



## ENV1.3

# Sustainable resource extraction



## Objective

Our objective is to promote the use of products in buildings and their external installations that are transparent with regard to their environmental and social impacts throughout the value chain and utilise raw material extraction and processing methods that comply with recognised environmental and social standards.

## Benefits

Improved transparency helps to raise awareness regarding the sustainable resource extraction among all people involved in the value chain. This leads to the further expansion and wider dissemination of experience gained about sustainable and socio-ecologically acceptable raw material extraction and to therefore counteract environmental and social wrongs.

## Contribution to overriding sustainability goals



	CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS (SDGS) OF UNITED NATIONS (UN)		CONTRIBUTION TO THE GERMAN SUSTAINABILITY STRATEGY	
 Significant	12.2	Use of natural resources	12.1.a	Sustainable consumption
	15.2	Sustainable management of all forest types	15.3	Forests
 Moderate	8.4	Global resource efficiency and decoupling of economic development	8.1	Resource conservation
	8.7	Ending child labour	12.2	Sustainable production
	12.5	Reducing and eliminating waste		
	12.6	Sustainability reporting		
 Low			8.6	Global supply chains



## Outlook

This criterion has been fundamentally revised in order to be able to reflect the modern reality of responsibility for raw materials extraction. In terms of evaluation, this criterion is designed to enable the DGNB to further expand the scope of analysis and to enable the evaluation of the quality levels to correspond to developments in the industry.

## Share of total score

				SHARE <sup>1</sup>	WEIGHTING FACTOR
Office	Education	Residential	Hotel	2.4%	2
Consumer market		Department store			
Logistics	Production				
Shopping centre				2.3%	2
Assembly buildings				2.5%	2

<sup>1</sup> Variable, building location related factors from the criterion ENV2.2 may influence the share of total score



## EVALUATION

The use of products manufactured using raw materials that were extracted responsibly is evaluated positively if the products make up a relevant proportion of the structure, technical installations or external works in which they are used. The greater the proportion of raw materials extracted responsibly or replaced by secondary raw materials used in the building, the better the evaluation in this criterion. In this criterion, the maximum possible number of 100 points can be awarded across one or more indicators (classification of "max.100").

NO. INDICATOR	POINTS
<b>1 Sustainably produced raw materials</b>	
<b>1.1 Corporate responsibility for resource extraction (quality level 1.1)</b>	<b>Max. 12</b>
Products permanently installed inside the building or on its external surfaces which meet the requirements of quality level 1.1. and exceed the level of significance.	
■ A single product	+3
■ Two products from two different manufacturers	+6
■ Three products from three different manufacturers	+9
■ At least four products from at least four different manufacturers	12
<b>1.2 Certified sustainable resource extraction of a part of the value chain (quality level 1.2)</b>	<b>Max. 100</b>
<b>Method A – Quantitative assessment of entire material groups with moderate or minor relevance:</b>	<b>0-10</b>
Points:	
■ per material group	
■ between 0 and 10 points for between 0% and 80% of the reference value by means of linear interpolation	
■ can be added together for different material groups	
Comment: for a material group permanently installed with estimated moderate or minor relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 1.2 have been met for at least 80% of the material specific reference value.	
<b>Method B – Quantitative assessment of entire material groups with high relevance:</b>	<b>0-25</b>
Points:	
■ Per material group	
■ between 0 and 25 points for between 0% and 80% of the reference value by means of linear interpolation	
■ can be added together for different material groups	
Comment: for a material group permanently installed with estimated high relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 1.2 have been met for at least 80% of the material-specific reference value.	
<b>Method C – Qualitative assessment of products with reference to their use in the building or on its external surfaces:</b>	<b>Max. 80</b>
For products that are above the significance level and either cannot be assigned to any of the defined material groups or where there is no	



quantitative assessment available for the entire material group in accordance with Method A or B and they meet the requirements of quality level 1.2.

Points:

- per certified product over the significance level
- assessment via application of the "Building relevance factors" (in accordance with Table 1) for the various applications
- can be added together for different material groups

Comment: Points in accordance with Method C cannot be awarded in addition to Methods A and B for the same products.

### 1.3 Certified sustainable resource extraction (quality level 1.3)

**Max. 100**

**Method A – Quantitative assessment of entire material groups with moderate or minor relevance:**

**0-30**

Points:

- per material group
- between 0 and 30 points for between 0% and 80% of the reference value by means of linear interpolation
- can be added together for different material groups

Comment: for a material group permanently installed with estimated moderate or minor relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 1.3. have been met for at least 80% of the material-specific reference value.

**Method B – Quantitative assessment of entire material groups with high relevance:**

**0-70**

Points:

- per material group
- between 0 and 70 points for between 0% and 80% of the reference value by means of linear interpolation
- can be added together for different material groups

Comment: for a material group permanently installed with high relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 1.3 have been met for at least 80% of the material specific reference value.

**Method C – Qualitative assessment of products with reference to their use in the building or on its external surfaces:**

**Max. 100**

For products that are above the significance level and either cannot be assigned to any of the defined material groups or there is no quantitative assessment available for the entire material group in accordance with Method A or B and they meet the requirements of quality level 1.3.

Points:

- per certified product over the significance level
- assessment via application of the "Building relevance factors" (in accordance with Table 1) for the various applications
- can be added together for different material groups

Comment: points in accordance with Method C cannot be awarded in addition to Methods A and B for the same products.



## 2 Secondary raw materials

### 2.1 Use of secondary raw materials with self-declaration (quality level 2.1) Max. 100

#### **Method A – Quantitative assessment of entire material groups with moderate or minor relevance** 0-10

Points:

- per material group and pro rata by the secondary raw material share
- between 0 and 10 points for between 0% and 80% of the reference value by means of linear interpolation
- can be added together for different material groups

Comment: for a material group permanently installed with estimated moderate or minor relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 2.1 have been met for at least 80% of the material specific reference value.

#### **Method B – Quantitative assessment of entire material groups with high relevance:** 0-25

Points:

- per material group and pro rata by the secondary raw material share
- between 0 and 25 points for between 0% and 80% of the reference value by means of linear interpolation
- can be added together for different material groups

Comment: for a material group permanently installed with estimated high relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 2.1 have been met for at least 80% of the material specific reference value.

#### **Method C – Qualitative assessment of products with reference to their use in the building or on its external surfaces:** Max. 80

For products that are above the significance level and either cannot be assigned to any of the defined material groups or there is no quantitative assessment available for the entire material group in accordance with Method A or B and they meet the requirements of quality level 2.1.

Points:

- per certified product over the significance level
- assessment via application of the "Building relevance factors" (in accordance with Table 1) for the various applications
- can be added together for different material groups

Comment: points in accordance with Method C cannot be awarded in addition to Methods A and B for the same products.

### 2.2 Use of certified secondary raw materials with self-declaration (quality level 2.2) Max. 100

#### **Method A – Quantitative assessment of entire material groups with moderate or minor relevance:** 0-30

Points:

- Per material group and pro rata by the secondary raw material share
- between 0 and 30 points for between 0% and 80% of the reference value by means of linear interpolation



- can be added together for different material groups

Comment: for a material group permanently installed with estimated moderate or minor relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 2.2 have been met for at least 80% of the material specific reference value.

#### **Method B – Quantitative assessment of entire material groups with high relevance:**

0-70

Points:

- Per material group and pro rata by the secondary raw material share
- between 0 and 70 points for between 0% and 80% of the reference value by means of linear interpolation
- can be added together for different material groups

Comment: for a material group permanently installed with estimated high relevance with regard to the building and its external surfaces, the max. score can be achieved if the requirements of the quality level 2.2 have been met for at least 80% of the material specific reference value.

#### **Method C – Qualitative assessment of products with reference to their use in the**

Max. 100

**building or on its external surfaces:** For products that are above the significance level and either cannot be assigned to any of the defined material groups or there is no quantitative assessment available for the entire material group in accordance with Method A or B and they meet the requirements of quality level 2.2.

Points:

- per certified product over the significance level
- assessment via application of the "Building relevance factors" (in accordance with Table 1) for the various applications
- can be added together for different products

Comment: points in accordance with Method C cannot be awarded in addition to Methods A and B for the same products.

#### **Re 1 INNOVATION AREA**

**and 2**

Explanation: If it is not possible to represent sustainably extracted raw materials or secondary raw materials in accordance with the criterion and proof that all defined objectives have been achieved is available, these can, as an alternative, be credited in accordance with the evaluation scheme for indicators 1.2–1.3 and 2.1–2.2, subject to coordination and agreement with the DGNB.



**Same as  
1.2–1.3  
and  
2.1–2.2**



## SUSTAINABILITY REPORTING AND SYNERGIES

### Sustainability reporting

The use of responsibly extracted raw materials or secondary raw materials in the building can be used as key performance indicators (KPI) for communication.

NO.	KEY PERFORMANCE INDICATORS (KPIs)	UNIT
KPI 1	Mass index for the (certified) sustainably produced raw materials that are installed in the building Note: The area (GFA) or volume (GV), for instance, can be selected as a unit of reference.	kg (certified) sustainably produced raw materials/unit of reference
KPI 2	Mass index for the (certified) secondary raw materials that are installed in the building Note: The area (GFA) or volume (GV), for instance, can be selected as a unit of reference.	kg (certified) secondary raw materials/unit of reference

### Synergies with DGNB system applications

- **DGNB BUILDINGS IN USE:** The requirements for construction products can be used as part of a procurement guideline for maintenance and interior finishing in criterion 9.2 "Procurement" from the scheme for buildings in use.
- **DGNB RENOVATED BUILDINGS:** This criterion corresponds to criterion ENV1.3 "Responsible procurement" from the scheme for renovated buildings.
- **DGNB INTERIORS:** This criterion corresponds closely to criterion ENV1.3 "Sustainable resource extraction" from the scheme for interiors.



## APPENDIX A – DETAILED DESCRIPTION

### I. Relevance

The intended effect of defining different quality levels is to make the market aware of the need to promote sustainable raw materials management. Quality levels and the associated required documentation throughout the value chain contribute to increased transparency. This enables measures for improving environmental and social standards to be identified and implemented as a fundamental cornerstone of efforts to improve resource efficiency.

The objective is therefore to encourage transparency and traceability in the origin, cultivation and harvest conditions or extraction conditions of raw materials and secondary raw materials as well as in the processing of these raw materials throughout the value chain by establishing binding standards – to provide guidance for consumer decisions as well.

**Vision 2050:** The benefits of sustainable resource extraction are understood by all participants in the value chain, and the resultant areas of action and required measures are recognised and effectively implemented throughout the value chain thanks to the improved transparency. The absolute depletion of natural resources as a whole is at a level that provides future generations with the same opportunities. An effective collection and recycling infrastructure supports extensive use of secondary materials, and new technologies make sure that construction materials are assembled and processed in a way that ensures ease of recycling.

### II. Additional explanation

Standards support the communication of "invisible attributes" of raw materials and provide the companies involved with clear guidelines regarding various aspects of resource extraction. "Invisible attributes" may include social or environmental impacts, for instance, that cannot be detected by the processor and/or end user on the basis of the construction material, such as compliance with human rights laws in the extraction of raw materials or risk of groundwater contamination by chemicals used in resource extraction. Standards can convey complex information about the construction material to processors/end users credibly and reliably. They can help to harmonise and implement clear regulations and requirements on the international market.

Products used in the construction sector vary greatly in terms of their origin, production methods and processing methods. There are currently not many standards that reinforce comprehensive transparency and assurance of environmental and social standards. Many companies carry out their production operations in accordance with environmental management standards, comply with minimum social requirements or provide comprehensive reports regarding the essential sustainability aspects of their production processes as part of Corporate Social Responsibility (CSR) reports.

Designers should take the origin and extraction conditions of the raw materials used in construction products into account and actively discuss these with their building owners early in the selection process for construction materials and construction products.

### III. Method

#### Introduction and overarching information

Usage of responsibly extracted and processed products, or products that include secondary raw materials and are installed in the building or on its external works, is evaluated on the basis of the three factors.





- The first factor is the substantive conformity of the objectives of the criterion with the measures implemented in terms of content, with regard to the product. This evaluation is performed using the definition of the five quality levels described.
- The second relevant factor to the evaluation is the quality of the documentation and/or the depth of implementation with regard to the product. This evaluation is performed using the distinction between quality level 1.1 (Products with proof of corporate responsibility), quality level 1.2 (Certified products – certificate records part of the value chain or part of the content requirements) and quality level 1.3 (Certified products), as well as between quality level 2.1 (Secondary raw materials with self-declaration) and quality level 2.2 (Secondary raw materials with certificate).
- The third factor that affects the evaluation is the quantity and relevance of the (raw) material with regard to the building. This evaluation is performed using the "Method for evaluating certified products in the building".

For products of quality level 1.1, a lump sum, of up to 12 points is awarded if the manufacturers of these products have high levels of corporate responsibility and these products are over the significance level.

For products of the other quality levels, three different methods are provided.

- **Method A** can be used if quantitative documentation is presented regarding the proportion of certified products from a material group in the building as a whole, if the relevance of the material in the building is minor or moderate. Depending on the quality level, up to 10 or 30 points can be awarded for this.
- **Method B** can be used if quantitative documentation is presented regarding the proportion of certified products from a material group in the building as a whole, if the relevance of the material in the building is high. Depending on the quality level, up to 25 or 70 points can be awarded for this.
- **Method C** can be used if qualitative documentation is presented regarding the products' installation location, their certificate or their declaration and this documentation indicates that the extent to which they have been used is above the significance level. Depending on the quality level, up to 80 or 100 points can be awarded here in total via predefined "Building relevance factors". Method C is suitable for products that cannot be assigned to any material group, or as a simplified method with no documentation of the total quantity of the material group and the proportion of certified products in this material group.

The proportion of certified products from one material group in the entire building can be assigned to different quality levels in accordance with available evidence.

In principle, all products permanently installed in the building or on its external installations that belong to: Structural building components in accordance with the table 1 "Building relevance factors" (detailed list according to Appendix 1, ECO1.1) or External works (detail description in "Outdoor facilities and open spaces", Appendix 4) can be evaluated in this criterion. Products must exceed a significance level to enable indicator 1.1 and Method C to be applied. For the purposes of this criterion, products also include construction materials or assembled components or structural elements.

### Country specific adaptation and exceptions

In the vast majority of countries high-quality documentation regarding responsible resource extraction and processing currently only exists for the small number of materials, certainly for wood/timber materials and natural stone. It is recommended when using wood products or wood materials, ensure that the high proportion of certified products are used in accordance with quality levels (QL) 1.2 or 1.3 the same is valid for the natural stone products. These two material groups (wood and natural stone) shall be always considered, recognised standards for different material groups can be seen in a document published separately by the DGNB: <https://www.dgnb-system.de/en/system/label-recognition/index.php>



If there is a country specific alternative certification system or a standard for material groups available e.g. alternatives for FSC certification but not yet published by the DGNB, a project specific solution can be made via DGNB system adaptation process. Ultimately, the organisation responsible for issuing standards can request recognition from the DGNB.

### Minimum requirements

Compliance with minimum requirements should constitute an additional requirement for evaluation of products in the building or on its external works. As a general rule, it is only possible to positively evaluate construction products in - Structural building components and External works created using primary and secondary raw materials that, in their entirety (100% of the total mass):

- Have been cultivated, extracted or manufactured without the use of child labour or forced labour, and
- Have verifiably not been extracted or produced illegally.

Compliance with these minimum requirements does not need to be proven for construction products that only use primary raw materials extracted in EU countries and only use secondary raw materials produced in EU countries, as these are considered to be regulated sufficiently by EU law. Documentation of this in the form of an appropriate guarantee by the manufacturer that the minimum requirements have been complied with is required for quality level 1.1. For quality levels 1.2 and 1.3, full compliance with the minimum requirements must be guaranteed by the organisation responsible for issuing standards as part of product certification. For indicator 2 "Secondary raw materials", documentation for compliance with the minimum requirements from the time of the previous re-use of the material must be provided in full via a manufacturer declaration or a certificate.

### Indicator 1: Sustainably produced raw materials

The use of raw materials certified as having been extracted responsibly in the building or on its external works and the use of raw materials in the building or on its external works for which the manufacturer has accepted and declared complete responsibility on the corporate level are evaluated positively in indicator 1 of this criterion. Please note: The use of secondary raw materials in the form of recycled material/products can be taken into account via indicator 2 "Secondary raw materials".

#### Indicator 1.1: Corporate responsibility for resource extraction (quality level 1.1)

The envisaged objective is for companies responsible for production to have information about the origin, extraction and processing of the (raw) materials used in their products and for them to contribute to ensuring increased transparency regarding environmental and social aspects throughout the value chain, and for active pressure by market participants to result in better environmental and social standards in extraction and production.

Products that have received an evaluation in accordance with quality level 1 have been produced in compliance with the minimum requirements. In addition, documentation is available demonstrating that the company/companies responsible for manufacturing the product assume(s) responsibility on the corporate level for responsible and transparent resource extraction and processing, and communicate(s) this appropriately for instance via CSR reports that show responsibility for the supply chain and suitably document the constituents of the products.

Responsibility on the corporate level is considered to mean that the manufacturer(s) assume(s) (shared) responsibility for compliance with environmental and social standards for the extraction and processing of the (raw) materials used by them, and undertake(s) to accept responsibility for corporate due diligence in accordance with the OECD Guidelines for Multinational Enterprises or other equivalent guidelines. The following principles and processes are at least incorporated into the corporate mission statement of the manufacturer(s) of the (raw) materials used in construction materials, products and components:



- Prevention of corruption and bribery,
- Prevention of negative environmental and social impacts resulting from (raw) materials or secondary materials (e.g. conflict minerals), used by the manufacturer(s) for their production processes,
- Prevention of human rights abuses.

In addition, the manufacturer must document the origin of the primary raw materials used in the products, specify all processing steps and indicate the locations (countries and regions) in which the processing steps were carried out. As proof of this, a raw materials list with documentation of origin and a description of the processing steps with locations must be presented in the form of a manufacturer declaration.

#### **Method for evaluating certified products in accordance with quality level 1.1 in the building**

If products are permanently installed in the building or on its external surfaces that are above the significance level, they can be incorporated into the evaluation as a lump sum of three points. It should be noted here that only one product per manufacturer is taken into account in the evaluation. Up to four different products from four different manufacturers can be taken into account in the evaluation. The significance level must be estimated via an assessment of the proportion of the production costs of the structure and its external works constituted by the product under evaluation. The significance level is equal to a 0.5% share of the material costs of the product under evaluation with reference to the overall costs from structural building components and external works. If the material costs cannot be determined, the use of typical cost parameters is permitted for determining the significance level. If no typical cost parameters are available either, cost parameters including installation and processing, etc. can be used as an alternative for determining the significance level.

#### **Indicators 1.2 and 1.3: Certified sustainable resource extraction of a part of the value chain (quality level 1.2) and certified sustainable resource extraction (quality level 1.3)**

Products that have received an evaluation in accordance with quality level 1.2 or 1.3 have been produced in compliance with the minimum requirements. In addition, the component/product used has a certificate for one of the standards recognised by the DGNB ("certification system" and "label" are synonyms for the purposes of this criterion) that goes beyond the statutory regulations regarding environmental protection and occupational safety and that, via the standard itself, at least ensures compliance with certain formal (systemic) requirements and content requirements at the product level. In order to narrow the scope of verification, the DGNB maintains and publishes a list in accordance with recognised standards: <https://www.dgnb-system.de/en/system/label-recognition/index.php>

If a standard is recognised by the DGNB, and compliance with the systemic requirements (separate document) and content requirements (in accordance with Appendix 1) for standards is thereby documented, the certificate of the standard can be used as part of evaluation of this criterion. If a standard is not yet recognised, either the organisation responsible for issuing standards can request recognition from the DGNB or a project-specific recognition can be obtained via the innovation area.

#### **Requirements for standards relating to indicators 1.2 and 1.3**

The differentiation in the sustainable resource extraction as part of a standard and its application in quality level 1.2 and quality level 1.3 relates to implementation of the requirements of a recognised standard for the certified products.

- If the standard allows the certification of just sub-elements of the elements of the value added chain which are defined in the sense of the criterion (focus on a sustainable resource extraction, e.g. just extraction of raw materials and not processing, or just processing of raw materials and not extraction), this application must be classified as "Certified sustainable resource extraction of a part of the value chain" (quality level 1.2). This classification can only be carried out if the standard of mapping the currently not considered elements of the value chain is determined in the future (The integration is already announced).



or

- If the standard allows the application of either just the environmental requirements or just the social requirements in the content requirements (see Appendix 1), classification into quality level 1.2 must also be carried out.

or

- If the standard allows a "mixture" of certified and non-certified raw materials, the organisation responsible for issuing standards must either carry out classification in accordance with quality level 1.2 or have a proportional evaluation based on the proportion of certified raw materials in the product carried out by the auditor. In case of doubt, the worst assumption must be used (worst-case scenario principle).

Only documented application of the environmental and social requirements defined as essential across all essential elements of the value chain enables classification into "Certified sustainable resource extraction" (quality level 1.3).

### **Systemic requirements for the purposes of the DGNB system (applies to quality levels 1.2 and 1.3):**

The systemic requirements for certificates for sustainable resource extraction of the "Method for recognising standards as part of the DGNB system" are documented by the organisation responsible for issuing standards and fulfilled via the award criteria of the organisation (link to document to follow: "Recognition of standards as part of the DGNB system by the DGNB").

For classification of a standard into quality level 1.2, the following **content requirements** from the organisation responsible for issuing standards must be documented:

- **Content requirements for standards for the purposes of indicator 1.2 (quality level 1.2):**

The standard clearly formulates environmental and/or social requirements in accordance with Appendix 1 in the form of sustainability goals that must be designated as essential, and the implementation of which must be demonstrated and communicated, for raw materials extraction and/or processing or production of construction materials, components or construction products within a specific group. The standard goes beyond statutory regulations.

The requirements in the area of social issues are based on human rights conventions and the labour standards of the International Labour Organization (ILO), the ISEAL Assurance Code and the OECD Due Diligence Guidance. Relation to the aforementioned or equivalent standards must be demonstrated by the organisation responsible for issuing standards as part of the verification process for the label recognition process (<https://www.dgnb-system.de/de/system/labelanerkennung/verfahren/>)

Compliance with the aforementioned systemic requirements and content requirements for a construction material, component or product must be documented by means of a product-specific and manufacturer-specific certificate identifying the scope and validity period. In addition, a declaration by the responsible manufacturer is required that confirms the continuous monitoring of compliance with the requirements or documents a "chain of custody certificate". The certificate regarding compliance with the requirements, the declaration of continuous monitoring and documentation of the installation of the construction material, component or product must be presented as documentation as part of the conformity check for a building certificate.

For classification of a standard into quality level 1.3, the following **content requirements** must be documented by the organisation responsible for issuing standards:

- **Content requirements for standards for the purposes of indicator 1.3 (quality level 1.3):**

The standard clearly formulates environmental **and** social requirements in accordance with Appendix 1 in the form of sustainability goals that must be designated as essential, and the implementation of which must be demonstrated and communicated, for raw materials extraction **and** processing or production of



construction materials, components or construction products within a specific group. The standard goes beyond statutory regulations.

The requirements in the area of social issues are based on human rights conventions and the labour standards of the International Labour Organization (ILO), the ISEAL Assurance Code and the OECD Due Diligence Guidance. Relation to the aforementioned or equivalent standards must be demonstrated by the organisation responsible for issuing standards as part of the verification process for the label recognition process.

Compliance with the aforementioned systemic requirements and content requirements for a construction material, component or product must be documented by means of a product-specific and manufacturer-specific certificate identifying the scope and validity period. In addition, continuous monitoring of compliance with the requirements must be documented (e.g. via a "chain of custody certificate"). The certificate regarding compliance with the requirements, continuous monitoring and documentation of the installation of the construction material, component or product must be presented as proof as part of conformity check for a building certificate.

### **Method for evaluating certified products in accordance with quality level 1.2 or 1.3 in the building**

The evaluation can be carried out in accordance with three different methods.

Method A – Quantitative assessment of entire material groups with moderate or minor relevance:

- For a material group permanently installed with estimated moderate or minor relevance with regard to the building and its external surfaces, proof is available indicating that the requirements of quality level 1.3 have been met for at least 80% of the material-specific reference value. Assessment of the relevance of the material group in the building must be carried out on the basis of the costs. For this process, the costs of the material group with reference to overall costs from structural components and external works must be determined or plausibly estimated. If the proportion of the costs represented by the material group is less than 5% of the overall costs (total of structural components and external works), the relevance in the building must be classified as moderate to minor (Method A).

The material groups permitted for the evaluation in accordance with Method A are (with the specific reference values to be used in brackets):

- Wood and wood materials (volume)
- Natural stone (mass)
- Concrete (volume)
- Metals (mass)
- Cork (mass)
- Glass (mass)

This method can be applied for each material group. It involves linear evaluation of the proportion of certified products in the total quantity/total volume of the reference value of between 0% and 80%. The full number of evaluation points are awarded at an 80% proportion of certified products. This evaluation can be applied for the six material groups listed above. The points achieved for each material group can be added together, up to a maximum of 80 evaluation points.

Method B – Quantitative assessment of entire material groups with high relevance:

- For a material group permanently installed with estimated high relevance with regard to the building and its external surfaces, proof is available indicating that the requirements of quality level 1.3 have been met for at least 80% of the material-specific reference value. Assessment of the relevance of the material group in the



building must be carried out on the basis of the costs. For this process, the costs of the material group with reference to overall costs from building structural components and external works must be determined or plausibly estimated. If the proportion of the costs represented by the material group is greater than or equal to than 5% of the overall costs (structural components and external works), the relevance in the building must be classified as high.

The material groups permitted for the evaluation in accordance with Method A are (with the specific reference values to be used in brackets):

- Wood and wood materials (volume)
- Natural stone (mass)
- Concrete (volume)
- Metals (mass)
- Cork (mass)
- Glass (mass)

This method can be applied for each material group. It involves linear evaluation of the proportion of certified products in the total quantity/total volume of the reference value of between 0% and 80%. The full number of evaluation points are awarded at an 80% proportion of certified products. This evaluation can be applied for the six material groups listed above. The points achieved for each material group can be added together, up to a maximum of 100 evaluation points.

Method C – Qualitative assessment of products with reference to their use in the building or on its external surfaces:

- For products that are above the significance level and either cannot be assigned to any of the defined material groups or lack any quantitative assessment of their total quantity for their entire material group in accordance with Method A or B, proof that they meet the requirements of quality level 1.3 is available.

This method can be applied for each certified product that is above the significance level. The significance level must be estimated via an assessment of the proportion of the production costs of the structure and its external works constituted by the product under evaluation. The significance level is equal to a 0.5% share of the material costs of the product under evaluation with reference to the overall costs from building structural components and external works. If the material costs cannot be determined, the use of typical cost parameters is permitted for determining the significance level. If no typical cost parameters are available either, cost parameters including installation and processing, etc. can be used as an alternative for determining the significance level.

The points can be determined in accordance with the "Building relevance factors" specified in Table 1 for the various applications in the building. In each case, the proportion of the certified product in the selected reference application in the building is not relevant. The points can be added together for different products and material groups. Products that have already been evaluated in accordance with Method A or B are excluded from this (duplication of assessments is not permitted).



Table 1: Points per product in its application in the building – "Building relevance factors"

COMPONENTS	POINTS FOR PRODUCTS IN QUALITY LEVELS 1.3 OR 2.2	POINTS FOR PRODUCTS IN QUALITY LEVELS 1.2 OR 2.1
<b>External walls</b>		
Non-load-bearing or prefabricated	5	2
Cladding units and internal linings (of external walls)	3	1
External doors and windows	3	1
<b>Internal walls</b>		
Non-load-bearing or prefabricated	8	3
Internal linings (of internal walls)	8	3
Internal doors and windows	7	3
<b>Floors and ceilings</b>		
Floorings	12	5
Ceiling linings	10	4
<b>Roofs</b>		
Roof coverings and roof linings	3	1
<b>Load-bearing structures</b>		
Load-bearing external walls	8	3
External columns	2	1
Load-bearing internal walls	6	2
Internal columns	2	1
Floor structures	8	3
Roof structures	4	2
<b>Foundations</b>		
Shallow or deep foundations	2	1
Subsoil and base slabs	2	1
Floorings	2	1
<b>External works</b>		
Ground surfaces, hard surfaces, external construction works	5	2





## **Indicator 2: Secondary raw materials**

Recycling is an alternative option for reducing extraction of primary raw materials and the associated impacts. For this reason, the use of post-consumer secondary raw materials and pre-consumer secondary raw materials (which should demonstrably come from external sources; pre-consumer in-house recycling cannot be taken into account) in the building is also evaluated positively. Demonstrably recycled materials used in the building can be incorporated into the evaluation via two quality levels. Quality level 2.1 enables points to be awarded for secondary raw materials installed in the building or on its external works that confirm their secondary raw material share in the product with a self-declaration. Quality level 2.2 enables points to be awarded for secondary raw materials installed in the building or on its external works that confirm their secondary raw material share in the product with a certificate.

### **Indicator 2.1: Use of secondary raw materials with self-declaration (quality level 2.1)**

Products that have received an evaluation in accordance with quality level 2.1 have been produced in compliance with the minimum requirements. In addition, the construction material, product or component used has a self-declaration by the manufacturer that the construction material, product or component contains secondary raw materials, and this declaration specifies the associated proportions by mass (analogous to content requirements in Appendix 2). The self-declaration/manufacturer declaration can use manufacturer-specific secondary raw material shares or secondary raw material shares typical of the industry as a basis for the secondary raw material share.

### **Evaluation of secondary raw materials with self-declaration in the building**

Points can be awarded for raw materials with a secondary raw material share installed in the building or on its external works in accordance with the method applied for quality level 1.2. However, only the actual secondary raw material share in the installed product is relevant for the evaluation, via proportional awarding of the points for the indicator. As an evidence a self-declaration or manufacturer's declaration, either with the manufacturer-specific or the sector-typical proportion of secondary raw materials, must be submitted. If an industry-specific proportion of the secondary raw materials is specified, the relevant declaration or confirmation from the manufacturer is needed, where the method of production - and thus the proportion of secondary raw materials – is clarified.

### **Indicator 2.2: Use of certified secondary raw materials (quality level 2.2)**

Construction materials, products and components that have received an evaluation in accordance with quality level 2.2 have been produced in compliance with the minimum requirements. In addition, the construction material, product or component used has a certificate for a recognised standard ("certification system" and "label" are synonyms for the purposes of this criterion) that at least ensures compliance with certain formal (systemic) requirements and content requirements. In order to narrow the scope of verification, the DGNB maintains a list in accordance with recognised standards.

If a standard is already recognised by the DGNB, and compliance with the systemic requirements (separate document) and content requirements (in accordance with Appendix 2) for standards is thereby documented, the certificate of the standard can be used as part of evaluation of this criterion. If a standard is not yet recognised, either the organisation responsible for issuing standards can request recognition from the DGNB or a project-specific recognition can be obtained via the innovation area.

### **Evaluation of certified secondary raw materials in the building**

Points can be awarded for raw materials with a secondary raw material share installed in the building or on its external works in accordance with the method applied for quality level 1.3, by providing documentation of a recognised standard and documentation of the relevance of the materials in the building. However, only the actual secondary raw material share in the installed construction material, product or component is relevant for the evaluation, via proportional awarding of the points for the indicator. The certificate must be produced, detailing the secondary raw material share.





## Appendix 1: Content requirements for organisations responsible for issuing standards for recognition by the DGNB for quality levels 1.2 and 1.3

### Recognition of standards for the purposes of the criterion by the DGNB

If compliance with the systemic requirements and content requirements for standards is documented, a certificate of the standard can be referenced as part of the evaluation. If the standard is already recognised by the DGNB, this can be taken from a document published separately by the DGNB: <https://www.dgnb-system.de/en/system/label-recognition/index.php>. If a standard is not yet recognised, the organisation responsible for issuing standards can request recognition from the DGNB.

### Content requirements for standards:

The standard clearly formulates **environmental and social requirements** in the form of **sustainability goals** that are essential/significant for raw materials extraction and the processing or manufacturing of construction materials within a specific group and that demonstrate and communicate the implementation of the same. The standard goes beyond statutory regulations.

### Definition of "Environmental requirements"

The objective is to reduce negative environmental impacts in the area of raw materials extraction and processing. Compliance with the following **environmental** sustainability goals that are relevant to specific raw materials and are essential for the extraction and processing of the raw materials groups in question must be proven via the standard. The assignment of which environmental objectives are essential for which individual raw materials group is listed in a separate document and is available from the DGNB office.

1. Protection and preservation of biodiversity
2. Ensuring the continued existence and protection of ecosystems (habitat diversity) – natural environments should be returned to a state that is at least equivalent to their original state. The prohibition of deterioration applies here.
3. Preservation of protective functions of ecosystems (flood protection, potable water, avalanches, etc.)
4. Preservation of soil and landscapes by reducing land use
5. Preservation of soil quality by preventing biological, chemical and physical land degradation (e.g. soil compaction, soil erosion, soil contamination due to the use of chemicals that are harmful to the environment and health or dangerous (substances of very high concern in accordance with REACH))
6. Preservation of the natural water cycle
7. Reduction of water consumption and prevention of impacts on surface water levels and/or groundwater levels and their quality
8. Prevention of water pollution (e.g. prevention of impacts on water quality due to waste water)
9. Prevention of waste, particularly toxic waste
10. Preservation of air quality by preventing harmful emissions
11. Reduction of environmental impacts due to transportation (e.g. by using local/regional sources of raw materials).

### Definition of "Social requirements"

The objective is to reduce negative social impacts resulting from the extraction and processing of raw materials. Compliance with the relevant **social sustainability goals** that are essential for raw materials extraction and the processing and production of products in a specific group must be proven via the standard. The assignment of which social objectives are essential for which individual raw materials group is listed in a separate document and is available from the DGNB office.

1. Ban on child labour and forced labour in accordance with ILO Conventions (ILO = International Labour Organisation) (29, 105, 138 and 182)
2. Compliance with fundamental ILO core labour standards and occupational safety and health measures



- (prevention of industrial accidents/protecting workers in hazardous conditions) across the entire supply/value chain
3. Compliance with labour laws (e.g. ensuring the existence of a written contract of employment in accordance with statutory requirements), also applies for subcontractors
  4. Compliance with the right to freedom of association, protection of the right of association and compliance with the right to collective bargaining in accordance with ILO Conventions 87 and 98
  5. Equal remuneration and non-discrimination in the workplace in accordance with ILO Conventions 100 and 111
  6. Implementation of "ethical business" (such as preventing corruption, implementing fair business practices and compliance with laws)
  7. Preservation of cultural values and compliance with the rights of indigenous peoples and the local population. Prevention of resource conflicts and threats to the livelihood of the local population due to possible negative impacts of raw materials extraction, processing or manufacturing of products (expropriation and dispossession of land, forced resettlement or negative impacts on food security)

The requirements in the area of social issues are based on human rights conventions and the labour standards of the International Labour Organization (ILO), the ISEAL Assurance Code and the OECD Due Diligence Guidance. Relation to the aforementioned or equivalent standards must be demonstrated as part of the verification process. Compliance with the aforementioned systemic requirements and content requirements must be documented by means of a product-specific and manufacturer-specific certificate identifying the scope and validity period.



## Appendix 2: Content requirements for recognition by the DGNB for quality levels 2.1 and 2.2

### Recognition of standards for the purposes of the criterion by the DGNB

If compliance with the systemic requirements and content requirements for standards is documented, a certificate of the standard can be referenced as part of the evaluation in accordance with quality level 2.2. If the standard is already recognised by the DGNB, this can be taken from a document published separately by the DGNB: <https://www.dgnb-system.de/en/system/label-recognition/index.php>. If a standard is not yet recognised, the organisation responsible for issuing standards can request recognition from the DGNB.

The systemic requirements and content requirements for products with secondary raw material shares are defined as follows and documented by the organisation responsible for issuing standards:

- **Systemic requirements for the purposes of the DGNB system (applies to quality level 2.2):**  
The systemic requirements for certificates for secondary raw materials from the "Method for recognition of standards as part of the DGNB system" have been met: ( "Recognition of standards as part of the DGNB system by the DGNB" - <https://www.dgnb-system.de/de/system/labelanerkennung/verfahren/>).

For classification of a standard to quality level 2.2, the following content requirements must be documented:

- **Content requirements for standards for the purposes of indicator 2.2 (quality level 2.2):**  
The standard documents the use of secondary raw materials in manufacturing construction materials, components or construction products and their proportions in the products.  
Compliance with the aforementioned systemic requirements and content requirements for a construction material, component or product must be documented by means of a product-specific and manufacturer-specific certificate identifying the scope and validity period. In addition, continuous monitoring of compliance with the requirements must be documented (e.g. via a "chain of custody certificate"). The certificate regarding compliance with the requirements, continuous monitoring and documentation of the installation of the construction material, component or product must be presented as proof as part of conformity check for a building certificate.



## Appendix 3: Raw material-specific requirements at the building level

### 1. Use of wood and wood materials

A minimum requirement for awarding of quality level 1.2 or 1.3 for installed wood and wood products is, above all, that wood harvested via uncontrolled extraction in tropical, subtropical and boreal climate zones cannot be used. The use of tropical, subtropical or boreal woods that lack certification constitutes a failure to meet this minimum standard. In this case, no points will be awarded.

In general, the supplier of wood and wood-based materials has to prove the regulated, sustainable management of the forest of origin by submitting a "Chain of Custody" certificate. Only certificates that prove conformity with the labels \* recognized by the DGNB are accepted as evidence. The supplier must also declare the country of origin and the type of wood. Alternatively, product certification in accordance with the FSC or PEFC labels possible.

### 2. Use of natural stone

A fundamental requirement for an evaluation in accordance with quality level 1.1, 1.2 or 1.3 of a natural stone is that the product was manufactured without child labour or forced labour and an illegal raw material extraction / production is excluded. If natural stones from EU countries are used, the minimum and content requirements are assumed to be implemented. A manufacturer's declaration must be submitted as evidence, confirming compliance with the minimum requirements and stating that all places of origin and processing must be in EU countries. The use of natural stone from countries within the EU is not the subject to any restrictions. The CE marking of the product can be used as a proof of this. Natural stones with this evidence can be assessed in quality level 1.2. For the evaluation of natural stones from non-EU countries according to indicator 1, it must be proven that the requirements of ILO Convention 182 are met and that independent third-party inspections have taken place.

\*The standards recognized by the DGNB are published and updated [online](#)



## Appendix 4: Outdoor facilities and open spaces

“External works” comprise Construction services and supplies for the construction of outdoor facilities of buildings and open spaces, which are self-reliant and independent of the structures, with the associated structural installations, constructions or technical installations. This also includes built-in components permanently attached to building structures that serve the special purpose as well as overarching measures.

EXTERNAL WORKS (MAIN AND SUB-LEVELS)	CONTENT
<b>Earthworks</b>	Surface and ground works, earthworks, excavations, dams, incisions, ramparts, slope stabilisers
Manufacturing	Soil removal and soil protection including topsoil and soil application; excavation of excavations and excavations including working areas and embankments; warehousing, soil delivery and soil removal; fillings and backfills;
Enclosure	Laying and securing of excavation pits, construction units, dams, ramparts and incisions (e.g. slot, pile, sheet pile, girder screed, injection and shotcrete securing) including anchorages, bracings and embankments
Drainage	Removal of ground and layer water during construction
Excavation	Underground disruption including support and locking
<b>Foundation, substructure</b>	foundation and substructure measures of outdoor facilities and open spaces including the related earthworks and cleanliness layers, if not included in the earthworks
Soil improvements	Soil exchange, compaction, pressing in, anchoring, support measures, soil loosening, laying of geotextiles
Foundations and floor slabs	Single foundations, strip foundations, foundation, floor and floor slabs
Foundation coverings	Coverings on base, floor and foundation slabs (e.g. screeds, sealing, insulating, protective and wear layers)
Seals and lining	Construction layers below the base, floor and foundation slab, waterproofing and linings of the foundation, including insulation, as well as filter, release, clean and protective layers
Drainage	Pipes, shafts, packings, sumps, deep drainage, surface drainage



<b>Superstructure, surface layers</b>	Superstructure and surface layers of outdoor facilities and open spaces; Superstructure and surface layers with or without binders on paved surfaces, including bedding materials, joint fillings, markings and borders (e.g. ribs, edging stones)
Pathways	Superstructure and surface layers of surfaces for pedestrian and bicycle traffic
Roads	Superstructure and surface layers of areas for light and heavy traffic as well as pedestrian zones with delivery traffic
Squares, courtyards, terraces	Superstructure and surface layers of courtyards, courtyards, terraces and seats
Parking	Superstructure and surface layers of surfaces for stationary traffic
Sports field surfaces	Superstructure and surface layers of sports fields
Railway tracks	Tracks, including switches and sleepers
Airfield surfaces	Superstructure and surface layers for example of helicopter landing pads,



## APPENDIX B – DOCUMENTATION

### I. Required documentation

A range of different forms of documentation is listed below. The documentation submitted must comprehensively and clearly demonstrate compliance with the requirements for the target evaluation of the individual indicators. In addition to the documents listed below, the instructions specific to raw materials specified in Appendix 3 must also be taken into account. The tool provided by the DGNB must be used for the verification.

#### **Indicator 1: Sustainably produced raw materials**

##### **Minimum requirements:**

- Documentation by the manufacturer/processor regarding the avoidance of illegal harvesting of raw materials
- Documentation by the manufacturer/processor regarding the exclusion of child labour and forced labour (product name, issuer of the document, date of issue and signature, conformity with ILO Convention 182)
- If necessary, documentation by the manufacturer/processor regarding material procurement and/or production in Europe
- As long as compliance with the minimum requirements can be proven by submitting a label, separate documentation need not be provided

#### **Indicator 1.1: Documentation for quality level 1.1**

- Excerpts from the risk management used regarding the relevant raw material, together with results reports, analyses, measures, documentation of origin and any resulting consequences for the manufacturer (for each raw material under consideration)
- Excerpt from corporate guidelines (highlighting relevant passages, e.g. the CSR report regarding the required principles and processes of the company together with a description of the relevance of the raw material)
- Assessment/estimate of the extent to which the significance level has been exceeded

#### **Indicators 1.2 and 1.3: Documentation for quality levels 1.2 and 1.3**

- If Method A or B is applied: Quantification of the raw material used (e.g. via building elements catalogue for the life cycle assessment or via the conventional method on the basis of the tenders)
- Specification of the type of the relevant raw materials from the same raw materials group installed (e.g. wood, wood products and/or wood materials)
- Proof that the products used are certified with a standard (label) recognised by the DGNB
- Delivery note or invoice from the supplier (specifying the CoC certification number and the name of the project under certification). The delivery document must indicate the certification status of the item being documented, if required by the applicable standard (e.g. FSC, PEFC or CSC Silver/Gold certification)
- Drop shipments: if the products are sourced via a dealer who simply passes on the original packaging, this dealer must present the delivery note/invoice from their supplier, which must specify its CoC certification number, the certification status of the item being documented, the name of the dealer and the certified project



- If Method C is applied: assessment/estimate of the extent to which the significance level has been exceeded

Please note: Implementation of the requirement for certified raw materials/products/components is only worthwhile if this was already formulated in the tender. Delivery documents with the corresponding documentation are only possible if the processing company is made aware of the required certification early enough (if possible, when the order is received). It is generally not possible to issue the required documents retrospectively.

#### **Indicator 2.1: Documentation for quality level 2.1**

- Specification of the type of relevant secondary raw materials installed
- If Method A or B is applied: quantification of the secondary raw material used (e.g. via building elements catalogue for the life cycle assessment or via the conventional method on the basis of the tenders)
- If Method C is applied: assessment/estimate of the extent to which the significance level has been exceeded
- Proof that a self-declaration regarding the secondary raw material share is available for the products used

#### **Indicator 2.2: Documentation for quality level 2.2**

- Specification of the type of relevant secondary raw materials installed
- If Method A or B is applied: quantification of the secondary raw material used (e.g. via building elements catalogue for the life cycle assessment or via the conventional method on the basis of the tenders)
- If Method C is applied: assessment/estimate of the extent to which the significance level has been exceeded
- Proof that the products used are certified with a standard (label) recognised by the DGNB
- Delivery note or invoice from the supplier (specifying the CoC certification number and the name of the project under certification). The delivery document must indicate the certification status of the item being documented, if required by the applicable standard (e.g. FSC or PEFC certification)
- Drop shipments: if the products are sourced via a dealer who simply passes on the original packaging, this dealer must present the delivery note/invoice from their supplier, which must specify its CoC certification number, the certification status of the item being documented, the name of the dealer and the certified project

Please note: Implementation of the requirement for certified secondary raw materials/products/components is only worthwhile if this was already formulated in the tender. Delivery documents with the corresponding documentation are only possible if the processing company is made aware of the required certification early enough (if possible, when the order is received). It is generally not possible to issue the required documents retrospectively.





## APPENDIX C – LITERATURE

### I. Version

#### Change log based on version 2018

PAGE	EXPLANATION	DATE
all	General: scheme “Assembly buildings” has been added	16.09.2021
all	Evaluation: clarification on point interpolation e.g. 0-10 instead of +10	16.09.2021
166	Method: clarification on evaluation of secondary raw materials with self-declaration	16.09.2021
171	Appendix 3: clarification on raw material-specific requirements at the building level	16.09.2021

### II. Literature

- Sustainable Development Goals icons, United Nations/globalgoals.org
- International Labour Organisation (ILO):
  - Convention 29 – Forced Labour, 1930
  - Convention 98 – Right to Organise and Collective Bargaining Convention, 1949
  - Convention 105 – Abolition of Forced Labour, 1957
  - Convention 138 – Minimum Age Convention, 1973
  - Convention 182 – Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, 1999
- OECD Guidelines for Multinational Enterprises