K-0212902-3
01-06-2026

Model Covenant

Products for primary assets of Energy Installations – Validation of circularity data from Raw Material Passport (RMP)

creating trust *driving progress*

kiwa

Preface

This Kiwa Covenant has been prepared by the Technical Committee “Validation of circularity data from Raw Material Passport” of Kiwa Nederland B.V. and accepted by the Kiwa Committee of Covenant (KCC). The KCC also supervises the certification activities and where necessary requires the Kiwa Covenant to be revised.
This Kiwa Covenant will be used by Kiwa in conjunction with the Kiwa-Regulations for Certification and Kiwa manual 15013. This regulation details the method employed by Kiwa for conducting the necessary investigations prior to issuing the product certificate and the method of external control. The inspection frequency is determined by the above-mentioned Technical Committee and Kiwa Committee of Covenant.

Only after approval by the above mentioned Technical Committee it is allowed for other certification institutes than Kiwa to use the contents of this Model Covenant for their own certification purposes.

In this model-Covenant the following major changes/updates have been implemented.

- The assessment of the circularity claim “Recyclability” has been removed;
- Introduction of Chain of Custody models as basis for the traceability of circularity claims (paragraph 2.1);
- Update of “Low carbon content (footprint)” for metals (paragraph 2.3);
- New paragraph 6.5 Changes in the Raw Material Passports;
- Update of Annex I “Third party accepted certificate” (formerly Annex IV);

This model Covenant replaces model Covenant K-0212902-2 dated 2025-01-15. The Covenant certificates issued on the basis of that model Covenant lose their validity one year after the date on which this version has been published.

Contents

1 Scope of the Covenant

1.1 The assessment scope and definition of the product

The assessment scope of this Kiwa Covenant is the validation of the circularity aspects of the raw materials used in manufacturing of products - used as a primary asset of the energy network operators united in Netbeheer Nederland - in terms of Circular-in data as specified in Raw Material Passports for the energy network operators in The Netherlands. The products are primary asset parts of energy distribution systems including e.g. cables, pipes, valves, fittings, hoses, manifolds and regulators. A certificate shows the scope of products applicable for the certificate holder by means of product groups. See Annex II for a not-limited list of Product Groups.

The Circular-in content is determined based on principles described in product related standards including:

1. ISO 22095: Chain of custody — General terminology and models; where separated storage/transportation of recycled material from virgin material is required for clear identification of recycled content
2. ISO 14021: Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling), paragraph 7.8.1 ; where defining the term recycled content (see also section 1.3) and paragraph 7.8.4; defining the formula for calculating the percentage of recycled content.
3. ISO 14040/14044: Environmental management - Life cycle assessment - Principles and framework (ISO 14040:2006,IDT).
4. IEC 62542: Environmental standardization for electrical and electronic products and systems - Glossary of terms, chapter 6; where defining recycling as processing of waste materials for the original purpose or for other purposes, excluding energy recovery.
5. Waste Framework Directive: Directive 2008/98/EC for End-Of-Waste criteria (article 6) and Prevention of waste (article 9).
6. ISO 16620-1: Plastics - Biobased content - Part 1: General principles.

   The source Circular-in content is expected to be traceable per certificates issued according to for example the principles of EN 15343 for recycled plastic products, NVN-CLC/TS 50625 series for waste electric and electronic equipment, ISO/IWA 19 for metals (which is withdrawn and soon replaced by ISO/CD 59014 and other related norms for other materials and NEN EN 455571: General method for assessing the proportion of recycled material content in energy-related products.

1.2 Fitness for function

This Kiwa Covenant is issued under Kiwa Covenant Manual K15013. The functional requirements for products are to be certified according to the clause 4.2 of the Manual K15013. This Covenant is issued only for the validation of the circular data of the raw materials used in the manufacturing of the product and not applicable for determining the fitness of function of the materials/products for the intended application.

1.3 Common terms relating to the certificate

- **Biomass**: material of biological origin excluding material embedded in geological formations and/or fossilized (ISO 16575);
- **Bio-based Content:** fraction of a product that is derived from biomass (ISO 16575). By default, this content is classified as ‘Primary’ unless it is demonstrated to originate from waste or residual streams within the Dutch (NL) context, as defined in Table 1 of the ‘List of Materials Eligible for ISCC PLUS Certification,’ in which case it may be classified as ‘Secondary’.
- **Certificate holder:** The party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based. Official registered name of the certificate holder should be mentioned in the documentation.
- **Chain of Custody**: Process by which inputs and outputs and associated information are transferred, monitored and controlled as they move through each step in the relevant supply chain, - ISO 22095

- **Circular-in content:** Percentage of the material that is recycled/secondary and or biobased material.
- **Low Carbon**: Low Carbon production methods are maintained to improve the environmental footprint of specific materials and therefore reduces the environmental footprint of a product. For further definitions see the applicable paragraph.
- **DSO: Distribution System Operator:** Grid and network operators that are responsible for the construction and maintenance of public energy infrastructures (electricity and gas).
- **Recycled content:** Proportion, by mass, of recycled material in a product per material type. For plastic recyclers the following detailing is applicable:
  - **Pre-consumer material**: Material diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it. Not excluded hereby is reutilization of rework materials obtained from a recycling process in which assembled products are separated into individual parts. Solely shredding of rework material for reutilization cannot be considered a recycling process.
  - **Post-consumer material**: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

  For end-product manufacturers and plastic suppliers, the exclusion of internal process scrap applies. Internal recycling involving the disassembly of assembled finished products into individual material waste streams is accepted.
  For upstream material suppliers and/or sub-manufacturers in non-plastics, all forms of pre-/post-consumer scrap are accepted, pending further standardisation of evidence documentation in the market.
- **Recycled/Secondary material:** Material that has been reprocessed from recovered [reclaimed] material by means of a manufacturing process and made into a final product or into a component for incorporation into a product.
- **Recovered [reclaimed] material:** Material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered [reclaimed] as a material input, in lieu of new primary material, for a recycling or a manufacturing process.
- **Environmentally sustainable energy:** (electric) Energy which comes from renewable energy sources according EU Taxonomy and/or sources considered by the EU Taxonomy as Taxonomy-aligned.
- **Scrap:** (see also Recycled Content): Scrap consists of recyclable materials left over from product manufacturing and consumption, such as parts of vehicles, building supplies and surplus materials and recovered with the intention of Rework or Recycling. Unlike waste, scrap can have monetary value. Scrap falls into two categories when referring to ISO 14021. See definition Pre-consumer material.

Supply Chain terms (designation in this document)

- **Material Supplier** also referred to as material processor or primary processor: An entity that transforms raw, extracted or waste materials into base materials or semi-finished goods. This includes industrial processors such as aluminum producers or polymer producers, who receive input from upstream sources (e.g. mines, refineries or chemical plants) and convert it into usable material streams for further processing or manufacturing.
- **Converter/sub-manufacturer** also referred to as Secondary Processor: The entity that operates between the material supplier and the product manufacturer. This organization further processes, transforms, or transfers materials or semi-finished goods within the supply chain.
- **Product Manufacturer**: The entity responsible for manufacturing and/or assembling the final product that is delivered to the Distribution System Operator (DSO), also referred to as the end-product manufacturer.
- **Tier 1** = the first direct downstream supplier for the end-product manufacturer (this can be the original material supplier or a sub-manufacturer/converter).
- **Tier 2** = the second downstream supplier for the finished product manufacturer OR the original material supplier in case Tier 1 is a sub-manufacturer/converter.

2 Determination of the circularity aspects: basic principle and determination methods

2.1 Chain of Custody and Traceability

The traceability of the circular claim is based on the various models of Chain of Custody as defined in the standard ISO 22095.

The ISO 22095 describes the following models:

- 5.3.1 identity preserved model
- 5.3.2 segregated model
- 5.4.1 controlled blending model
- 5.4.2 mass balance model
    - 5.4.2.2.1 Rolling average
    - 5.4.2.2.2 Credit method
- 5.5 book and claim model

For detailed information on these models the ISO 22095 should be studied. Where standard ISO 22095 is referring to “characteristics” in any product related meaning, in this Covenant, these characteristics are considered: recycled content, biobased content, and Low Carbon i.e. the certified characteristics. Other and “non-circular” material or product characteristics are *not* considered.

The following table shows the various models and the material characteristics and processes which are accepted as proof for the certification process of this Covenant. In the table the manufacturer is assumed being the entity that delivers a product to Distribution System Operators and Supplier the entities that are part in the supply chain to the manufacturer. See terminology in section (1.3) of this Covenant.
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Some forms of mass balance are allowed under certain conditions. Annual rolling average mass balance is accepted, and credit mass-balance is accepted if verified by an independent third party. For the definitions of these mass balance models and the corresponding certification requirements, please refer to the covenant text and the explanatory document in 0Annex VI: Clarification of the Chain of Custody models as referred to in chapter 2.1 (Non-normative)

Entity	Accepted Chain of Custody Models					
	5.3.1	5.3.2	5.4.1	5.4.2.2.1	5.4.2.2.2	5.5
	Identity preserved	Segregated	Controlled blending	Rolling average	Credit	Book and Claim
Material Supplier						
Plastics						
Recyclers	X	X	X			
Biobased	X	X	X	X	X	
Metals						
Steel						
Melter recycled	X	X	X	X		
Melter low carbon	X	X	X			
Copper						
Melter recycled	X	X	X	X		
Melter low carbon	X	X	X			
Aluminum						
Melter recycled	X	X	X	X		
Melter low carbon	X	X	X			
Oil	X	X	X			
Converter/sub-manufacturer	X	X	X			
Product manufacturer	X	X	X	(1)	(2)	

(1) Rolling average for serial / batch production is allowed. The rolling average is calculated over the total input volume.
Rolling average is not applicable for engineer-to-order production.

(2) This is permitted only when the received material is certified under ISCC PLUS and supported by a corresponding ISCC PLUS certificate. If this condition is not met, option (1) shall apply.

2.2 Determination of Circular-in content

2.2.1 Origin of Circular-in content

Circular-in content must be resourced per a Chain of Custody model as described in 2.1

2.2.2 Calculation of the Circular-in content

The Circular-in content is expressed as a percentage of the mass of the Circular-in raw material used to the total mass of the material.

Per material the calculation of the Circular-in content is as follows:

X(%) = A / T *100

Where:

X is the Circular-in content, expressed as a percentage;

A is the mass of circular-in material;

T is the total mass of the raw material.

2.2.3 Documentation required for determining the Circular-in content

To determine the Circular-in content the following documentation is required:

1. Relevant documentation to be provided by the supplier of the materials and/or incoming goods of each part of the product, confirming that the provided raw materials and/or incoming goods consist of the amount of Circular-in content as specified by the supplier. Relevant documents are specified in Annex I.

2. Material recipes (data sheets) from the material batches used for the manufacturing of the product which include the Circular-in content recovered from waste according to the product related standards.
3. 12 Months of historical data preceding an audit showing traceability according to EN 15343:
    - Received loads. Circular-in materials shall be traceable to suppliers having 3rd party certificates as listed in Annex I, showing the material name and its Circular-in content;
        - If the certificate holder receives material from a recycling activity owned by the company itself or the holding, that process must be evaluated additionally based on the same principles as described in this Covenant.
    - Amount of raw material(s) entering the production process must be traceable to incoming loads per production stage;
    - Amount of raw material(s) used in manufacturing process, including scrap.

2.3 Determination of Low Carbon footprint

2.3.1 Origin of Low Carbon content (metals)

Low Carbon production methods are maintained to improve the environmental footprint of specific materials, which reduces the environmental footprint of a product.

The declared CO_2 value must match the total Global Warming Potential (GWP) for modules A1–A3 as reported in the supporting EPD, in line with ISO 14025 (Type III declaration)

CO_2-threshold for certification of low carbon metals Low carbon primary metal production route	kg CO_2-eq./kg metal
Steel	≤ 0.9
Aluminum	≤ 5,00
Copper	≤ 7,00

Note: The threshold values are set by the Technical Committee of the Raw Material Passport and are based on provided documents of proof, public information from normative institutes (such as ASI) and research by consultancy institute CE Delft.

Requirement: Low Carbon content must be resourced per a Chain of Custody model as described in 2.1 Low Carbon claim requirements: See Annex I

2.4 Procedure for verification of Circular claim

An initial investigation and yearly surveillance inspections will be executed to verify the required documentation and requirements to be met. The inspections will be preceded by Pre-audit documentation. The Pre-audit documentation shall be filled in and returned before the inspection. During the inspection, the claim(s) for Circular-in content will be verified by means of checking the documentation and registrations.

3 Verification and confirmation of the circularity data

3.1 Verification and confirmation of Circular-in content

1. The certificate holder shall present information for the Circular-in content claim according to the determination methods of chapter 2.1;
2. Kiwa shall verify the data and information presented and confirm the Circular-in content claim according to 2.4.

3.2 Verification and confirmation of Low Carbon footprint

1. The certificate holder shall present information for the Low Carbon footprint claim according to the determination methods of chapter 2.3;
2. Kiwa shall verify the data and information presented and confirm the Low Carbon claim according to 2.4.

4 Marking

The Kiwa Covenant logo (see below) may be used in connection with the Raw Materials Passport in documentation, websites, leaflets, etc.

RMP = Raw Material Passport

5 Quality management system requirements

5.1 General

The certificate holder's quality management system must comply to the by the network operators required standard quality management system *(not to be assessed within the scope of this Covenant)*.
Requirements imposed on the specific production and data processes related to the declared circularity aspects in the Raw Material Passports are included in this chapter.

5.2 Internal quality control / quality plan

The certificate holder must have an implemented and operational internal quality control scheme (IQC-scheme) in place for the control of the specific production and data processes related to the declared circularity aspects in the Raw Material Passports.

This IQC-scheme shall be derived from the example format as shown in Annex IV. The scheme must be detailed in such a way that it provides Kiwa sufficient confidence that the requirements of this Covenant are continuously fulfilled.

The manufacturer shall execute an internal audit (preferably) prior to the audit for this Covenant. The internal audit will address the same aspects as the audit for this covenant.

5.3 Control of supplier documents

The manufacturer must have a procedure in place to ensure that the products supplied under the Raw Material Passport are made from components/materials with circular aspects as declared in the Raw Material Passport. Such procedure includes:

- Timely receiving of renewed supplier certificates and declarations and timely updating of the Raw Material Passport.
- Effective process/product control and registrations to ensure that sustainable aspects are considered during all stages of product design and production.

6 Initial inspection and continous surveillance by Kiwa

6.1 Summary of investigations and inspections

This chapter contains a summary of the following investigations and inspections to be carried out in the event of certification:

1. Initial investigation;
2. Yearly surveillance inspections;
3. Control of the certificate holder's IQC-scheme.

6.2 Assesment Matrix for validation of circularity data from Raw Material Passport

Table 1 Assessment Matrix

Description of requirements	**Clause Covenant**		**Investigation within the scope of:**	
			Initial investigation	**Inspections** [2)]
Verification and confirmation of Circular-in content	3.1		X	X [1)]
Verification and confirmation of Low Carbon footprint	3.2		X	X
Marking	4		X	X
Quality management system requirements	5		X	X

1. In case the production or data processes changes significantly, the verification requirements as laid down in the IQC-scheme shall be determined again.
2. During the inspection visit, the inspector shall check the declared circularity aspects in the Raw Material Passports for a selection of by the certificate holder verified production batches. The frequency of the inspection visits is recorded in clause 7.3 'Nature and frequency of external inspections'.

6.3 Inspection of the quality system

The quality system will be checked by Kiwa on the basis of the IQC scheme (see par. 5.2).

6.4 Raw Material Passport access

As a prerequisite for conducting an audit of the certificate holder, the certification body shall be granted full access to the Raw Material Passport claims submitted by the certificate holder to the DSO. This access must be provided through one of the following means: direct access to the DSO's Raw Material Passport database, Raw Material Passport file exchange between the certificate holder and the DSO, or any other officially recognized method of sharing Raw Material Passport data. Failure to provide such access will result in the certification body being unable to proceed with certification.

6.5 Changes in the Raw Material Passports

The certificate holder shall update periodically and ad hoc all Raw Material Passports for active products. Active products are products that have been produced during the year of evaluation and products that will be or maybe produced the coming year(s).

- A periodic update will be made in May of each year.
  Updates are based on renewed supplier declarations and certificates requested and retrieved prior to the periodic update of the Raw Material Passports in May.
- Ad hoc updates are made when a characteristic changes for any reason.
  - Note: The list with materials eligible for ISCC PLUS certification is updated frequently (but irregular).

The concerned Distribution System Operators will be informed by the Certificate Holder whenever an updated version is issued. The latest version will be approved and signed off by the officer responsible for document control and archived as part of the quality control manual of the Certificate Holder.

7 Agreement on the implementation of certification

7.1 General

In addition to the requirements included in this Covenant, the general rules for certification as included in the Kiwa Regulations for Certification also apply.

In particular, these are:

- The general rules for conducting the initial evaluation to be distinguished in:
  - the way certificate holders are to be informed about how an application is handled;
  - how the tests and verifications are conducted;
  - the decision to be taken as a result of the pre-certification tests;
- The general directions for conducting inspections and the aspects to be audited;
- The measurements to be taken by Kiwa in case of Non Conformities;
- Measurements taken by Kiwa in case of improper Use of Certificates, Certification Marks, Pictograms and Logos;
- Terms for termination of the certificate;
- The possibility to lodge an appeal against decisions of measurements taken by Kiwa.

7.2 Report initial investigation

Kiwa records the results of the initial investigation in a report. This report shall comply with the following requirements:

- completeness: the report's verdicts about all requirements included in the Covenant;
- traceability: the findings on which the verdicts have been based shall be recorded in a traceable manner;
- basis for decision: the decision maker shall be able to base his decision on the findings included in the report.

7.3 Nature and frequency of external inspections

Kiwa shall carry out inspections at the certificate holder's production site(s) to investigate whether the obligations are met. At the time of validation of this Covenant this frequency has been fixed at 1 inspection visit per year per production site. For multiple sites an audit plan can be composed with onsite and remote audits, in which the main sites are visited onsite yearly and others per a combination of onsite (at least every 3 years) and remote (complementary) audits. At least one site is appointed "main site".

Inspections shall invariably include:

- The IQC-scheme of the certificate holder and the results of calculations carried out by the certificate holder;
- The correct use of marking;
- The compliance with the requirements according to chapter 2 and 3.

The findings of the inspection visits performed shall be traceably recorded, by the certification body, in a report.

7.4 Sanction policy

The sanction policy is available through the service page on the website of Kiwa.
The weighing of the non-conformities is as follows:

- A major non-conformity is applicable in case the claim in the Raw Material Passport cannot be verified (by e.g. insufficient evidence according to chapter 3) and in case the claim in the Raw Material Passport is not confirmed by the evidence presented;
  The certificate holder will correct the Raw Material Passport and will notify customers to whom may have been delivered products with a wrong (too high %) circular claim in the passport. If a non-conformity persists the certificate will be withdrawn.
- All other non-conformities observed are to be regarded as minor non-conformities.

8 Titles of standards

8.1 Public legislaton

Law/regulation	Title	Version
2008/98/EC	Waste Framework Directive	2008

8.2 List of normative documents

Standard [1)]	Title	Version
EN ISO/IEC 17020	Conformity assessment - General criteria for the operation of various types of bodies performing inspection	2012
EN ISO/IEC 17021	Conformity assessment - Requirements for bodies providing audit and certification of management systems	2015
EN ISO/IEC 17065	Conformity assessment - Requirements for bodies certifying products, processes and services	2012
EN-ISO 14021	Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling)	2016
ISO 16620-1:2015	Plastics — Biobased content — Part 1: General principles	2015
EN-ISO 14025	Environmental labels and declarations - Type III environmental declarations - Principles and procedures	2010
EN-ISO 14040	Environmental management - Life cycle assessment - Principles and framework	2006
ISO/IWA 19	Guidance principles for the sustainable management of secondary metals	2017
ISO/CD 59014	Secondary materials — Principles, sustainability and traceability requirements	Under development
EN 15343	Plastics - Recycled Plastics - Plastics recycling traceability and assessment of conformity and recycled content	2007
EN 10204	Metallic products - Types of inspection documents	2004
EN 13430	Packaging - Requirements for packaging recoverable by material recycling	2004
EN 45557	NEN EN 45557. 1.General method for assessing the proportion of recycled material content in energy-related products	2020
ISO 15270	Plastics - Guidelines for the recovery and recycling of plastics waste	2008
NEN-ISO 22095	Chain of custody - General terminology and models	2020
CEN/TR 13688	Packaging - Material recycling - Report on requirements for substances and materials to prevent a sustained impediment to recycling	2008
EN-IEC 62542	Environmental standardization for electrical and electronic products and systems - Glossary of terms	2013
2008/98/EC	Waste Framework Directive (consolidated version)	2008
Kiwa Manual K15013	Kiwa Covenant for products and processes	2022

1) The documents, in whole or in part, are normatively referenced in this document. For dated references, only the edition cited applies. For undated references, the latest edition of the reference document (including any amendments) applies.

Annex I: Third party accepted certificates.

This Annex defines the documents and additional requirements for verifying the circularity and low carbon material aspects of the Raw Material Passport. The certificate holder should be able to show documentation received from its suppliers of raw material or half products.

This documentation should state clearly the declared percentage recycled and/or bio-based content and/or low carbon material specification in the raw material or half products. These sustainable material declarations should be in line with the requirements of 2.1 Chain of Custody and Traceability. A link to the platform or certification body must be publicly available to be able to proof the validity of a certificate.

There are multiple types of documents. If a certain document is received that is not mentioned above, this shall be presented to certification institute before any certification process or activity and before using its claim for using/sending data to the Raw Material Passport.

List of accepted documents of proof:

For plastics

Mechanical Recycling -

- Recyclass : Recycling Process – RecyClass
- Eucertplast : European Certification of Plastics Recyclers | EuCertPlast
- Corepla : http://www.corepla.it/
- Blue Angel : Blue Angel | The German Ecolabel (blauer-engel.de)
- PolyCert : Certification schemes | PolyCert Europe
- Kiwa : Certification according to a Covenant

Chemical Recycling -

- Not recognized.

For metals:

- Declaration of Honour

  The acceptance of a declaration of honour (DOH), which is a self-declaration, is recognized up to limited amounts of recycled percentages as follows:

  - Copper (conductor): 50%
  - Steel general application: 50%
  - Steel as part of functional component (transformer core); 15%
  - Aluminum (cable conductor): 10%
  - Aluminum (transformer conductor) 15%
  - Brass 90%

  Note: The threshold values are set by the Technical Committee of the Raw Material Passport and are based on provided documents of proof, public information from normative institutes (such as ASI) and research by consultancy institute CE Delft.
- EPD : Environmental Product Declaration on the basis of EN-ISO 14025 (Type III declaration) issued or reviewed by an independent third party including the amount of Circular-in content declared.
- LCA : Lifecycle analysis on the basis of ISO series 14040 and issued or reviewed by independent third party and the amount of Circular-in content declared specifically.
- Specific third party certifications:
  - Kiwa Nederland B.V. : Certification according to a Covenant

For Oil:

- A Declaration of Honour accompanied by a certification that confirms the process being operated and the target oil is produced from recycled source. For example an ISO 9001 certificate with recycling as certification scope.

Biobased content

For plastics

In accordance with the definition provided in Chapter 1.3, the material is accepted if it is ISCC PLUS certified (ISCC PLUS – ISCC System (iscc-system.org)). For the material to be classified as Secondary, the ISCC certificate and/or accompanying report must explicitly specify its origin. The origin must be classified as waste/residue material in the **List of Materials Eligible for ISCC PLUS Certification** (https://www.iscc-system.org/certification/iscc-documents/iscc-material-lists/, which is updated regularly).

Low Carbon footprint

- EPD : Environmental Product Declaration on the basis of NEN-EN-ISO 14025 (Type III declaration) issued or reviewed by an independent third party.
- LCA : Lifecycle analysis on the basis of ISO series 14040 and issued or reviewed by independent third party and the amount of Circular-in content declared specifically.

Other materials not considered above

If a certificate holder wants to claim a specific material as Circular-in content, the certificate holder shall document a proposal to substantiate why that material is to be considered as Circular-in content. Which information will be evaluated by the Technical Committee. If a material is considered acceptable as Circular-in content, this will be communicated with the certificate holder including the conditions for acceptance (like certification).

The material may be added to this Annex when the Covenant is updated. If the supplier indicates that the material is of such a nature that confidentiality is desired, it may be included in a confidential appendix to the Model Covenant.

Annex II: Product Groups

The scope of certification per certificate holder is determined based on Product Groups. The following list gives a not-limited list of Product Groups applicable for this certification.

- Oil-immersed power transformers
- Oil-immersed distribution transformers
- Oil-immersed Earthing transformer
- Oil-immersed Voltage Regulating Transformer
- High Voltage 50 kV power cables
- Medium-voltage distribution cables
- Low-voltage distribution cables
- Electricity meters (smart meter)
- Gas meters (smart meter)
- Smart meter communication equipment: Gate-way
- Gas pipes
- Cable protection pipes / ducts / conduits
- 20/10 kV Ring Main Units (RMUs)
- Secondary substations (MV → LV)
- LV switchboards

Annex III – Questionnaire for Circular-in content

1. Is a procedure in place for registration and records archived for at least 12 months to be able to fulfil the requirements of this Annex;
2. Are records available for all materials received showing name and address of supplier and supplier certificate (or other document confirming the origin if applicable), batch info including material type, amount/weight, specification, date received;
3. Is a stock management system in place to identify goods coming in, stored and released traceable towards incoming batch and sold batch;
4. Are product recipes maintained describing the amounts of materials used per unit (product);
5. Is a registration in place showing material batches processed per final batch produced including:
    a. Produced quantities;
    b. Rejected, scrapped quantities.
6. Are the production logs available to confirm the above mentioned produced and rejected/scrapped amounts;
7. Does the certificate holder perform a volume reconciliation showing per desired period (month or year for the last 12 months) how much of which material is received, consumed per product (type) and the amount of product and rejects/scraps made;
8. Does the volume reconciliation show that purchased amounts exceed produced amount considering stock differences at the start and finish of a period;
9. Is a registration in place for all product batches sold;
10. Is a registration in place of all rejected and other material discarded off and re-used;
    a. Product (materials) re-used will only be considered recycling for the part initially made from Circular-in material.
11. Is an independent inspector able to verify above mentioned items for the whole period of evaluation by selection of individual batches:
    a. During the factory tour;
    b. Administratively per record keeping.

Annex IV: Model IQC scheme

Inspection subjects	Inspection aspects	Inspection method	Inspection frequency	Inspection registration
Raw materials supplied: - recipe sheets - 3rd party certificates from the raw material supplier	 - correct raw material delivery - proof of Circular-in material	 - document check - document check	 - each delivery - each delivery	 - in QMS - in QMS
Production process: - Weighing and mixing of raw materials	- percentage of Circular-in content	- weighing registrations - mixing calculation(s)	- Continuous - Per production batch	- in QMS / quality control card(s) - in QMS / quality control card(s)

Annex V: Model RMP Covenant Certificate

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Valid from !

Replaces !

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Products for primary assets of Energy Installations – Validation of circularity data from Raw Material Passport (RMP)

STATEMENT BY KIWA

With this Covenant, issued in accordance with the Kiwa Regulations for Certification, Kiwa declares that legitimate confidence exists that the products supplied by

Company name

and used as a primary asset of the energy network operators united in Netbeheer Nederland as specified in this Kiwa Covenant, may be relied upon to comply with the Kiwa model Covenant K0212902-x, the validation of circularity data for the Raw Material Passports (RMP) issued xxx including amendment dated xxx.

signature

Name signatory
Position signatory

Publication of this certificate is allowed.
Advice: consult www.kiwa.com in order to ensure that this certificate is still valid.

Certification process consists of initial and regular assessments of

- **Quality system,**
- **Circularity data Raw Material Passport**

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Certificate holder
Fill in the text

Page 2:

Covenant
K-xxx-x

Products for primary assets of Energy Installations – Validation of circularity data from Raw Material Passport

SCOPE

The table below lists the sites that covered with this certificate:

Legal name site	Scope	Address site
XXX	XXX	XXX

CIRCULARITY DATA SPECIFICATION

With this Covenant certificate the validity of the circularity aspects of the raw materials used in manufacturing of products by Company name - used as a primary asset of the energy network operators united in Netbeheer Nederland - in terms of Raw Material Passports required from the energy network operators in The Netherlands is demonstrated. The products are primary asset parts of energy distribution systems.
For the overview of products and corresponding circularity data reference is made directly to the applicable Raw Material Passport(s) issued by Company name and accepted by the applicable energy network operator(s).

COMPANY PROCESSES

The company processes as implemented and performed by Company name, including entry control of raw materials, the manufacturing of the products, storage and transport to the customers are set up in such a way that the values declared in the Raw Material Passport(s) are traceable and validated.

MARKING

The Kiwa Covenant logo (see below) may be used in connection with the raw materials passport in documentation, websites, leaflets, etc.

APPLICATION AND USE

This Covenant certificate applies to the validation of circularity data of the products used as a primary asset of Netbeheer Nederland as specified above and is not applicable for determining the fitness of function of the products for the intended application.

RECOMMENDATIONS FOR CUSTOMERS

Check at the time of delivery whether:

- the supplier has delivered in accordance with the agreement and Raw Material Passport;
- if applicable, the mark and the marking method are correct in documentation, website, leaflets etc.

If you should reject a product on the basis of the above, please contact:

- Company name;

and, if necessary,

- Kiwa Nederland B.V.

Refer to the circularity data of the products concerned as included in the Raw Material Passports by Company name as approved by the applicable energy network operator.

Annex VI: Clarification of the Chain of Custody models as referred to in chapter 2.1 (Non-normative)

Important note: The text as in the Covenant RMP and in the referred to ISO standards are leading in case below clarification is interpreted differently.

The traceability of the circular claim is based on the various models of Chain of Custody as defined in the standard ISO 22095. The ISO 22095 describes the following models. Per model an example is given. The example consists of a component / material that is part of the final product and the Chain of Custody does relate to the Recycled Content percentage in that component / material.

Identity preserved model (5.3.1)
The characteristic Recycled Content is not changed during processing / manufacturing. There is no mixing of input material so the source is always the same. Example: The granulate of the outer sheet of the power cable is made of one granulate type from one source (supplier). There are not additives used to extrude the granulate around the cable. Each and every end product (or it's component) is made from the same input source without altering the Recycled Content percentage.

Segregated model (5.3.2)
The characteristic Recycled Content is defined during design, the materials consumed are having the same characteristic but the source may vary, like for instance 30% Recycled Content in copper wire. The copper wire is bought from different suppliers but the minimum percentage Recycled Content of 30% is applicable for all supplied and consumed copper wire. The wire maybe reduced in form, there is no change in recipe that would change the original percentage Recycled Content. End products may be made from different sources but the characteristic Recycled Content percentage of the input material is preserved for all produced batches.

Controlled blending model (5.4.1)
The characteristic Recycled Content is defined during design by means of a fixed recipe. The granulate is sourced from suppliers that produce the same Recycled Content percentage and for technical reasons the granulates are mixed with other materials (with other percentages). The recipe for the mixing is then fixed and applied in all production batches. End products may be made from different sources but the characteristic Recycled Content percentage is preserved for every batch by the fixed recipe.

Mass balance model (5.4.2)
The characteristic Recycled Content percentage in the output batches may vary and based on the following two systems be claimed for each batch produced over a determined amount of time (generally a 1 year).

- **Rolling average (5.4.2.2.1)**
  The input material may per product vary in percentage Recycled Content during the period of evaluation (1 year). During the evaluation all input materials consumed for the production of each singular (component of a) product is summarized. Based on the total amount consumed and the Recycled Content Percentage per input material, the average Recycled Content Percentage is calculated. Batches of same end product (it's specified component) may have different percentages of Recycled Content but on yearly basis the average is as claimed. For example, based on 8 months with 5% and 4 months with 45% recycled content, a calculated annual average recycled content of 18.3% is accepted.

- **Credit method (5.4.2.2.2)**
  The amount of input with a certified portion of Recycled Content may not exceed the amount of output with the same certified portion of Recycled Content over the period of evaluation.
  Example 1:
  Of the input of 100 tons of material, only 20 tons are certified with 30% Recycled Content. When converted into end products, on the output only an amount of product containing 20 tons of the input may be claimed to have a 30% Recycled Content. The complementary amount (80 tons) may not be claimed containing Recycled Content, even though it comes from the same production line.

  Example 2
  A material producer manufactures a physical batch of 10,000 tons of polymer. The batch contains 0.3% biobased content (which equals 30 tons of biobased material). Under the credit system, the producer can allocate this biobased content as credits to specific customers. They may sell credits equivalent to 30 tons as products claimed to be 100% biobased. The remaining physical material in the batch is not allowed to be

claimed as biobased and has to be sold as conventional material. Key principle: the total amount of credits sold (100% biobased claims) cannot exceed the actual biobased content in the batch (30 tons).

Book and claim model (5.5)

The market of the product is controlled per credits for input, trading and consumption of those credits. There is no link between physical flow and administrative flow. This model is not considered applicable for this Certification.

Annex VII: Explanatory to the Annex I use of a Declaration of Honour (Non-normative)

Preface

Declaration of Honour (DoH) is a formal statement in which a person or organization confirms something is true based on their integrity and good faith, without immediately providing official proof or certificates.

Requirements for a Declaration of Honour

- Company name and address are present.
- Date on which the declaration is signed.
- The declaration is signed by an officer who may be held legally responsible for the statement, stating name, responsibility (job/function), signature.
- The period for which the declaration is valid. Preferably 1 year and **not** more while only accepted for one year.
- The declaration shall clearly state the **minimum** amount of circular content **per** raw material / half product.
- When a window/range is declared, the lowest percentage will be considered as the actual percentage at any time. For example: Circular-in content: 5% to 10 %. In this case 5% will be accepted as circular content.
- The name/reference on the declaration shall be unique in such way that if a product/material is offered/supplied, the documentation can be identified by that unique name/reference.

Content of Declaration of Honour - template for layout and content:

Legal company name:
Legal company address info:
Chamber of Commerce number or VAT number:

Subject: Declaration of Honour - to whom it may concern

I (or we), the undersigned, hereby declare that the following products/materials are produced/manufactured with a circular content as given:

Product/material (name/reference)	Circular-in content %
...	...%
...	...%

The above percentages are justified by the circular content and ratios of the input materials as received from applicable suppliers and as processed in-house over the period of one year preceding the date of this declaration.
For the input materials we have received evidence from our suppliers to substantiate their claim(s).
The validity of this declaration is one year from the year of the date of this declaration.

Date(s):

Signature(s) (*of legal representative)*:

Annex VIII: How to prepare for audit (Non-normative)

for the certification according the Covenant K-0212902

Preface:

The certification for the Raw Material Passport according Covenant K-0212902 "*Products for primary assets of Energy Installations Validation of circularity data from Raw Material Passport (RMP)"* is a process certification. The certification confirms that the process of the supplier is capable to fulfil the requirements of the Covenant and that products entered in the RMP have the sustainable characteristics as indicated. This is substantiated by historical data being presented to the auditor prior to and during the initial audit and the yearly audits.

This Explanation and Instruction is a guiding for the audit preparation and information exchange during the audits.

Requirements:

The certification according the Covenant RMP requires the following procedures, documentation and registrations:

The certificate holder must have proof from its supplier of materials / components that these are containing the amounts of circular content as claimed. The documents needed / accepted are mentioned in Annex I of the Covenant.

The certificate holder is able to show procedures and registrations according to those procedures that the sustainable characteristics are met and will be met continuously.

Audit preparation:

This is applicable for initial and for yearly audits. During the audit, the auditor will verify the required information on the basis of the documents and logistical information that is made available, digital and/or per hardcopy. Documents can be for instance Certificates, Declarations, Bill of Materials. Logistical information most often by means of an ERP system. Such ERP system contains production batch information, material and amounts flow information, sales, receiving's and so on.

The preparation for an audit after the initial audit as mention here after must be an minor effort as procedures, documents and information should be up-to-date and made available at request at any time as part of the quality assurance and control of the auditee.

Step 1 of the audit preparation - Overview

This step determines the products and process that leads to the RMP-outcome.

a. The auditee has an overview of products that are listed in the RMP. Note:

The list shows also "which" updates have "when" been done during the preceding year:

a. When a product is added or taken of the list,

b. When the sustainable characteristics have changed. Examples:

- A supplier certificate or other declaration has a validity of 1 year . The auditee shall be in control (Quality Assurance / Control) of becoming informed about the new certificate / declaration.
- The internal process has changed and influences the sustainable characteristic.

Upon such changes the RMP must be updated accordingly.

b. The auditee has a **process description** in which is made clear how materials logistically come together when producing products listed on the RMP and how the sustainable characteristics are justified. Simplified example:

A product design is described in a Bill Of Material (BOM). In the BOM each component is described and indicated per a unique article number for this material. In case of a Circular component, the component has a separate article number to differentiate with a standard (technically similar) virgin product.

Materials / components are bought against the unique article number. When purchased they receive and are labelled with the unique number.

When a production order is going into production, the production order details are derived from the BOM with the amounts needed. A production order is one on one linked with a customer order. Logistics delivers the article in the quantities ordered from storage to production.

During production the consumed batches are registered. The amounts taken from storage are deducted to the production order from storage inventory. Per the BOM also the quantities and ratio of components is described for the extrusion process. The extruder is programmed, based on the recipe. Produced half products have a unique identification in production storage as indicated in the BOM.

Quantities produced are registered in ERP system and traceable to sales orders.

The above process is able to identify and registered the use of Circular components in the products specified in the RMP.

During a factory tour and the document and data review, the auditor will be observing the process to verify the traceability and application of Circular components.

Step 2 – Detailing

This step leads to detailed and verifiable information on the actual application of circular materials and components in the listed products and a volume reconciliation confirming that the circular claim was feasible for the period of evaluation based on consumption and availability of circular material.

a. Prepare an overview of all deliveries for products listed in the overview of step 1a. The overview containing dates and quantities (number of products or meters or ...).

b. Add to the overview the following information for only the circular components. This depends on the type of sourcing and production. Choose I) for material bought to stock and consumed from stock or II) for material bought project specific:

I. Consumed from stock

A. Product component name (see also RMP – core, wire, sheet, ...)

B. Material type (copper, PE, ...)

C. Determine the amount consumed per Circular material type (BOM * amount produced) for the period of 1 year preceding the audit.

D. Add supplier

E. In case of, for instance an extrusion process, several materials are added of which one is circular, add the percentage of circular component

Repeat for all circular components.

Example:

Product	Component	material	Amount	Supplier	%	Component	Material	.....
Cable XYZ	Sheet	PE	5334 kg	Borealis	70	Wire	Copper	Aurubis

II. Project specific

F. List material / component orders (to supplier) and deliveries for the deliveries

G. Add supplier

H. %

Example:

Product	Component	material	Orders	Supplier	%	Component	Material	.....
Transformer	Housing	iron	X123c	Samsung	70	core	iron	....

Comment: the information is preferably retrieved from the ERP system and preferably can be retrieved at any moment.

During the audit, the auditor will review the information and, by means of sampling orders from the ERP system, evaluate how above data is gathered and verify the application of Circular components in product produced and delivered under RMP.

Step 3 - Reconciliation

I. For each component under Step 2) I-A prepare an overview of following information:

a. Amount available at beginning of 12 month period.

b. Amount received during period

c. Amount available at the end of the 12 month period.

II. For each component under Step 2) I-C determine the total amount consumed during the 12 month period.

III. The amounts consumed 3-II may not exceed the amount of 3-I

During the audit, the auditor will review the information and, by means of sampling orders from the ERP system, evaluate how above data is gathered and verify feasibility.

During an audit, it is necessary that officers in charge of above information are available to answer detailed questions.