

5 Material Reutilization

5.1 *Defined Appropriate Cycle*

Required for Basic certification level

Applicant shall demonstrate the intention to optimize the product as a Technical or Biological Nutrient product (or both if the materials are easily separable) when requirements for Silver or higher are not yet fulfilled.

Required for Silver, Gold, and Platinum certification levels.

Applicant shall demonstrate that the product has successfully been designed as either a Technical or Biological Nutrient (or both if materials are easily separable); hence, the appropriate materials and chemical inputs have been intentionally selected to support the metabolism for which the product was designed. In addition, the manufacturer is in the process of developing a plan for end of life product recovery.

5.2 *Well Defined Recovery Plan*

Required for Gold and Platinum certification levels.

Applicant shall demonstrate that there is a well-defined logistics and recovery system plan for this class of product. The elements of the plan include:

- Scope: how extensive the recovery effort will be
- Timeline: when the actual recovery will begin
- Budget: commitment of resources (e.g., dollars, labor, equipment, etc.)

The plan can include partners outside the traditional supply chain (e.g., recycling partners, recovery/transportation partners, etc.). This does not necessarily mean a product take-back program. That is one potential strategy for closing the loop on the materials/product but there are several other legitimate strategies as well. For example, utilizing design for disassembly (DfD) strategies along with third party regional recyclers may be more effective in recovering and reutilizing materials than a product take back program that requires potentially very disperse products to be sent back to the manufacturer.

5.3 *Actively Closing the Loop*

Required for Platinum certification only.

Applicant shall demonstrate that the plan developed in 5.2 above has been implemented. As each manufacturing system varies, the certifying body will judge the validity and efficacy of each applicant's program on a case-by-case basis.

5.4 *Nutrient Reutilization Score >= 50*

There is no Nutrient Reutilization Score requirement for Basic certification.

For Silver certification, the applicant shall demonstrate a Nutrient Reutilization Score of 50 or higher. The certifying body will calculate this score as follows:

The **Nutrient Reutilization Score** is a combination of the recyclability/compostability and recycled/renewable content of the product and is calculated as follows:

$$\frac{(\% \text{ of the product considered Recyclable or Compostable}) * 2 + (\% \text{ Recycled or Rapidly Renewable Content})}{3} * 100$$

Example – Product X is made up of components that are 80% recyclable and it contains 40% recycled content

$$\text{Nutrient Reutilization Score} = \frac{[(0.80) * 2] + [(0.40) * 1]}{3} * 100 = 67$$

Note: For the purposes of this certification, recycled content is only counted if it positively defined (e.g., recycled content of Red assessed materials will not count). In addition, a material must be easily separable to be considered recyclable. For example, if two different materials, each easily recyclable by itself, are irreversibly joined together neither one will be considered recyclable.

The term “recyclable” is also a somewhat subjective term. The certifying body judges the inherent qualities in a material to determine recyclability even if an infrastructure for the recovery of this material has not yet been created.

Waste to energy is considered a viable strategy for “closing the loop” only at the Silver level. In addition, the product must not contain any substances that would lead to toxic air emissions to qualify.

5.5 Nutrient Reutilization Score >= 65

Required for Gold certification levels.

Applicant shall demonstrate a Nutrient Reutilization Score (as calculated above) of 65 or higher.

5.6 Nutrient Reutilization Score >= 80

Required for Platinum certification only.

Applicant shall demonstrate a Nutrient Reutilization Score (as calculated above) of 80 or higher.