

ecoloop.network

a mission to build trust and incentivise for the use of waste-based plastics

modul 1

(Version: 0.9 Date: 29.10.2018)



Contents

1. Introduction	3
2. Focus of certification in modul 1	3
3. Aspects of inspection	5
a. Boundary of balancing	5
b. Balancing method	5
c. Booking period	5
d. Ensuring coverage	6
e. Accounting management system	6
f. Additionality	7
g. Prohibition of 'double counting'	7
h. Shelf life of booked MB equivalents	7

1. Introduction

The aim is to promote and increase plastics recycling at a high level and the use of waste-based plastics.

ecoloop is a certification-program for plastic producers, recyclers as well as processors and manufacturers of plastic products.

This certification gives its customers the assurance that their products make a contribution to the circular economy through the use of waste-based plastics. All companies that have their products certified supported the network to increase the need and demand for waste-based plastics.

The certification system itself operates according to various standards: EN ISO 14021:2016, TÜV SÜD CMS 71, EuCertPlast and RAL UZ 30a and is a certification of products.

On a broad basis, ecoloop enables certification at various levels of the value chain, which documents the respective contribution to the circular economy and is intended to promote the use of waste-based plastics.

2. Focus of certification in modul 1

The use of recycled materials as a source of feedstock is an excellent opportunity to decouple value creation from the consumption of fossil resources. To a chemical manufacturer, a recycled feedstock is just another raw material that enters production. Co-feeding both recycled and virgin feedstock into the same network of chemical production plants offers a pragmatic way to enable the chemical industry to transition towards a circular economy, as well as being an enabler for other industries.

The idea of the mass balance approach is that recycled feedstock replaces an equivalent amount of virgin feedstock at the beginning of the value chain (input) to be allocated to the product (output) in such a manner that the input and output match. What happens in between is less relevant, as long as the balancing task can be met in a proven and reliable manner by considering a few boundary conditions in the calculation.



Here, the recycled-feedstock is mixed with conventional fossil-based feedstock at the very beginning of the production chain and then allocated to selected products through a precise accounting method. Balancing enables precise accounting of the amount of recycled materials used in the production plants and traceability on how these are allocated to products-to-be-sold.

Taking into account that products can be produced through different paths using different raw materials, is this balancing System based on a Standard unit. The conversion of raw materials into the Standard unit is performed on the basis of a mass balance, therefore, the Standard unit is named "raw material unit" (RMU). Through the definition of Standard units, it is assured that the amount and value of the used recycled raw materials can be converted into the amount and value of fossil raw materials. This conversion and capturing the RMU-s in an accounting System allows the use and free interchangeability of the raw materials, however under the condition that the raw materials are not used as energy carrier.

3. Aspects of inspection

In Module 1, the recycling of the waste-based raw material within the system boundaries is checked. This approach is designed in such a way that the use of recycled materials can also be used in existing production systems and thus supports the use of recycled raw materials while at the same time reducing the use of fossil raw materials.

The following sections will be reviewed:

a. Boundary of balancing

The balancing of waste based raw materials is permissible over different operating units within an integrated chemical production system. Here, the term “integrated chemical production system” denotes either a physically interconnected arrangement of production sites at the same location or the physical interconnection of operating facilities over different locations by means of dedicated transportation systems (e.g. rolling pipelines, pipelines). Operating facilities in separated locations can be considered as interconnected

b. Balancing method

A reliable procedure for continuous monitoring and securing of cover between procurement, storage, and delivery was employed. The procurement quantities have been clearly labelled and confirmed by both parties (supplier and producer).

The conversion of fossil and waste based raw materials is calculated based on RMU

c. Booking period

The booking period shall be defined prior to the conformity assessment. In principle, booking periods based on sales and booking periods based on production are acceptable as two alternatives. Depending on the chosen booking period, advertising claims can be placed for product marketing. Booking period based on manufacture.

The determined amount of waste based raw materials is already available at the time of manufacturing the product.



d. Ensuring coverage

The certificate holder employs a procedure that ensures that, in accordance with the forecast sale of certified product, the corresponding raw material can also be obtained in sufficient quantity and in due time. This procedure also considers any variation of the actual value from the standard recipes and ensures that if standard recipes are exceeded by actual values it does not imply a shortage in the balance.

e. Accounting management system

General

RMU's that entered the system boundary shall be administered in an accounting management system. Companies are allowed to manage more than one accounting management system and to use different product specific advertising claims. An RMU can only be included in one accounting system. The accounting management system chosen for a product during a certification cycle is regarded as binding.

For the production or sale of certified products, the appropriate proportion of waste based raw materials must be booked out of the accounting management system in each case.

Book entries

Book entries of RMU's into the balancing system are made in accordance with the verified conversion rates. Once the RMU's are booked into the account they are not distinguishable from their raw material anymore and are therefore arbitrarily interchangeable. RMU's can only be booked into the account after the physical entry into the system boundary and if a material use of the waste based raw material is guaranteed.

Booking out

The booking out is subject to the chosen booking period. Bookings are conducted at the time of sale of the goods. Bookings shall be documented product-specific. Booking-out is done using RMU's on the basis of standard recipes. Once a year, bookings which have been made on the



basis of standard recipes shall be adjusted by annualized actual values. The bookings may be omitted if the actual values are lower than the used standard recipes. A de-minimis threshold is applicable: It is not required to conduct adjustments for deviations $< XXX\%$ or $< XXX\text{ kg}$ (still to be defined) RMU's.

f. Additionality

The certificate holder is only allowed to use additional waste based raw materials for certified products. Additional waste based raw materials mean waste based raw materials that replace fossil raw materials from the moment of certification on.

g. Prohibition of 'double counting'

General

The accounting management system must strictly exclude double counting of RMU's. Especially if the company manages different accounting management systems.

Other double counting

Communicating a total quantity of waste based raw material used for certified products is only permitted if the impression is not created that each product sold contained an according proportion of waste based material.

h. Shelf life of booked MB equivalents

RMU's can, basically, be kept for a period of 12 months in an accounting system. Variations from this rule may be accepted if it can be proven that there is appropriate storage capacity for the waste-raw material or its derivatives on the site.