, fisheries and forestry residues,

Co-products

² In the following referred to as WFD.
³ Article 2 (p) Directive 2009/28/EC (RED) amended by Directive 2015/1513
⁴ 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)
⁵ Article 2 (v) Directive 2009/28/EC (RED) amended by Directive 2015/1513
⁶ Article 2 (t) RED

processing residues and waste on the one hand, and primary products and co-products on the other.

3.2 Member States

The classification of a material as a waste or residue and the eligibility to count towards national biofuel quotas depend on the regulations of the individual EU Member States. Some EU Member States have published so-called “positive lists” of recognised waste or residues or have included the eligible feedstocks within the national legislation. Furthermore, individual EU Member States might require that “waste” material must comply with the waste definition of the respective national (or European) waste law. If individual EU Member States require a case-by-case assessment for specific materials to demonstrate the waste or residue status according to national law of the respective EU Member State, Certification Bodies (CBs) should apply the general principles of the WFD for evaluation and verification purposes while conducting the audit. This allows for a harmonised verification approach based on the principles of the legislative framework within the EU.

Individual EU Member State requirements

Verification and certification under ISCC does not overrule nor replace official waste classification which is in the responsibility of competent national authorities. ISCC does not guarantee the acceptance of waste- or residue-derived products by the competent EU Member State authorities. CBs and System Users are obliged to investigate and research the eligibility of material in the targeted EU Member State. Acceptance of a final product (e.g. biofuel) produced from a raw material which was certified according to the ISCC waste and residue certification process is the decision of the authorities of the particular EU Member State where the final product comes onto the market (e.g. to fulfil biofuel quota obligations). It is possible that certain materials are classified as waste or residue by one EU Member State and as a (co-) product by another and thus market access might depend on the certification process applied to the raw material.

Analysis of target market

3.3 ISCC

ISCC certification can cover all types of biomass including waste and residues. Materials, which are explicitly referred to as waste or residue either in the RED or FQD - including its Annexes⁷ or within relevant Communications from the Commission - can be certified under ISCC. Materials, which are officially recognized or accepted by EU Member States as waste or residue within the framework of the RED and FQD, can also be certified under ISCC.

All raw materials

As a formal requirement and for the purpose of a harmonised description of materials, ISCC keeps a list of all raw materials eligible for certification

ISCC list of materials

⁷ Annex IX RED, *inter alia*, includes waste and residues. However, not all materials in Annex IX can be considered to be waste or residues. In particular, materials in points (p) and (q) cover a broad range of feedstocks which could be classified as products, residues (agricultural, forestry or processing) or waste.

according to ISCC. On this list, ISCC indicates the materials, which qualify for certification according to the ISCC certification process for waste and residues (in the following referred to as ISCC w/r process). If a material is not published on this list, the material cannot be covered by ISCC certification. However, ISCC can update the list and can include additional materials on the list upon request. If a waste or residue material shall be added to this list, ISCC will require sufficient evidence demonstrating that the material is recognised as a waste or residue in at least one EU Member State within the framework of the RED and FQD. ISCC can also remove certain materials from the list, based on re-classifications by Member States or latest analysis regarding the status as a waste or residue and the required certification approach. During any audit the relevant raw material and the respective output material must be determined and classified according to the ISCC list of materials.

It is important to note that ISCC itself is not in the position to officially classify material as waste or residue, neither by certification nor by publishing a material on the ISCC list of materials.

4 Certification Process

4.1 Sustainability Requirements

Waste and processing residues other than those directly derived from agriculture, aquaculture, fisheries and forestry do not need to comply with the sustainability requirements for sustainable cultivation of biomass.⁸ This means that the further use of genuine waste and processing residues can be considered as sustainable if they comply with the applicable ISCC requirements.

Not applicable to genuine waste

Residues, which are directly derived from agriculture, aquaculture, fisheries and forestry, must comply with the sustainability requirements for sustainable cultivation of biomass laid down in Article 17 of the RED and in ISCC Document 202 “Sustainability Requirements”. Therefore, the certification process for such residues starts at the level of cultivation and is identical to the process for agricultural crops grown and harvested on farms or plantations. The ISCC w/r process does not apply for such materials.

Applicable to agricultural residues

4.2 Greenhouse Gas (GHG) Emissions

Waste, agricultural crop residues, including straw, bagasse, husks, cobs and nut shells and residues from processing, including crude glycerine (glycerine that is not refined), are considered to have zero life-cycle greenhouse gas emissions up to the point of collection of those materials⁹. In this context, the “point of collection” is the point where the waste or residue arises in the first place e.g. for used cooking oil (in the following referred to as UCO) this

Zero GHG emissions

⁸ Article 17 (1) RED

⁹ Annex V, part C, point 18 RED

would be the restaurants or plants producing fried products, for animal fat or tallow this would be the rendering plant producing animal fat or tallow from animal by-products. Under ISCC the point where a waste or residue arises in the first place is referred to as “point of origin”.

Biofuels and bioliquids produced from waste and residues must comply with the GHG reduction target laid down in Article 17 (2) of the RED.¹⁰

GHG reduction target

The requirements for GHG calculation and verification are specified in ISCC Document 205 “Greenhouse Gas Emissions”.

4.3 Traceability and Chain of Custody

Traceability of waste and residues starts at the point where the waste or residue occurs or is generated (point of origin) and covers the entire supply chain. Traceability is achieved by using systems for traceability (e.g. mass balance or segregation) as well as identification numbers and delivery documents (Sustainability Declarations), assuring that the country of origin (i.e. the country where the waste/residue was generated), the type of (raw) material, the amount and the respective GHG emissions of a material can be clearly identified on each level of the supply chain.

Traceability starts at point of origin

In the case of waste or residues, the ISCC Sustainability Declaration must include the name of the waste or residue raw material. In the case of intermediate or final products derived or produced from waste or residues, the waste or residue material used as raw material must be specified on the Sustainability Declaration for the product (e.g. bioethanol from wheat straw). For waste and processing residues, other than agricultural crop residues, aquaculture, fisheries and forestry residues, the Sustainability Declaration must include a clear statement that the (land-related) sustainability criteria according to Article 17 (3) to (6) RED are not taken into account. If a Sustainability Declaration includes the respective statement this means that the ISCC criteria for sustainable production of biomass (see ISCC Document 202) have not been verified as a part of the certification process.

Information on Sustainability Declaration

The entire chain of custody of sustainable material must be covered by certification. The first element of the supply chain requiring individual certification is the collecting point for waste and processing residues or the first gathering point of agricultural crop residues. Figure 1 provides an overview of a supply chain indicating which supply chain elements are subject to audits.

Certification starts at the Collecting Point

The general definitions of supply chain elements are specified in ISCC Document 201 “System Basics”. The general requirements for traceability and chain of custody are specified in ISCC Document 203 “Traceability and Chain of Custody”. The audit requirements for individual supply chain elements are specified in ISCC Document 204 “Audit Requirements and Risk Management”. The requirements for group certification and sampling are specified in ISCC Document 206 “Group Certification”.

Relevant reference documents

¹⁰ Article 17 (1) RED



Figure 1: Example of a (simplified) supply chain

4.3.1 Point of Origin: Agricultural, Aquaculture, Fisheries and Forestry Residues

In the case of residues directly deriving from or generated by agriculture (e.g. straw, bagasse, husks), aquaculture, fisheries and forestry, the point of origin is a farm, plantation or forest management unit where sustainable biomass is cultivated and harvested. In the case of residues from aquaculture, fisheries and forestry the point of origin is the equivalent to the farm or plantation for agriculture. Farms, plantations and forest management units do not need to be certified individually. Farms, plantations and forest management units which are not certified individually have to conduct a self-assessment and complete and sign a self-declaration which must be provided to the certified first gathering point. Farms, plantations and forest management units are usually audited based on a sample. Farms, plantations and forest management units can also become certified individually on a voluntary basis.

Agricultural crop residues

4.3.2 Point of Origin: Waste and Processing Residues

For waste and processing residues, different set-ups can be identified. They can especially be distinguished with respect to the type of the point of origin, the collection setup of the material and the risk of false declaration of non-waste material as waste.

Different types of points of origin

Points of origin for waste and processing residues do not need to be certified individually. Instead of becoming certified individually, such points of origin must issue a self-declaration to the certified collecting point. If traceability of waste and residues from the point of origin to the collecting point is ensured by existing systems operated by governmental authorities (delegated or authorised otherwise), e.g. on a local, regional or national level, ISCC can recognise the equivalence of such systems with the issuing of a self-declaration. Equivalence of such systems must be assessed and approved by ISCC. Depending on the type and size of the point of origin the principles of group auditing (auditing based on a sample) can be applied. However, individual certification of such points of origin is possible on a voluntary basis.

Self-declaration or equivalent

ISCC takes into account the different risk levels to ensure integrity of ISCC, of claims made under ISCC, and to avoid unnecessary obstacles or administrative burdens related to the certification of waste and residues. By this, ISCC facilitates the diversification of sustainable raw materials. As different categories of points of origin for waste and processing residues exist, these categories must be considered separately with respect to the certification process and audit requirements.

Diversification of raw materials

In the following, different categories of points of origin, their relationship to the collecting point, their risk exposure and the particular requirements for the certification and audit process are specified:

1 Businesses and Companies:

This is the most common category of points of origin. It includes for example restaurants or industrial operations using virgin oils to fry or cook food, operations processing biomass or vegetable oils and other commercial processors generating waste or residues. In case of animal fat or tallow, the point of origin is usually a rendering plant producing animal fat / tallow out of animal by-products.

Restaurants or industrial operations

Irrespective of the amount of material generated, businesses and companies must allow auditors on-site access to verify compliance with the ISCC requirements if necessary. However, businesses and companies generating less than 10 metric tons of a specific waste or residue per month (or less than 120 metric tons per year based on a rolling average) are considered to have a low risk of fraud due to the marginal amount of material generated. Thus, it is (usually) not obligatory to verify compliance during an on-site audit, unless there is indication or evidence for non-conformity with the ISCC requirements. Businesses and companies generating more than 10 tons of a waste or residue material per month (or more than 120 tons per year) are considered to have a higher risk of fraud due to the higher amount of material generated. Therefore, it is obligatory to audit such points of origin on a sample basis. Points of origin may also become certified individually on a voluntary basis. Points of origin which are not certified individually must fill in and sign a self-declaration to the certified collecting point, declaring compliance with the ISCC requirements and confirming access to their premises. Points of origin which are not certified individually and producing amounts above the respective threshold form the basis for the sample calculation during the certification of the collecting point (at least the square root multiplied by the risk factor). Sampling can only be applied if the contractual basis, on which the point of origin is operating, avoids incentives to make false claims about the nature of the raw material, and if the risk of fraudulent behavior is low. Points of origin, for which sampling cannot be applied, must be audited individually.

Risk-based audit approach

In the case several points of origin are organised under a franchise system (e.g. fast food restaurants) two different set-ups are possible regarding the self-declaration to be issued and signed. If the point of origin is managed by a legally independent owner (franchisee), the point of origin must sign the self-declaration for the individual entity in order to deliver waste or residues as sustainable. In case several points of origin are operated locally by on-site employees but are fully owned and managed by a local or regional entity (franchisor) and not

Franchise system

acting independently, the self-declaration can be signed by the competent local or regional manager responsible for the points of origin. In this case it is possible to issue and sign one self-declaration for all points of origin covered by the self-declaration. It must be ensured that a list is attached to the self-declaration which clearly identifies all individual points of origin (including their specific addresses).

The CB is obliged to verify compliance with the ISCC requirements, especially if there is an indication or evidence for non-conformity of such points of origin which are not certified individually. This rule applies irrespective of the size of the point of origin or the amounts generated.

2 Private Households:

The amounts of waste or residue material (e.g. UCO) generated by individual private households are marginal. Furthermore, private households usually do not sell waste or residues to a collecting point. Thus they have no economic benefit from providing waste or residues to a collecting point and there is no risk of fraud. It would be disproportionate to require signed documents or on-site audit of private households. Therefore, private households do not need to issue self-declarations to a collecting point and they are not subject to on-site verification. However, the certified collecting point responsible for the collection of waste and residues from private households must be able to demonstrate to the CB the type of material collected and the plausibility of the amounts collected (e.g. by showing collection routes, frequency of collection and historic data of collected amounts).

No audit of private households

3 Community (Municipal) Collection / Landfill Sites:

Such sites are usually operated by local (governmental) authorities and provide the option (e.g. to private households) to discard waste or residues at their premises. The risk of fraud is comparably low, as such sites are operated by local (governmental) authorities and are obliged to comply with local and national waste laws. Such sites can be considered to take over the role as point of origin. Therefore they must fill in and sign a self-declaration to the certified collecting point. Due to the fact that such sites might accumulate high amounts of material, they are subject to on-site audits based on a sample according to the principles specified under point 1 (Businesses and Companies).

Operated by authorities

The community collection site must be able to demonstrate to the CB the type of material and the plausibility of the volumes received.

Plausibility of amounts

4 Public Containers:

Some EU Member States have implemented the collection of UCO via systems using public containers in which private households can discard UCO. This is usually done using small containers or bottles, which are then inserted into the public container. The container is then collected or emptied by a collecting point. In order to ensure plausibility of the amounts collected from such containers and to reduce the risk of fraud, the collecting point must meet specific requirements. The collecting point in charge for picking up the container is responsible for implementing an appropriate level of control and determination of the incoming material. The collecting point has to indicate employees responsible for internal quality control and inspection of the material (e.g. truck drivers and/or employees handling the material). Indicators for internal control of UCO can include (but are not limited to) for example: colour, smell, consistency or viscosity. The collecting point must have sufficient documentation in place which ensures that a CB can assess and verify the plausibility of the amounts collected. The required information includes:

- > Permit or license for collection by the competent authority
- > Total number of containers including size (volume) of the containers
- > Information where each container is located and the respective permit/license from the authorities
- > Information about the residential area or the neighbourhood of the container including the population density of the area
- > Dates when specific containers have been emptied/collected and information on how often containers are emptied/collected (e.g. based on signed receipts from truck drivers)
- > Weighbridge reports or collection reports of the incoming material
- > Information about the average number of collections per day
- > Reports on the amounts and management of solid waste and waste water (e.g. from cleaning UCO)

The collecting point is responsible for setting up appropriate measures to prevent contamination of the environment (e.g. by spillage or leakage) and to set up a process on how to handle contaminations. Each container should show instructions, which at least indicate the type of material to be inserted into the container and how to act in the event of a spillage or leakage.

*UCO collection
via public
containers*

*Specific
requirements*

*Prevention of
contamination*

4.3.3 Collecting Point and First Gathering Point

Collecting Points are System Users that receive or collect waste and (processing) residues, not grown and harvested on farms or plantations (e.g. UCO, crude glycerine, tall oil pitch).

*Definition
collecting point*

First gathering points are System Users that receive biomass from companies that grow and harvest this biomass (farms or plantations). The definition of a first gathering point also applies in case the material is an agricultural crop residue (e.g. straw, husk, bagasse, nut shells), or the equivalent in case of aquaculture, fisheries and forestry residues.

*Definition first
gathering point*

The collecting point and the first gathering are responsible for the correct determination of the amounts collected, for the application of the correct certification process for the material and for the correct declaration of the material. Due to their role and responsibility, the collecting point or first gathering point is the first supply chain element which requires individual certification. Collecting points and first gathering points collecting sustainable waste and residues from points of origin which are not certified individually must receive a self-declaration from these points of origin. Only when a self-declaration has been signed by the point of origin the collected material can be considered as sustainable. Material which has been collected from points of origin neither certified individually nor having signed a self-declaration must be considered as non-sustainable. The self-declaration must be issued to the certified collecting point or first gathering point and must be available during the audit.

*Correct
declaration of
material*

Collecting points and first gathering points must keep a list of all suppliers of sustainable material. This includes points of origin supplying waste and residues with a self-declaration as well as individually certified suppliers supplying material without self-declaration. During the audit of a collecting point or first gathering point a sample of points of origin is usually audited depending on the type of point of origin. Suppliers, including points of origin, which are certified individually do not fall into the sample as they have already been audited individually.

List of suppliers

Collecting points may use the services of dependent collectors or other service providers (e.g. storage facilities) acting on behalf (in the name) of the certified collecting point or first gathering point. Dependent collectors or other service providers storing sustainable material must be covered during the audit based on a sample. It is the responsibility of the collecting point or first gathering point to ensure that CBs and ISCC are entitled and enabled to assess and evaluate compliance with the relevant requirements also at relevant service providers. This can e.g. be included in the respective contractual agreements between the collecting point and the service provider.

*Dependent
collectors*

4.4 Application of ISCC Waste and Residue Process

4.4.1 Overview Verification Process

In the following, the requirements are described to determine if a material can be certified according to the ISCC w/r process. The verification process is based on the principles set out in the WFD as required in the RED and FQD. For proper determination of waste and residues the waste hierarchy specified in Article 4 WFD must be taken into account. The principles of the waste hierarchy lay down a priority order of five possible ways on dealing with waste shown in figure 1.

*Principles of
European waste
law*

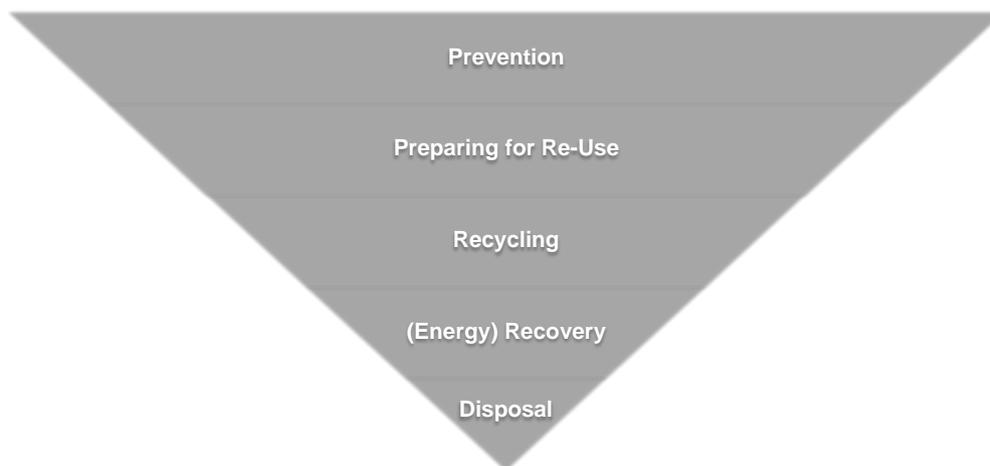


Figure 2: Waste hierarchy according to Article 4 WFD

For materials which are clearly identified as a waste or residue, either within the RED and FQD or by individual EU Member State authorities (e.g. published on positive lists) the CB must (usually) only verify if the point of origin did not produce the material intentionally and if it has been declared correctly. This also applies for material, which is commonly accepted as being waste or residue and having a low risk of being incorrectly classified or declared (e.g. UCO, animal fat / tallow, crude glycerine). Such materials are explicitly indicated by ISCC on the list of materials and they can be certified under the ISCC w/r process.

*Intentional
production to be
precluded*

If an EU Member State requires a (case-by-case) assessment to demonstrate compliance with the criteria of European or national waste law, the principles of the WFD shall be applied by the CB to distinguish between genuine waste or processing residues on the one hand and (non-waste) products or co-products on the other. These principles must also be applied for materials with a high risk of the material to be declared as waste or residue with the intention to receive incentives due to the waste/residue status and/or to avoid upstream certification of the material. This applies, for example, for materials which can either be certified under the “regular” ISCC certification process or under the process for waste and residues (e.g. free fatty acids from refining of vegetable oils). Such materials are explicitly indicated by ISCC on the list of materials.

*Case-by-case
assessment*

The following flow chart is based on the principles specified in the WFD. The principles on the flow chart must be applied for individual (case-by-case) assessments conducted by the CB at the point of origin if this is deemed necessary to evaluate if a material can be certified according to the ISCC w/r process. The result of the flow chart determines if a material can be certified according to the ISCC w/r process or if the regular ISCC process must be applied. The result from the flow chart is not an official classification of the respective material, as this classification entirely depends on EU Member State requirements.

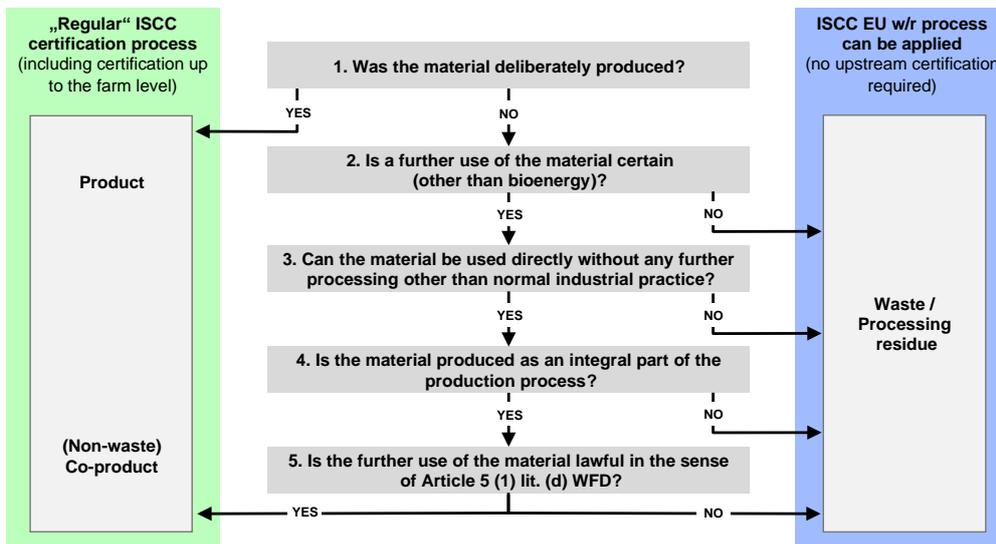


Figure 3: Flow chart to determine whether the ISCC w/r process can be applied¹¹

4.4.2 Deliberate Production

A deliberate (intentional) production process aims for the production of specific main or primary products. A production must be considered deliberate (intentional), if the production process was modified to influence the amount, the quality and/or the technical characteristics of a material. Where the production of a material concerned is the result of a technical choice, it is considered a (co-) product. If the producer could have produced the primary product without producing the material concerned but chose not to do so, this can be regarded as evidence that the material concerned is a product. The deliberate or intentional production of waste or residues violates the principle of waste prevention and is a critical non-conformity under ISCC.

*Deliberate waste
production is
prohibited*

4.4.3 Further Use is Certain

“Further use is certain” means that it is guaranteed that the material will be used. The purpose of this requirement is that if further use were not certain, there would be a risk of the material being disposed of as waste (e.g. to a

*Guaranteed use
of material*

¹¹ Flow chart based on: EC DG Environment 2012: “Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste”

landfill). During the assessment of this requirement, the waste hierarchy established in Article 4 of the WFD must be considered.

“Certainty of further use” may be indicated through, for example:

- > The material is commonly used for specific purposes (other than energy applications);
- > Existence of contracts between the point of origin and subsequent user;
- > Established market and market conditions (sound supply and demand);
- > Evidence that the material fulfils the same specifications as other products on the market;
- > Existence of trading specifications or standards;
- > Verifiable market price being paid for the material;
- > A (significant) financial gain for the point of origin

Examples of indications that further use is uncertain:

- > No market or commonly known use (other than energetic applications) for the material;
- > The economic benefit for the point of origin is low / insignificant;

Several EU Member State authorities consider the value of a material and the economic benefit for the point of origin to be one important factor to distinguish between (co-) products and waste or residues. As the existence of a market or an alternative application for a waste or residue material may be difficult to assess during an audit, the economic value of a material is a feasible criterion which can be assessed. If the economic benefit for the point of origin is insignificant, it can be assumed that the main goal of the point of origin is to reduce the amount of waste or residue in favour of the main or primary product(s). Therefore, the risk can be considered to be low. To take this into account appropriately, ISCC considers a material generated at a point of origin to be of insignificant economic value to the point of origin if the economic value per metric ton of the material concerned is below 15% compared to the economic value per metric ton of the main or primary product(s). This only applies if the material is used for non-bioenergy purposes. This means, if only bioenergy applications are relevant to be considered as “further use of the material”, the economic value in this case is not relevant to determine whether the ISCC w/r process can be applied or not. In the case of two or more main or primary products, the average economic value of those products shall be used. The economic value of a material being evaluated can be calculated using the following formula:

Economic value

$\frac{\text{price per ton } \left(\frac{\text{€}}{t} \right) \text{ of material}}{\text{price per ton } \left(\frac{\text{€}}{t} \right) \text{ of main/primary product(s)}}$

*Calculation
formula*

Figure 4: Formula to calculate the economic value

4.4.4 Direct Use Without Further Processing

A material may be considered as a (co-) product if its further use is certain without prior processing other than normal industrial practice. If a waste or processing residue has to be treated before it can be used further, this may indicate a waste treatment operation, thus in turn, indicating a waste or residue. In meeting the requirement of being able to be “used directly without any further processing other than normal industrial practice”, the crucial point is to determine what “normal industrial practice” is.

(Co-) Product

“Normal industrial practice” can include all steps which a producer would take for a product, such as the material being filtered, washed, or dried (modification of size or shape by mechanical treatment); or adding materials necessary for further use; or carrying out quality control. However, treatments usually considered as a recovery operation cannot, in principle, be considered as normal industrial practice in this sense. Some of such processing tasks can be carried out on the production site of the manufacturer, some on the site of the next user, and some by intermediaries, as long as they also meet the criterion of being “produced as an integral part of a production process”.

*Normal industrial
practice*

4.4.5 Integral Part of the Production Process

A material, which is made ready for further use through an integral part of a production process, can be considered as a (co-) product. If a material leaves the site or factory where it is produced in order to undergo further processing, this may be evidence that such tasks are no longer part of the same production process, thus indicating a waste or residue.

*Analysis of
production
process*

The following points can be considered in order to determine if a material is produced as an integral part of a production process:

- > What is the nature and extent of the tasks needed to prepare the material for direct further use? How integrated are these tasks in the main production process?
- > Are the tasks that are undertaken as part of “normal industrial practice” also “an integral part of a production process”?

4.4.6 Further Use is Lawful

A further use of a material is lawful if the material fulfils relevant product, environmental and health protection requirements at EU and at Member States level for the specific use, and if it will not result in overall adverse

*Legal or
technical
requirements*

environmental or human health impacts. Compliance with relevant product, environmental and health protection requirements for the specific use may, for example, be indicated through:

- > A material meeting the technical or product specifications relevant to its further use;
- > If there are no relevant technical specifications for the material, it can still be lawful to use it simply if its use is not specifically forbidden.

The following can indicate that further use is unlawful:

- > The material does not meet the technical or product specifications required for it to be usable.
- > The material is banned from use or the material must be disposed of or recovered as waste by certain obligatory methods.