

Cradle to Cradle Certified® Product Standard

Version 4.0 to Version 4.1 Comparison:

Summary of Modifications

May 2024

This document contains a high-level comparison of the requirements in Version 4.0 and Version 4.1 of the Cradle to Cradle Certified® Product Standard, highlighting modifications made to the requirements.

General Requirements – Compliance Assurance and Measurable Improvement

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	No change: A certification compliance assurance system is in place.
	No change: At least one <u>measurable</u> improvement has been made in at least one of the five standard categories. (Required at Bronze and Silver level recertification.)

General Requirements – Environmental Policy and Management

The majority of the Environmental Policy and Management requirements (Section 3.2) have been modified in Version 4.1 as follows:

- The scope of the Bronze level environmental policy, risk assessment, and strategy, and Silver and Gold level management system requirements has been increased. These requirements now apply to the applicant company rather than focusing primarily on final manufacturing stage facilities and the certified product.
- The following environmental topics must now be included in the Bronze level risk assessment in all cases: Greenhouse gas emissions and contribution to climate change, environmental pollution (air, fresh and marine water, soil), resource use and circularity, biodiversity, and ecosystems.
- For large companies ($\geq 250,000$ employees), these same issues must always be addressed in the company's environmental policy. For other companies, these issues must be addressed in the policy if they are identified as high-risk per the risk assessment.
- The scope of the Silver level monitor and verify performance requirements, and the Silver and Gold level grievance mechanism, transparency, and stakeholder engagement requirements, has been increased. These requirements now apply to the environment and human rights. Under Version 4.0, these requirements exist in the Social Fairness category and apply to human rights alone.

With these changes in place, the Environmental Policy & Management requirements will be fully aligned with the human rights due diligence requirements that already exist in the Version 4.0 Social Fairness category. This means that the standard will include a comprehensive set of human and environmental due diligence requirements aligned with leading regulations and international guidelines including the European Union's

upcoming Corporate Sustainability Due Diligence Directive and the Organization for Economic Cooperation and Development's (OECD's) Due Diligence Guidance for Responsible Business Conduct.

Notes: (1) The environmental policy section has been moved to the beginning of the Environmental Policy & Management category. The risk assessment section now follows in Section 3.2.2. (2) In Version 4.1, the Environmental Policy & Management and Social Fairness due diligence requirements are presented in two separate standard sections (as they are in Version 4.0). These requirements may be combined in future versions of the standard given the high degree of similarity.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	<p>Modified: An environmental policy based on an understanding of the company's environmental risk areas is in place. → <i>Version 4.1 requires that an environmental policy set expectations for the applicant company and the broader value chain. Under Version 4.0, the environmental policy may apply only to final manufacturing stage facilities and the supply chain of the certified product.</i></p>
	<p>Modified: Environmental risks are assessed for the applicant company, final manufacturing stage facilities, and for the product. → <i>Version 4.1 requires that the applicant company assess its environmental risks. Under Version 4.0, the risk assessment may apply to final manufacturing stage facilities and the certified product alone. In addition, Version 4.1 requires that the following topics be included in all environmental risk assessments: Greenhouse gas emissions and contribution to climate change, environmental pollution (air, fresh and marine water, soil), resource use and circularity, biodiversity, and ecosystems. Further, these issues must be considered high-risk for all large companies (i.e., companies with ≥ 250,000 employees). Finally, waste generation must now be considered a high-risk issue for manufacturing facilities located where waste tends to be poorly managed. Note that all high-risk issues must also be included in the company's environmental policy.</i></p>
	<p>Modified: A strategy for implementing the environmental policy is developed. At recertification, progress toward achieving the strategy is measured. → <i>Version 4.1 requires that the strategy for implementing the environmental policy be applicable to the applicant company in all cases. Under Version 4.0, strategies applicable only to final manufacturing stage facility companies are also accepted.</i></p>
	<p>No change: Company executives demonstrate commitment and support for establishing and maintaining a culture for achieving high levels of environmental performance.</p>
Silver	<p>Modified: Environmental performance data are requested from tier 1 suppliers associated with high-risk issues. At recertification, progress is made on supply chain data collection and corrective actions, if needed. → <i>Requesting and obtaining performance data from tier 1 suppliers (and tracking corrective actions if needed) is required in the Version 4.0 Social Fairness category. Under Version 4.1, the scope of this requirement has been expanded to include high-risk environmental issues.</i></p>

	<p>Modified: Management systems are in place that support the implementation and oversight of the policy within company operations and at final manufacturing stage facilities. → <i>Version 4.1 requires that the applicant company <u>and</u> all final manufacturing stage facilities have management systems in place to support implementation of the environmental policy. Under Version 4.0, environmental management systems are required only for final manufacturing stage facilities.</i></p>
	<p>Modified: A grievance mechanism permits stakeholders to obtain redress for negative environmental impacts. → <i>A grievance mechanism that permits stakeholders to obtain redress for negative human rights impacts is required in the Version 4.0 Social Fairness category. Under Version 4.1, the required scope of the mechanism has been expanded to include negative environmental impacts.</i></p>
	<p>Modified: The company uses open and transparent governance and reporting, making information on how environmental risks are managed and adverse impacts are addressed publicly available. → <i>A similar transparency requirement focusing on human rights risks and impacts exists in the Version 4.0 Social Fairness category. Under Version 4.1, this requirement has been expanded to also require transparency on environmental risks and impacts.</i></p>
Gold	<p>Modified: Responsible sourcing management systems are in place that support the implementation and oversight of the environmental policy within the product's supply chain. → <i>Version 4.1 requires that the responsible sourcing management system be applicable to the applicant company in all cases. Under Version 4.0, responsible sourcing management systems applicable only to final manufacturing stage facility companies are also accepted.</i></p>
	<p>Modified: A grievance mechanism permits contract manufacturer stakeholders to obtain redress for negative human rights impacts. → <i>A grievance mechanism that permits contract manufacturer stakeholders to obtain redress for negative human rights impacts is required in the Version 4.0 Social Fairness category. Under Version 4.1, the required scope of the mechanism has been expanded to also include negative environmental impacts.</i></p>
	<p>Modified: The company incorporates stakeholder engagement and feedback into environmental risk management. Stakeholder feedback informs strategy and operations. → <i>A similar stakeholder engagement requirement focusing on human rights exists in the Version 4.0 Social Fairness category. Under Version 4.1, this requirement has been expanded to include environmental risks as well.</i></p>
Platinum	<p>Modified: Environmental objectives are incorporated into relevant employee performance evaluations, and incentives are provided to encourage top management and employees to actively participate in achieving the company's environmental goals. → <i>Version 4.1 requires that this requirement be met by the applicant company in all cases. Under Version 4.0, the requirement may alternatively be met by final manufacturing stage facility companies.</i></p>

Material Health

4.1 Compliance with Leading Chemical Regulations (4.1 Restricted Substances List Compliance under Version 4.0)

- The Version 4.1 restrictions are now fully aligned with leading regulatory restrictions. This will ease verification of compliance with this Bronze level requirement for applicants who are already complying with these regulations. Full details may be found in the Version 4.1 Cradle to Cradle Certified Restricted Substances reference document. Note that compliance with leading regulations serves as the first step towards achieving a broader set of chemical restrictions that increase with increasing achievement level.
- Textile chemical formulations may now comply with leading regulations or with the Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substances List (MRSL). Under Version 4.0, compliance with both the Restricted Substances list (RSL) and MRSL are required at the Bronze level for this product type.

4.2 Avoidance of Organohalogenes and Functionally Related Chemical Classes of Concern

- The Bronze level restrictions on halogenated flame retardants (HFRs) and organophosphate ester flame retardants (OPFRs) have been clarified to indicate that flame retardant chemicals are restricted in all cases, including when used for other (i.e., non-flame retardant) purposes.
- An exception to the Section 4.2 restrictions on organohalogenes and functionally related chemical classes of concern (i.e., PFASs, HFRs, OPFRs, and highly halogenated substances), applicable to intermediate/input products (e.g., dyestuffs), has been added to the standard. This exception allows accounting for the specified concentration of the intermediate/input in relevant end product(s) when determining if restriction limits are met. A disclaimer will be placed on the certificate in this case, given that the intermediate/input product as sold will not meet the restriction(s) in the same way as is required for consumer and other end products.

4.3 Material and Chemical Inventory

- A 100 ppm threshold for homogeneous materials being subject to review in a product has been introduced, with the following exceptions:
 - Finishes (coatings, plating, paints) are subject to review at any concentration when the part these are relevant to is itself present at $\geq 0.01\%$ in the product.
 - Any homogeneous material in the final product that comes into routine and direct human contact during the normal use of the product, is subject to review at any concentration.

Under Version 4.0, all homogeneous materials within a product are subject to review, regardless of their concentration in the product (except for minor commodity type components such as fasteners). Homogeneous materials are defined as materials of uniform composition throughout that cannot be mechanically disjointed, in principle, into different materials.

Note that this Version 4.1 change has not been shown in the table below. The change will be most relevant to highly complex products with many small components (e.g., electronics). The change is relevant to nearly all requirements in the Material Health category. For materials that are not subject to review, it is not required to demonstrate compliance with leading regulations (per Section 4.1) or with the organohalogens and functionally related chemical classes of concern restrictions (per Section 4.2). Further, materials that are not subject to review are not required to be assessed or optimized at any achievement level.

4.4 Assessing Chemicals and Materials

- The Version 4.0 requirement to determine percentage assessed based on the lower of the percentage of chemical substances that have been assessed by weight or by number (applicable to products consisting of a single homogeneous material) has been removed from the standard. In other words, it is no longer required to determine percentage assessed by number. Under Version 4.1, the percentage assessed requirements are based on weight alone.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	Modified: Product complies with leading chemical regulations → <i>The Version 4.0 Restricted Substances List (RSL) has been modified to fully align with leading regulations. Under Version 4.1, these restrictions are no longer referred to as a Restricted Substances List. In addition, textile chemical formulations may comply with leading regulations or the Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substances List (MRS�). Under Version 4.0, compliance with both the RSL and MRS� are required for this product type.</i>
	Modified: Product does not contain organohalogen substances of special concern, or functionally related, non-halogenated classes of equivalent concern, above relevant thresholds. → <i>The restrictions on flame retardants have been clarified to indicate that flame retardants are restricted in all cases, including when used for other (i.e., non-flame retardant) purposes. In addition, an exception to the organohalogen restriction applicable to intermediate products (e.g., dyestuffs) has been added. This exception allows accounting for the specified concentration of the intermediate in relevant end product(s) when determining restriction limits.</i>
	No change: Product is 100% characterized by generic material.
	Modified: Product is ≥ 75% assessed (complete formulation information collected for 100% of materials released directly into the biosphere). → <i>Under Version 4.1, it is no longer required to determine percentage assessed based on the number of assessed chemicals (applicable to single homogeneous material products only). Rather, percentage assessed is determined based on weight or concentration alone.</i>
	No change: Strategy developed to phase-out or optimize all x-assessed or grey-rated chemicals.
Silver	Modified: Product is ≥ 95% assessed (complete formulation information collected for 100% of materials released directly into the biosphere). → <i>Under Version 4.1, it is no longer required to determine percentage assessed based on the number of assessed chemicals (applicable to single</i>

	<p><i>homogeneous material products only). Rather, percentage assessed is determined based on weight or concentration alone.</i></p> <p>No change: Product does not contain materials with > 1% carbon-bonded halogens by weight, or recognized PBTs or vPvBs. Product does not contain EU CLP Cat.1 and 2 CMRs or substances causing an equivalent level of concern, or exposure is unlikely or expected to be negligible.</p> <p>No change: Product has low VOC emissions (required for products permanently installed in buildings).</p> <p>No change: Product complies with VOC content limits (required for liquid and aerosol consumer and construction products).</p>
Gold	<p>No change: 100% of homogeneous materials subject to review are assessed (i.e., none have a grey rating due to insufficient data).</p> <p>No change: Product is optimized for material health (i.e., all x-assessed chemicals replaced or phased out).</p> <p>No change: Strategy developed to either increase the percentage of preferred (A/a and/or B/b assessed) materials and chemicals in the product or optimize the chemistry in the supply chain.</p> <p>No change: Product has very low VOC emissions or is inherently non-emitting (required for products permanently installed in buildings).</p>
Platinum	<p>No change: All product relevant process chemicals are assessed (i.e., none have a grey rating due to insufficient data) and no x-assessed chemicals are used.</p> <p>Modified: > 50% of the product is assessed as A/a or B/b. → <i>Under Version 4.1, it is no longer required to determine percentage assessed based on the number of assessed chemicals (applicable to single homogeneous material products only). Rather, percentage assessed is determined based on weight or concentration alone.</i></p> <p>No change: ≥ 75% of the product's input materials or chemicals have a C2C Certified Material Health Certificate at the Gold or Platinum level or ≥ 50% of the product's input materials or chemicals are Cradle to Cradle Certified at the Gold or Platinum level or equivalent. A strategy is developed to increase percentages over time. OR Environmental health impact hotspot analysis based on life cycle assessment completed, emissions and resource use hotspots that impact human and environmental health are identified, and material health optimization strategy is developed based on the results.</p>

Product Circularity

5.1 Circularity Education (removed in Version 4.1)

The Version 4.0 Bronze level requirement to "Participate in a circularity education initiative to obtain practical knowledge about developing or improving upon the infrastructure needed for the product to be part of a

circular system” has been removed from the standard. Note: Although removed as a formal requirement, obtaining (or already having) this knowledge will still be necessary to achieve the active cycling requirements.

5.3 (Version 4.0) / 5.2 (Version 4.1) Preparing for Active Cycling

Both Version 4.0 and Version 4.1 require applicants to initiate partnerships for recovery and processing of the product at the Silver level. Further, recycling is a required pathway for all products in technical cycles. Under Version 4.0, this means that partnership(s) for recycling products in technical cycles are always required at the Silver level.

Under Version 4.1, reuse, repair, refurbish, remanufacture, or recycling are accepted as the pathway for which partnerships are initiated at the Silver level. Partnerships must then be initiated for any additional intended pathways (including recycling for products in technical cycles) at the Gold level.

5.4 (Version 4.0) / 5.3 (Version 4.1) Increasing Demand: Incorporating Cycled and/or Renewable Content

- Under Version 4.0, achievement of these requirements is based on the minimum or worst case scenario. Version 4.1 has been modified to allow for achieving these requirements based on average content or a credit method (i.e., mass balance) approach. This modification will allow for a broader range of cycled and renewable content standards to be recognized for achievement of these requirements. Note that the method employed (i.e., minimum, average, rolling average, credit method/mass balance) is required to be publicly disclosed via the Circularity Data Report.
- Because the standard now allows for acceptance of a credit method (i.e., mass balance) approach, standards focused on the verification of recycled inputs to chemical recycling processes may now be recognized (i.e., ‘C2CPII-recognized’) for achieving these requirements. Therefore, Version 4.1 requires several additional disclosures (via the Circularity Data Report) for cases where chemical recycling is employed. This includes disclosure of the technology pathway and the human and environmental health trade-offs.

5.9 (Version 4.0) / 5.8 (Version 4.1) Active Cycling

Version 4.0 requires active cycling at the Gold level for short use phase products alone. Short use phase is defined as products with a use phase of less than one year. Other products must be actively cycled at Platinum level. Under Version 4.1, active cycling is required at the Gold level for (1) products for which cycling is required per leading regulations (e.g., apparel, electronics), and (2) products with a use phase of less than four years.

Other

The 100 ppm homogeneous material subject to review threshold introduced in the Version 4.1 Material Health category (see the Material Health section above) is also relevant to the Product Circularity category. In general, the materials subject to review in Material Health are also subject to review in Product Circularity. This change has not been included in the table below. However, it is relevant to the requirements to define

the intended cycling pathways, use cycled and renewable content, and to use materials that are compatible for cycling.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	Removed: Applicant is involved in a circularity education initiative to gain an understanding of relevant cycling infrastructure development.
	No change: Intended cycling pathway(s) for the product and its materials are defined.
	No change: A plan has been created to address challenges with the cycling infrastructure at the end of the product's first use; potential cycling partners have been identified.
	Modified: Select product and material types contain cycled and/or renewable content. Alternative: Limitations that prevent achievement of this requirement are publicly reported. → <i>Several additional methods for achieving these requirements have been added in Version 4.1, including averages and a credit method/mass balance approach.</i>
	No change: ≥ 50% of materials by weight are compatible with the intended cycling pathway(s) (i.e., recyclable, compostable, or biodegradable).
Silver	Modified: Partnerships for cycling (recovery and processing) of the product have been initiated. If the product is intended for cycling via municipal systems, materials are compatible with those systems. → <i>For Version 4.1, initiation of partnerships for reuse, repair, refurbish, remanufacture, or recycling are now accepted at Silver level for products intended for technical cycles. Under Version 4.0, initiation of partnerships for <u>all</u> intended pathways is required at Silver level. Further, because recycling is a required pathway for all products in technical cycles, this means that under Version 4.0 partnership(s) focused on recycling are required at Silver for all products in technical cycles.</i>
	Modified: Percentage of cycled and/or renewable content, by weight, is equal to or higher than industry averages and/or is consistent with common practice. Alternative: Limitations that prevent achievement of this requirement are publicly reported. → <i>Several additional methods of achieving these requirements have been added in Version 4.1, including averages and a credit method/mass balance approach.</i>
	No change: ≥ 70% of materials by weight are compatible with the intended cycling pathway(s) (i.e., recyclable, compostable, or biodegradable).
	No change: A strategy for improving product circularity is developed including plans for: Increasing the amount of post-consumer recycled content and/or responsibly sourced renewable material, as relevant to the product type, implementing a circular opportunity or innovation, and improving the product's design for disassembly (if relevant).
Gold	Modified: Partnerships for cycling (recovery and processing) of the product according to <u>all</u> intended cycling pathways have been initiated. → <i>Moved from the Version 4.0 Silver level to the Version 4.1 Gold level.</i>

	<p>Modified: Percentage of cycled and/or renewable content, by weight, is consistent with values achieved by industry leaders for the product type. Alternative: Limitations that prevent achievement of this requirement are publicly reported. → <i>Several additional methods of achieving these requirements have been added in Version 4.1, including averages and a credit method/mass balance approach.</i></p>
	<p>No change: ≥ 90% of materials by weight are compatible with the intended cycling pathway(s) (i.e., recyclable, compostable, or biodegradable) and support high-value cycling. This means that the materials are of high quality and are likely to retain their value for subsequent use. If relevant, parts containing these materials are designed for easy disassembly.</p>
	<p>No change: The strategy has been implemented including: Increased use of post-consumer and/or responsibly sourced renewable material as relevant to the product type. Alternative: Limitations that prevent increased use are publicly reported. A circular opportunity or innovation that increases product circularity.</p>
	<p>Modified: The product is actively cycled (recovered and processed) and/or a program is implemented to increase the cycling rate or quality of the product's materials after use. (Both are required for short-use phase products and for products required to be cycled per leading regulations; one is required for long-use phase products.) For select single-use plastic products, a minimum cycling rate of 50% is achieved. → <i>In Version 4.1, active cycling is required at the Gold level for (1) products for which cycling is required per leading regulations (e.g. apparel, electronics), and (2) products with a use phase of less than four years. The definition of short use phase has been changed from one year to four years.</i></p>
Platinum	<p>No change: At least two intended cycling pathways are defined for the product and its materials.</p>
	<p>Modified: Percentage of cycled and/or renewable content, by weight, has reached the technically feasible maximum. → <i>Several additional methods of achieving these requirements have been added in Version 4.1, including averages and a credit method/mass balance approach.</i></p>
	<p>No change: ≥ 99% of materials by weight are compatible with the intended cycling pathway(s) (i.e., recyclable, compostable, or biodegradable). If relevant, parts containing these materials are designed for easy disassembly.</p>
	<p>No change: The product is actively cycled in an amount consistent with the product's use phase (the shorter the use phase, the higher the minimum percentage required) and a program is implemented to increase the cycling rate or quality of the product's materials after use.</p>
	<p>No change: Cycling rates and quality are monitored over time, and an increase in cumulative cycling rate or quality is demonstrated.</p>

Clean Air & Climate Protection

6.2 Quantifying Electricity Use and Greenhouse Gas Emissions & 6.6 Transparency

An Environmental Product Declaration (EPD) is required at the Silver level under Version 4.1 for construction products and building materials used to construct the primary building elements. Note: This means that a verified life cycle assessment (LCA) is also required at Silver level for this product type. This is required at the Gold level for this product type under Version 4.0.

6.3 Clean Air & Climate Protection Strategy

Estimating the cost of achieving the renewable electricity and greenhouse gas emissions targets at the next higher certification level is no longer required as part of the strategy section. Further, the requirement to explain how the targets set are 'sufficiently ambitious' has been removed from the standard.

6.4 Using Renewable Electricity and Addressing GHG Emissions

Several changes have been made in Version 4.1 to the acceptable methods of achieving the renewable electricity and greenhouse gas emissions targets applicable to the final manufacturing stage, as follows:

- The requirement to procure renewable energy attribute certificates that support new renewable electricity generators (≤ 15 years) no longer applies when renewable electricity attributes and electricity are procured via a single contract with a utility. This means that it is not necessary to determine if attribute certificates provided by a utility together with an electricity purchase were originally unbundled when obtained by the utility.
- The definition of a long-term Power Purchase Agreement (PPA) has been changed from ≥ 15 to ≥ 10 years. In addition, a PPA signed pre-financing (i.e., before the relevant renewable electricity generator(s) have received financing to be built) now receives credit regardless of the term length. Note: Long-term PPAs, and now PPAs signed pre-financing, receive credit at the Gold and Platinum levels as a high-quality renewable electricity procurement option.
- Several exceptions to the Gold and Platinum level requirement that long-term PPAs support new (≤ 15 years) renewable electricity installations have been added. The exceptions are for cases where there are no grid transfers, the applicant was the original off-taker, and/or the operational commencement date was before the validity date of Version 4.0 (i.e., 1 July 2021).
- Carbon offsets may now be used to address emissions attributable to purchased electricity in locations where the nuclear power share is $> 10\%$. This is allowed only if there is no established renewable electricity market and related attribute tracking system in the region.
- Woody waste that is contaminated (e.g., with paint) may now count as renewable (and receive partial credit via the bioenergy credit sub-section of the standard) if air emissions limits are met and incinerator waste is properly managed as defined per leading regulations. This is a newly introduced alternative to the Version 4.0 approach, which requires limiting contaminants based on btu value.
- The ENERGY STAR building and plant certification or equivalent now receives credit at the Bronze and Silver levels. This new option has been incorporated into the performance improvement credit section of the standard.
- Investments in on-site emissions reductions projects now receives credit through the Gold level. Under Version 4.0 this is an option at the Bronze and Silver levels only.

- Carbon offsets are no longer accepted at the Gold level to address emissions attributable to purchased electricity in locations where there is a renewable electricity market and related attribute tracking system.
- Carbon offsets are no longer accepted at the Platinum level for achieving the final manufacturing stage targets. Under Version 4.0, offsets were still accepted at Platinum level for non-energy related emissions.

6.6 Transparency

Public disclosure regarding how the Clean Air & Climate Protection targets have been achieved (e.g., procurement of renewable energy attribute certificates, use of on-site renewables, carbon offsets etc.) is newly required beginning at the Bronze level.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	No change: Final manufacturing facilities comply with air emissions regulations or guidelines - i.e., permits, international guidelines, or industry best practice.
	No change: Annual electricity use and greenhouse gas emissions associated with the final manufacturing stage of the product have been quantified.
	Modified: A strategy for increasing use and/or procurement of renewable electricity and addressing greenhouse gas emissions has been developed. The strategy includes near and mid-term targets. → <i>The requirement to estimate the cost of achieving the next certification level has been removed. Further, the requirement to explain how targets are 'sufficiently ambitious' has been removed.</i>
	Modified: 5% target(s)* for procuring or producing renewable electricity and/or addressing greenhouse gas emissions have been achieved. Applicable to final manufacturing stage electricity and emissions only. → <i>Version 4.1 includes several changes to the methods that may be used to achieve these targets, as described in the bulleted list before this table.</i>
	No change: Products that use energy during the use phase (e.g., appliances) or that greatly impact the energy efficiency of buildings (e.g., windows, insulation), are certified using a C2CPII-recognized energy efficiency standard or similar, if available.
	Modified: Greenhouse gas emissions data for the applicant company, for all final manufacturing stage facilities, or for the final manufacturing stage of the product are made available to stakeholders. → <i>Disclosure of how the Clean Air & Climate Protection targets have been achieved is now required beginning at the Bronze level.</i>
Silver	Modified: For construction products and building materials used to construct primary building elements, the embodied emissions associated with the product from cradle to gate or through end of use have been quantified, a third-party critical review is conducted, and an Environmental Product Declaration produced. → <i>This requirement has been moved from the</i>

	<p><i>Version 4.0 Gold level to the Version 4.1 Silver level for this product type. Note that the required EPD must also be publicly disclosed per the transparency section.</i></p>
	<p>No change: The renewable electricity and greenhouse gas reduction strategy includes long-term target(s) in addition to the near and mid-term targets.</p>
	<p>Modified: 20% target(s)* for procuring or producing renewable electricity and/or addressing greenhouse gas emissions have been achieved. Applicable to final manufacturing stage electricity and emissions only. → <i>Version 4.1 includes several changes to the methods that may be used to achieve these targets, as described in the bulleted list before this table.</i></p> <p>No change: Alternative: 25% of the embodied emissions associated with the product from cradle to gate or through end of use are offset or otherwise addressed (e.g., through projects with suppliers, product redesign, savings during the use phase). Note: This is required at the Gold level in all cases.</p>
Gold	<p>No change: For all other product types, the embodied emissions associated with the product from cradle to gate or through end of use have been quantified and third-party verification or an internal review is conducted.</p>
	<p>Modified: 50% target(s)* for procuring or producing renewable electricity and/or addressing greenhouse gas emissions have been achieved. Applicable to final manufacturing stage electricity and emissions only. 50% of the renewable electricity (25% of total electricity used) is either produced on site or procured through long-term power purchase agreements (PPAs) or PPAs signed pre-financing supporting new renewable electricity installations. Alternative: Renewable electricity procurement matches 100% of electricity used at final manufacturing facilities. → <i>The definition of a long-term power purchase agreement (PPA) has been changed from ≥ 15 years to ≥ 10 years. PPAs signed pre-financing now receive equivalent credit regardless of contract term length. Several exceptions to the requirement to support new renewable electricity installations have also been added. Further, Version 4.1 includes several additional changes to the methods that may be used to achieve the Gold level targets, as described in the bulleted list before this table.</i></p>
	<p>No change: Embodied greenhouse gas emissions data are made available to stakeholders.</p>
	<p>No change: Blowing agents used in the manufacture of the product's foam materials (any foam > 1% of product by weight) have low to no global warming potential and no ozone depletion potential.</p>
	<p>No change: 25% of the embodied emissions associated with the product from cradle to gate or through end of use are offset or otherwise addressed (e.g., through projects with suppliers, product redesign, savings during the use phase).</p>
Platinum	<p>No change: For all other product types, a third-party critical review of the quantification of embodied greenhouse gas emissions associated with the product from resource extraction through end of use is conducted, and an Environmental Product Declaration produced.</p>

	<p>Modified: Fully electrify, use renewable electricity for total energy demand, and eliminate on-site greenhouse gas emissions: > 100% of electricity is renewably sourced. The electricity is produced on site or procured through long-term power purchase agreements (PPAs) or PPAs signed pre-financing that support new renewable electricity installations. Eligible sources of bioenergy receiving full credit (e.g., wastewater methane) may be used. Applicable to final manufacturing stage electricity and emissions only. → <i>Carbon offsets are no longer accepted for addressing final manufacturing stage emissions at the Platinum level. Under Version 4.0, offsets are still accepted at Platinum to address GHG emissions from non-energy related sources (if any).</i></p>
	<p>No change: 100% of the embodied emissions associated with the product from cradle to gate or through end of use are offset or otherwise addressed (e.g., through projects with suppliers, product redesign, savings during the use phase).</p>

*Depending on the achievement level, the “targets” may apply to renewable electricity procurement or on-site production and use, performance improvements (emissions intensity reductions), absolute emissions reductions, use of eligible bioenergy sources, purchase of carbon offsets, and/or financial donations or investments.

Water & Soil Stewardship

7.1 Characterizing Local and Product Relevant Water & Soil Issues

- The requirement to identify water and soil related risks at tier 1 supplier locations has been moved from the Version 4.0 Bronze level to the Version 4.1 Silver level.
- In any case where there are more than 50 tier 1 suppliers in scope for this requirement, assessment of locations beyond 50 may be conducted at recertification.

7.2 Effluent Quality Compliance

- The requirements to (1) verify that off-site, independently operated, effluent treatment facilities (if any) are in compliance with effluent quality permits or guidelines, or (if not), (2) make adjustments to ensure effluent is adequately treated at the relevant final manufacturing stage facility(ies), has been moved from the Version 4.0 Bronze level to the Version 4.1 Gold level.
- Under Version 4.1, applicants are required to request effluent quality compliance data from third-party treatment plants at Bronze level. These data must be obtained by the Silver or Gold level respectively for privately owned and government owned plants. If these data show that off-site, independently operated, effluent treatment facilities are out of compliance, the applicant must create a strategy to address the issue, and has until Gold level recertification to make adjustments that may be necessary to ensure effluent is properly treated – either on or off-site. This could (for example) involve installing new treatment equipment on-site unless the off-site plant is able to improve its own performance.
- The Silver level requirement to demonstrate effluent quality compliance of tier 1 suppliers has been removed from the Version 4.1 standard.

7.5 Strategy and 7.6 Water & Soil Conservation

- If final manufacturing facilities are not in scope for the Silver or Gold level requirements in Section 7.6 Water & Soil Conservation, it is no longer required to develop a strategy at the Bronze level or to take action at the Silver level.
- If final manufacturing stage facilities are in scope for the Silver level Section 7.6 requirement to take ‘one additional action to conserve water or soil at final manufacturing facilities or in the supply chain’, taking action in the supply chain is an option for achieving the requirement. However, this is not required until the Gold level. In other words, in this case action may be taken in the supply chain or at a final manufacturing stage facility to meet the requirement.

7.7 Assessing and Optimizing Product Relevant Chemicals in Effluent and Sludge

- For textile chemical formulations that are used as process chemicals to manufacture the certified product, compliance with the ZDHC MRS� is now accepted as an alternative to compliance with leading regulations (Per Section 4.1) at the Bronze level.
- The requirement to assess product relevant chemistry at tier 1 (and any tier for pulp & paper, leather, metal plating and textiles) has been moved from the Version 4.0 Gold level to the Version 4.1 Platinum level.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	<p>Modified: Local and product relevant water and soil issues are characterized. (Required for final manufacturing stage facilities.) → <i>The requirement to characterize water and soil related issues at tier 1 supplier locations has been moved to the Silver level.</i></p>
	<p>Modified: Final manufacturing facilities comply with water quality regulations or guidelines (i.e., permits, international guidelines, or industry best practice). Data to demonstrate the compliance status of off-site, independently operated, effluent treatment facilities (if any) are requested. → <i>In Version 4.1, the requirement to verify that off-site, independently operated effluent treatment facilities (if any) are in compliance with permits or effluent quality guidelines has been moved to the Silver and Gold levels (for privately owned and government facilities respectively). Compliance must be verified by Gold level. If it is necessary to make adjustments on-site to compensate for inadequate treatment at the off-site plant, applicants now have until Gold level recertification to do so.</i></p>
	<p>Modified: Product relevant chemicals entering effluent or sludge are in compliance with leading chemical regulations. (Required for final manufacturing stage.) → <i>Version 4.1 provides a new alternative for textile chemical formulations that are used as process chemicals to manufacture the certified product. These formulations may now comply with the Zero Discharge of Hazardous Chemicals (ZDHC) Manufacturing Restricted Substances List (MRS�) <u>or</u> with leading chemical regulations per standard Section 4.1. Note that the Version 4.0 RSL has been updated to</i></p>

	<p><i>align more closely with leading regulations (See the Material Health section above for additional information).</i></p>
	<p>No change: Water use at final manufacturing stage facilities is quantified.</p>
	<p>No change: Adequate drinking water, sanitation, and hygiene are provided (final manufacturing stage facilities only).</p>
	<p>Modified: A strategy for achieving the Silver level water and soil conservation requirements has been developed. For facilities using high volumes of water in stressed locations, the strategy includes water use reduction targets. Progress is reported at recertification. → <i>In Version 4.1, water and soil related issues occurring in the supply chain are no longer required to be included in the Bronze level strategy.</i></p>
Silver	<p>Modified: Water and soil related risks are characterized. (Required for select tier 1 suppliers of key materials.) → <i>This requirement has been moved from the Version 4.0 Bronze level to the Version 4.1 Silver level. Further, if there are more than 50 tier 1 suppliers in scope for this requirement, assessment of locations beyond 50 may be conducted at recertification.</i></p>
	<p>Modified: <u>Privately owned</u>, off-site, independently operated effluent treatment facilities (if any), comply with effluent quality guidelines or regulations. Alternatively, a strategy to address the issue has been developed. → <i>This requirement has been moved from the Version 4.0 Bronze level to the Version 4.1 Silver level.</i></p>
	<p>Modified: The Bronze level water and soil conservation strategy has been implemented including:</p> <p>At least one conservation technology or best practice at facilities expected to have the greatest water- or soil-related impacts. (Required for final manufacturing facilities with high volume processes in stressed locations and facilities with pollutant intense processes.)</p> <p>One additional action to conserve water and/or soil either at final manufacturing facilities or in the supply chain. (Required when there are any facilities with high volume or pollutant intense processes and/or in stressed locations.)</p> <p>→ <i>In Version 4.1, taking action to address water and soil related issues in the supply chain is an option at the Silver level. Under Version 4.0, this was required at Silver in cases where there were issues in the supply chain and no issues to address at final manufacturing stage facilities.</i></p>
	<p>No change: Product relevant process chemicals entering effluent and sludge are defined and assessed.</p>
	<p>No change: Product relevant effluent and sludge does not contain recognized PBTs, vPvBs, or EU CLP Cat.1 and 2 CMRs, or substances causing an equivalent level of concern, or exposure via effluent and sludge is unlikely or expected to be negligible. (Required for final manufacturing stage.)</p>
	<p>No change: Water use data are made available to stakeholders.</p>
	<p>No change: A strategy for achieving the Gold level water and soil conservation requirements has been developed. Progress is reported at recertification.</p>

Gold	<p>Modified: <u>Government owned</u>, off-site, independently operated effluent treatment facilities (if any),, comply with effluent quality guidelines or regulations. Alternatively, a strategy to address the issue has been developed. → <i>This requirement has been moved from the Version 4.0 Bronze level to the Version 4.1 Gold level.</i></p> <p>For recertification at the Gold level, all off-site, independently operated effluent treatment facilities (if any), comply with effluent quality guidelines or regulations. Alternatively, manufacturing facilities comply with effluent quality guidelines for direct discharge or otherwise address the issue. → <i>This requirement has been moved from the Version 4.0 Bronze level to the Version 4.1 Gold level for <u>recertification</u>.</i></p>
	<p>No change: The Silver level water and soil conservation strategy has been implemented including:</p> <p>Conservation technologies and best practices at facilities expected to have the greatest water- and/or soil-related impacts. (Required for all final manufacturing facilities with high volume or pollutant intense processes and/or in stressed locations.)</p> <p>Actions to conserve water and/or soil in the supply chain, including the use of certified materials, working as part of multi-stakeholder group(s), and/or working directly with suppliers to implement water and soil stewardship requirements and address the processes of concern. (Required for key materials in scope.)</p>
	<p>Modified: Product relevant chemicals in effluent and sludge are assessed and optimized (i.e., none are x-assessed or grey-rated). (Required for the final manufacturing stage.) → <i>The requirement to assess product relevant chemistry at tier 1 (and any tier for pulp & paper, leather, metal plating and textiles) has been moved from the Version 4.0 Gold level to the Version 4.1 Platinum level.</i></p>
	<p>No change: A positive impact project that addresses local and/or product relevant water and/or soil issues has been implemented.</p>
Platinum	<p>No change: Water quality data are made available to stakeholders.</p>
	<p>Modified: Product relevant chemicals in effluent and sludge are assessed and optimized (i.e., none are x-assessed or grey-rated). (Required for key materials where pollutant intense processes occur at tier 1, or at any tier for leather, metal finishing, pulp/ paper and textiles.) → <i>This requirement has been moved from the Version 4.0 Gold level to the Version 4.1 Platinum level.</i></p>
	<p>No change: Impact of positive impact project demonstrated.</p>
	<p>No change: For final manufacturing stage facilities: A comprehensive effluent and sludge quality management system has been established, and Effluent and sludge produced as a result of all manufacturing processes used at the facility are optimized.</p>

Social Fairness

8.1 Human Rights Policy

- Applicants have until recertification at the Bronze level to fully implement all elements of the human rights policy. Under Version 4.0, all elements must be in place at the initial Bronze level certification.
- Any policy element(s) that are not included at the initial Bronze level certification must be disclosed/posted via an expanded scorecard or certification report or directly on C2CPII's public registry.
- Incomplete policies are not accepted at the Silver level.
- Version 4.0 requires that all policies “be formally approved and signed by a duly empowered officer of the applicant company or by the board of directors”. Version 4.1 has been modified to allow for accepting public disclosure of the policy as an alternative to a signature.
- Note: the policy section has been moved to the beginning of the Social Fairness category (replacing the risk assessment, which is now in Section 8.2).

8.3 Monitor & Verify Performance

- The Bronze level requirement to measure performance on achieving all elements of the human rights policy for the applicant company has been removed in the Version 4.1 standard. Performance must still be measured for all final manufacturing stage facilities at Bronze level.
- For final manufacturing stage facilities in high-risk locations, measuring performance (i.e., a social audit) is now required every 1.5±0.5 years, instead of once every three years.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze	Modified: A human rights policy based on international human rights standards and an understanding of the company's risk areas is in place. → <i>In Version 4.1, applicants now have until recertification at the Bronze level to ensure that their human rights policies include all of the required policy elements. Public disclosure of the missing elements is required. Incomplete policies are not accepted at Silver level. Formal approval of the policy may be demonstrated via a signature or by public disclosure of the policy.</i>
	No change: Human rights risks are assessed for the applicant company, final manufacturing stage, and direct suppliers to the final manufacturing stage (tier 1). Progress is made on assessing risks beyond tier 1 (i.e., tier 2 and beyond).
	No change: A strategy for implementing the human rights policy is developed. At recertification, progress toward achieving the strategy is measured.
	Modified: For final manufacturing stage facilities, performance against the human rights policy is measured and corrective actions for select issues (e.g., child labor, forced labor) are complete. Corrective actions are planned for any other poor performance issues and, at recertification, progress is demonstrated. → <i>Performance is no longer required to be measured for the applicant company per Version 4.1. The requirement to measure performance at final manufacturing facilities is retained. For final manufacturing facilities in high-risk locations, a social audit is now required every 1.5±0.5 years instead of once every three years.</i>
	No change: Company executives demonstrate commitment and support for establishing, promoting, maintaining, and improving a culture of social fairness.

Silver	No change: Social audit performance data are requested from tier 1 suppliers in high-risk locations. At recertification, progress is made on supply chain data collection and corrective actions, if needed. Corrective actions for select issues (e.g., child labor, forced labor) are complete.
	No change: Management systems support the implementation and oversight of the human rights policy within company operations.
	No change: A grievance mechanism permits company employees and other stakeholders to obtain redress for negative human rights impacts.
	No change: The company has implemented a positive social impact project that measurably improves the lives of employees, the local community, or a social aspect of the value chain.
	No change: The company uses open and transparent governance and reporting, making information on how human rights risks are managed and adverse impacts are addressed publicly available.
Gold	No change: Human rights risks are assessed for the product's components and raw materials (regardless of tier).
	No change: Materials associated with high risk of child or forced labor or support of conflict are certified to a C2CPH-recognized certification program or an equivalent alternative is in place. If a certification program is not available, a traceability exercise is conducted upon recertification.
	No change: Responsible sourcing management systems support the implementation and oversight of the policy within the product's supply chain.
	No change: A grievance mechanism permits contract manufacturer employees and other stakeholders to obtain redress for negative human rights impacts.
	No change: An assessment has been conducted to determine the impact of the positive impact project using quantitative metric(s). Measurable progress is demonstrated at recertification.
Platinum	No change: The company incorporates stakeholder engagement and feedback into human rights risk management. Stakeholder feedback informs strategy and operations.
	No change: The company is collaborating to develop and scale solutions to an intractable social issue within the value chain of the product.
	No change: The company fosters a diverse, inclusive, and engaged work environment in which social fairness operates as a core part of recruitment, training, remuneration, performance evaluation, and incentive structures.

Packaging for Certified Products

The Version 4.1 changes to the Packaging requirements are as follows:

- The two types of packaging (to which the Packaging requirements pertain) have been consolidated into one type under Version 4.1, as follows:

- All packaging materials contained in one sales unit as it is offered to the end user or consumer at the point of purchase (e.g., the box for a smartphone, tube for cosmetic lotion and the sales unit box it is contained in, paint can, plastic clamshell and cardboard backing for a set of kitchen knives) and not added exclusively for shipping
AND
- Any packaging materials that are intended to be used with the product or for the application or dispensing of the product (e.g., mascara tube and brush applicator, twist-up tube for lipsticks or glue sticks, paper towel or toilet paper cores)
- Compliance with leading chemical regulations and the organohalogen and functionally related chemical classes of concern restrictions (per Material Health Sections 4.1 and 4.2 respectively) is now required for all packaging types described above. This means that certain types of packaging (e.g., the outer sales unit packaging such as a toothpaste box) are newly required to comply with leading chemical regulations under Version 4.1.
- One of the circularity requirements must be met at the Bronze and Silver levels, and two of the circularity requirements must be met at the Gold for all packaging types described above. Under Version 4.0, two of the circularity requirements must be met for type 1 packaging and one for type 2 packaging at the Bronze level. There are no Silver or Gold level circularity requirements under Version 4.0.
- To receive credit for reducing packaging weight under Version 4.1, compatibility for cycling must not be reduced. This is a new requirement in Version 4.1. Under Version 4.0, credit is given for weight reduction without consideration for compatibility.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
Bronze and Silver	<p>Modified: Packaging* is in compliance with leading chemical regulations and the Bronze level organohalogen and functionally related chemical classes of concern restrictions (per Material Health Sections 4.1 and 4.2).</p> <p>Packaging* meets <u>one</u> of the following circularity requirements:</p> <ul style="list-style-type: none"> ● The sum of post-consumer cycled and renewable content is $\geq 20\%$ or equal to the percentage of cycled and renewable content required for the Silver level in Product Circularity. ● Materials are compatible with municipal cycling systems; materials intended for composting are compostable. ● The packaging is reusable/refillable, is part of a refill system, and/or has a product-specific take-back program. ● The applicant has demonstrated efforts to reduce the amount or weight of packaging materials for the certified product without reducing compatibility for cycling.

	<p>*The following packaging types are subject to these requirements: All packaging materials contained in one sales unit as it is offered to the end user or consumer at the point of purchase (e.g., the box for a smartphone, tube for cosmetic lotion and the sales unit box it is contained in, paint can, plastic clamshell and cardboard backing for a set of kitchen knives) and not added exclusively for shipping, AND Any packaging materials that are intended to be used with the product or for the application or dispensing of the product (e.g., mascara tube and brush applicator, twist-up tube for lipsticks or glue sticks, paper towel or toilet paper cores)</p> <p>→ <i>The two types of packaging described in Version 4.0 have been combined into one type in Version 4.1. All packaging in scope must comply with leading chemical regulations. The requirement to comply with two circularity requirements has been moved from the Version 4.0 Bronze level to the Version 4.1 Gold level. One circularity requirement must be achieved at Bronze and Silver levels per Version 4.1. To receive credit for weight reduction, compatibility must not be reduced.</i></p>
Gold and Platinum	<p>Modified: Packaging* meets <u>two</u> of the circularity requirements listed above. → <i>This requirement has been moved from the Version 4.0 Bronze level to the Version 4.1 Gold level.</i></p>

Animal Welfare Requirements

The Version 4.1 changes to the Animal Welfare requirements are as follows:

- The requirement to use 100% certified material has been moved from the Silver to the Gold level.
- For the Silver level, it is now required to use ≥ 50% materials and substances certified to a C2CPII-recognized animal welfare certification program, or equivalent alternative. Alternatively, if it is not possible to achieve the 50%, a feasibility analysis and public disclosure of the limitations of using the required percentage of certified material are required. A strategy for increasing the percentage and progress at recertification is also required.

Level	Version 4.1 Requirements and Explanation of Modifications Compared to Version 4.0
	<p>No change: Company policy forbids animal abuse including practices of high concern relevant to the species (e.g., mulesing, live plucking), requires provision of the five freedoms, and includes provisions for immediately addressing cases where it becomes known that abuse is occurring. A strategy for implementing a mechanism to ensure adherence to the policy is developed.</p>
	<p>No change: Progress on implementing the policy and mechanism are demonstrated.</p>
Silver	<p>Modified: ≥ 50% of animal material in scope is certified to a C2CPII-recognized animal welfare certification or equivalent. Alternative: Limitations that prevent achievement of this requirement are publicly reported. → <i>Under Version 4.0, it is required to use 100% certified</i></p>

	<i>material at the Silver level. This has been reduced to ≥ 50% in Version 4.1. Alternatively, if the 50% cannot be achieved, publicly disclosing the limitations and progress at recertification is required.</i>
Gold	Modified: 100% of animal material in scope is certified to a C2CPII-recognized animal welfare certification or equivalent. → <i>This requirement has been moved from the Version 4.0 Silver level to the Version 4.1 Gold level. The alternative option included at Silver level in Version 4.1 (public disclosure of the limitations) no longer applies at Gold.</i>