

# Chain of custody models and definitions

A reference document for sustainability  
standards systems, and to complement ISEAL's  
Sustainability Claims Good Practice Guide

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# 1 Introduction

The Chain of Custody (CoC) System (CoC Standard and supporting assurance system) is one of the key elements of most sustainability standards systems.

The objective of the CoC System is to validate claims made about the product, process, business or service covered by the sustainability standard. This is achieved by defining a set of requirements and measures that provide the necessary controls on the movement of material or products, and associated sustainability data, from approved or certified businesses through each stage of the supply chain. Many standard systems set a CoC standard for this purpose, in addition to their production or management standard.

The CoC System therefore forms the basis for any claims that can be made about the approved or certified product. The supporting assurance system (including auditing, oversight, reporting, claims approval, etc) is then used to verify that the actor involved has met the requirements of the CoC Standard and supporting policies.

Each industry and each scheme is different and the requirements of the CoC standard and supporting system will vary between schemes, sometimes even within models of the same name. In discussing these different models, it is important to have a shared baseline reference document, which is what this document aims to provide.

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This document is intended to

- › Present current definitions of the different models of CoC
- › Provide a reference for discussions about CoC using shared language
- › Provide a reference document for the ISEAL Sustainability Claims Good Practice Guide. The Guide refers to limitations of some models with regard to the resulting claims – the document helps to communicate which ‘version’ of each model is being referred to.

This document is **not** intended to

- › Provide a comprehensive overview of what each CoC model encompasses, or of all of the different permutations and interpretations of each of the models
- › Standardise CoC Models for purposes beyond the ISEAL guidance documents, and the intended uses
- › Indicate that one (or more) CoC model is preferable to another
- › Capture or describe the benefits and drawbacks for each CoC model
- › Suggest that the claims noted here reflect best practice or good practice – they are simply capturing current practice
- › Give guidance on appropriate claims for each model (this can be found in the ISEAL Sustainability Claims Good Practice Guide).

## Note

Sustainability standards systems may or may not use a ‘certification’ process for their sustainability or CoC standards. However, this is currently the most commonly used term and approach, so, for this document, products or businesses that are referred to by the sustainability claim will be termed ‘certified’. This covers all verified, monitored, certified or otherwise products where the intention is to track that quality.

## Chain of Custody, Chain of Custody System and Traceability

The following section seeks to provide definitions to distinguish the different terms used, sometimes interchangeably, regarding this topic.

In summary, the key function of a traceability system is to collect and maintain data on product characteristics and trace data along a supply chain. The fundamental differences

between CoC models lie in the handling or tracking of physical product and the handling or tracking of associated data.

The CoC standard is one of the key elements of the CoC system, and defines the requirements for the operators in the supply chain that wish to make a claim about the products they are offering.



### What is the difference between CoC and traceability?

Although often thought of as interchangeable, CoC and traceability can be defined separately. Put simply - traceability is the ability to demonstrate the CoC.

The level and type of information recorded can vary, and the demonstration of the ability to trace information can be achieved through the implementation of different CoC models.

#### Chain of custody (CoC)

‘The custodial sequence that occurs as ownership or control of the material supply is transferred from one custodian to another in the supply chain’. (Adapted from: WB, *WWF Alliance for Forest Conservation and Sustainable Use*, 2002).

Documenting chain of custody describes the list of all organisations (supply chain) that take ownership or control of a product during production, processing, shipping and retail (physically and/or administratively).

#### Chain of custody certification

Confirmation of the chain of custody or traceability in the supply chain where a certificate is issued.

#### Chain of custody model

The general term to describe the approach taken to demonstrate the link (physical or administrative) between the verified unit of production and the claim about the final product.

#### Chain of custody system

The complete set of documents and mechanisms used to verify the traceability between the verified unit of production and the claim about the final product. The CoC system is the detailed application of the chain of custody model. The system normally includes a standard, a monitoring mechanism and sometimes an associated reporting system (usually online).

#### Sustainability data

The data carrying the proof of meeting certain sustainability criteria, i.e. evidence that the material has originated from a source that has been ‘monitored’ or ‘certified’ against a sustainability standard, as distinct from commercial data.

#### Traceability

The ability to verify the history, location, or application of an item by means of documented recorded identification.

#### Traceability system

The system that records and follows the trail as products, parts, and materials come from suppliers and are processed and ultimately distributed as end products. Often when someone says ‘traceability system’ they mean an online traceability/tracking system, but this does not have to be the case. Systems used to ensure traceability vary widely and are designed to be fit for purpose (e.g. could be paper based or only go to a limited level of detail).

*For all other definitions please see the [ISEAL Glossary](#)*

### Functions of a Chain of Custody System

Depending on the approach taken, a CoC System has **some** or all of the following functions:

- › Identify origin of a final product or product component (though sometimes in equivalences (e.g. Mass balance) or actual (Identity preservation))
- › Ensure a custodial sequence along the supply chain
- › Ensure that volumes of certified material sold (outputs) match or do not exceed volumes of certified material produced or bought (inputs)
- › Link sustainability practices at a certain stage in the value chain with a product claim at the end of the chain
- › Protect and monitor the integrity of claims
- › Improve transparency in the supply chain
- › Ensure systems are in place for integrity of entities or participating operators
- › Compile life cycle analysis (LCA) data along the chain (e.g. GHG data)
- › Improve access and connection between members of the supply chain and the standard-setter
- › Allow a private scheme or third party to back up the best practices implemented by the entity.

The CoC standard is one of the key elements of the CoC system, and defines the requirements for the operators in the supply chain that wish to make a claim about the products they are offering

## 2 Chain of Custody models

There are a range of different CoC models that describe the systems used to track the movement of products and their associated claims through a supply chain.

These vary in terms of the level and detail of knowing the source of the product and its sustainability characteristics, and the complexity of implementation. Standards systems may choose to include one or several CoC models as the means to verify compliance with their CoC standard, and this will affect the claims permitted. It is strongly recommended for users to read this document in conjunction with ISEAL's Sustainability Claims Good Practice Guide for additional information and to understand the link between the CoC model and appropriate claims.

It is important to clearly determine which claims the system wishes to allow its users to make, in order to choose the appropriate CoC model(s). More information on the links between CoC and permitted claims can be found in the ISEAL Claims Good Practice Guide. The model(s) chosen will also

be affected by the commodity, the industry and whether there are any specific related legislative requirements, concerns of stakeholders in relation to the credibility and integrity of the system and the need for traceability of physical product to source.

### Note

A product may begin the journey through the supply chain under one CoC model, and transfer to another as it moves through the supply chain. In the table below, there is decreasing connection between the product and the sustainability claim and/or data. Since it is impossible to reconnect these once they are lost, changes to permitted CoC models may only ever move down the list in [Table 1](#) below, which defines a set of commonly used CoC models.

It is important to note that this is not an exhaustive list and that it is possible to vary these models as long as it can be shown to be credible and practicable. The models in this list are slightly different to those in Annex F of ISEAL's Sustainability Claims Good Practice Guide as thinking, particularly with regard to mass balance, has evolved since its publication (May 2015).

**Table 1 | Chain of custody models described in this document**

This document	How this compares to Annex F, Sustainability Claims Good Practice Guide
<b>2.1</b> Identity preservation	<b>Same</b> Identity preservation
<b>2.2</b> Segregation	<b>Same</b> Segregation
<b>2.3</b> Mass balance overview	<b>Related</b> Covers some elements of 'Mass Balance'
<b>2.3.1</b> Batch level mass balance	<b>Very similar</b> Known percentage blending
<b>2.3.2</b> Site level mass balance	<b>Similar</b> Controlled blending
<b>2.3.3</b> Group level mass balance	<b>Related</b> Covers some elements of 'Mass Balance'
<b>2.4</b> Certificate trading	<b>Same</b> Certificate trading

**Table 2** overleaf outlines the defining characteristics of the different models defined in this document. Please note that this is a summary table and different schemes may allow different options within their defined chain of custody models. Consideration of these characteristics can inform a better understanding of where the differences may lie between the different models.



## Key points

### Time frame

Note that though all of the chain of custody models ensure that volumes of certified material sold matches (or does not exceed) volumes of certified material bought, that the purchase and sale of these volumes of product may take place over very different time scales.

For identity preservation there is no time lag as each batch can be traced to its origin, whereas for mass balance a reconciliation could be considered over as much as an annual time line (i.e. volumes bought and sold within one year must balance).

### Conversion rates

Note the importance of consideration of conversion rates/ratios, noting that volume of inputs versus volumes of outputs depends on the conversion rate of a particular product.

For example, a whole cocoa pod of 1kg should not be expected to convert to 1kg of raw cocoa output, so the conversion rate needs to be taken into account when considering whether volumes balance. This is the case for all models of chain of custody where any kind of processing takes place, not just for mass balance.

## Key to figures



**Certified product**



**Non-certified product**



**Blended product**

Blended product which contains certified and non-certified product



**Certified product documentation**



**Non-certified product documentation**



**Blended product documentation**

Documentation, showing certified or non-certified claim

**Table 2** Summary of the properties of each model

	2.3 Mass balance overview					
	2.1 Identity preservation	2.2 Segregation	2.3.1 <i>Batch level mass balance</i>	2.3.2 <i>Site level mass balance</i>	2.3.3 <i>Group level mass balance</i>	2.4 Certificate trading
Ensure that volumes of certified material sold matches (or does not exceed) volumes of certified material bought <sup>1</sup>	Yes	Yes	Yes	Yes	Yes	Yes <sup>2</sup>
Traceability linked to volume reconciliation over a set time period	No	No	No	Yes	Yes	Yes
Allows mixing of certified and non-certified content	No	No	Yes	Yes	Yes	Yes
Physical traceability	Yes	Yes	Yes	Yes, to point of blending	Depends	No <sup>3</sup>
Identify origin of a final product or product component in actual product	Yes	Yes, but 'origin' may not be as specific as IP depending on the supply chain (e.g. to country or region may be possible)	Depends (lost with physical blending)	Depends (lost with physical blending)	Depends (lost with physical blending)	No

<sup>1</sup>Accounting for conversion rates

<sup>2</sup>Refers to numbers of credits as they represent volumes, rather than the volumes themselves

<sup>3</sup>No physical traceability, but can sometimes be linked to location or region, i.e. volume of production per country



## 2.1 Identity Preservation (IP) Also 'hard IP' or 'track and trace'

An IP model ensures that certified product from a certified site is kept separate from other sources. If used through the whole supply chain, it allows certified products to be uniquely traced through the production process from a production site and batch (sustainability certificate holder) to the last point of transformation or labelling of a product (or use of a claim).

In this model, the certified material cannot be physically mixed with other certified or non-certified material of the same commodity or ingredient. Material from different certified sources cannot be physically mixed and must be documented accordingly.



### Key factors Identity preservation

- › Certified physical product and associated product documentation can be traced back to the single point of origin.
- › Each lot, batch, quantity, or consignment of certified product is treated separately and clearly separated in both physical product and in associated documentation from other certified or non-certified product throughout the supply chain.

**Figure 1** Identity preservation<sup>1</sup>



<sup>1</sup>In **Figure 1** above and all following figures, numbers represent a hypothetical unit or volume of product, e.g., 15 kg of coffee beans or 15 tonnes of cocoa

## 2.2 Segregation (SG) Also 'bulk commodity' or 'soft IP'

This model ensures that certified product is kept separate from non-certified sources through each stage of the supply chain, allowing assurance that the ingredients within a particular product originate from certified sources, though it may not be possible to identify which molecule came from which certified source.

It permits the mixing of certified products/ingredients from a variety of sources certified to the same standards.

In this model, the certified material cannot be physically mixed with non-certified material of the same commodity.

Physical mixing of certified material coming from two or more different certified sources is allowed and must be documented accordingly.

### 2.2.1 Mixed IP

This model includes components of the identity preservation and segregation models. It allows one supply chain actor to combine certified volumes from several IP sources into one stock item.

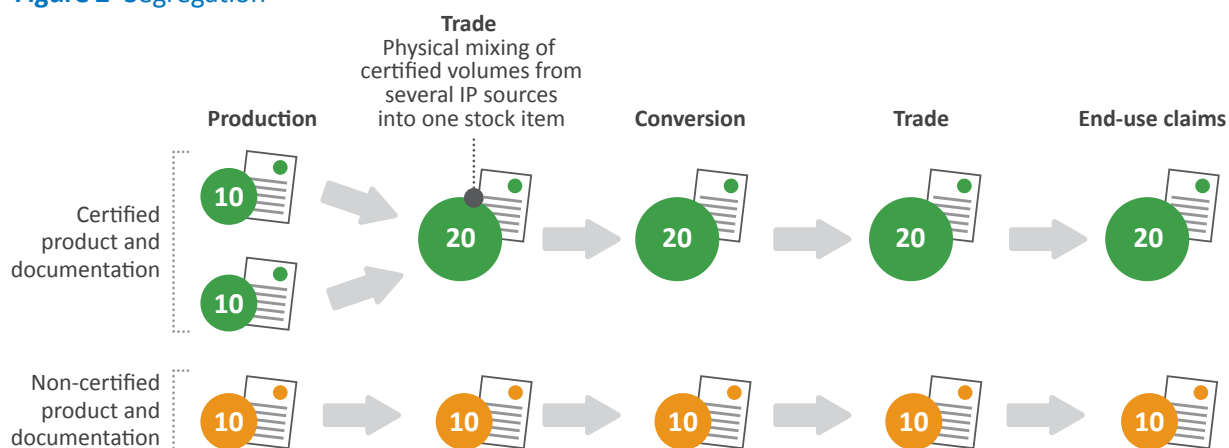
The exact origin/producer information of all individual volumes composing the mix and how much of which producer in the mixed volume remains available throughout the chain in the traceability system.



#### Key factors Segregation

- Certified product is kept physically separate from non-certified product through each stage of the supply chain.
- Permits mixing of certified product: Different lots/batches/quantities/consignments of certified physical product may be mixed only with other lots (etc) of physical product certified to the same standard, or two standards which recognize equivalence.
- The documentation associated with certified physical product clearly separates between certified and non-certified and may be used to track each individual lot/batch/quantity/consignment of certified physical product separately in the associated documentation. The associated documentation refers to the mix of lots (etc) of certified physical product.
- The certified products are mixed but the documentation may retain specific origin information to denote the origin from a specific region or country in the claim.

**Figure 2 Segregation**



## 2.3 Mass balance

Mass balance is an overarching term for various slightly different types of chain of custody which involve balancing volume reconciliation.

### General points for all types of mass balance

In the mass balance model the volume of certified product entering the operation is controlled and an equivalent volume of product leaving the operations can be sold as certified. The physical mixing of certified and non-certified product is allowed, but not required (i.e. does not define the model to have physical blending) at any stage in the production process provided that the quantities are controlled in documentation.

Two main variables affect the type of mass balance, and are important to note when discussing this topic.

- 1 Whether physical mixing of certified and non-certified content actually happens, and
- 2 At what stage in the supply chain segregation is lost (i.e. where physical mixing or volume reconciliation happens), and how often.

Both are related to the level of certainty that the product actually contains certified content and in some cases, how much certified content.

Even where physical mixing does not occur, the sustainability data or 'certified' claim (with related documentation that is sometimes controlled by the standard-setter) may be disassociated from the physical certified product. The 'sustainability data' or 'certified' claim can be allocated to any physical product leaving the system as long as the volumes are appropriately balanced.

In the following sections the three different levels of mass balance have been described in more detail, but the important thing to remember is the two main variables:

- › whether mixing occurs, and
- › where in the supply chain segregation is lost.

### Batch level, Site level and Group level mass balance

These three levels of mass balance are described in the following pages:

2.3.1 Batch-level mass balance	10
2.3.2 Site-level mass balance	12
2.3.3 Group-level mass balance	14



### Key factors

#### General factors for mass balance

- › Certified physical product is not separated from and may be mixed with non-certified physical product at any stage in the production process, provided that the quantities are controlled.
- › Consists of the reconciliation of inputs and outputs of the certified product through the manufacturing process, including all product variants or derivatives resulting from the original certified product.

The reconciliation period is the pre-defined timeline within which this process should happen (to prevent indefinite prolongation).

- › The volumes can be balanced at
  - the batch level
  - the site level
  - the group level

Note these options are significantly different and the ability to audit is stronger with batch, then decreases for site, then decreases further for group level, so this is a significant distinction. It is important to be clear about which is permitted/required.

- › May be a percentage-based (physical mixing) or a volume-based system.
- › There is no guarantee that there is **any** certified content in each final product (except batch level mass balance where physical mixing occurs).
- › Sustainability data can be assigned to any physical product leaving the system, as long as the volumes are controlled, and the claims are not misleading.
- › Administratively monitors the trade of certified product throughout the entire supply chain, as a driver for mainstream trade in certified product.
- › The associated documentation refers to the mix of lots/batches/quantities/consignments of certified physical product.
- › In some systems where mass balance is permitted, there are separate controls assigned for the non-certified product that is blended, or has volumes reconciled, with certified product.

## 2.3.1 Batch-level mass balance Also 'percentage blending', 'batch blending'

This model maintains segregation until the final point of blending or mixing for a specific batch of a product. Mixing with non-certified product is controlled and recorded, so the proportion of certified content in each final product is known.

This is where certified and non-certified components are mixed within an actual product.

This type of mass-balance ensures the end-product contains at least a proportion of certified product, which allows specific end-use claims to be made.



### Key factors

#### Batch-level mass balance

#### In addition to the Key Factors

##### General factors for mass balance, page 9:

- › Until the point of blending or mixing certified with non-certified product, 'identity preserved' or 'segregation' models are followed for the certified component.
- › Proportion of certified and non-certified components is recorded.
- › The percentage of certified content actually contained in the final product is known.
- › Only the percentage of content that is certified may be sold as certified.
- › There are two claim options available for batch-level mass balance. e.g., for a mix with one-third certified and two-thirds non-certified product:
  - (A) 33% can carry a claim of 'fully certified', or
  - (B) 100% can carry a claim of 'contains 33% certified content' (and various other combinations to achieve a true claim).

### Worked example

#### Figure 3 Batch-level mass balance

In **Figure 3** opposite, both Factory A and B buy in twice as much non-certified product as certified product (1:2). Both factories use batch-level mass balance to make a range of goods.

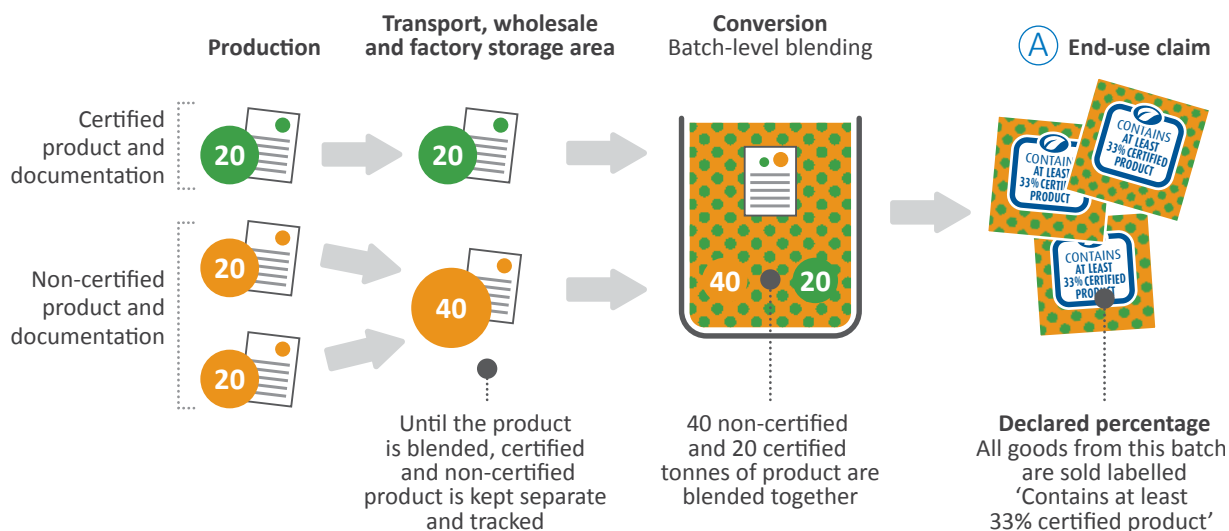
(A) **Factory A** chooses to declare the overall percentage of certified product in goods made from a batch.

(B) **Factory B** decides to label goods from this batch as either 'certified', and 'non-certified'. 33% of the goods made from the batch are labelled 'contains certified content'. The remainder 66% of goods are unlabelled.

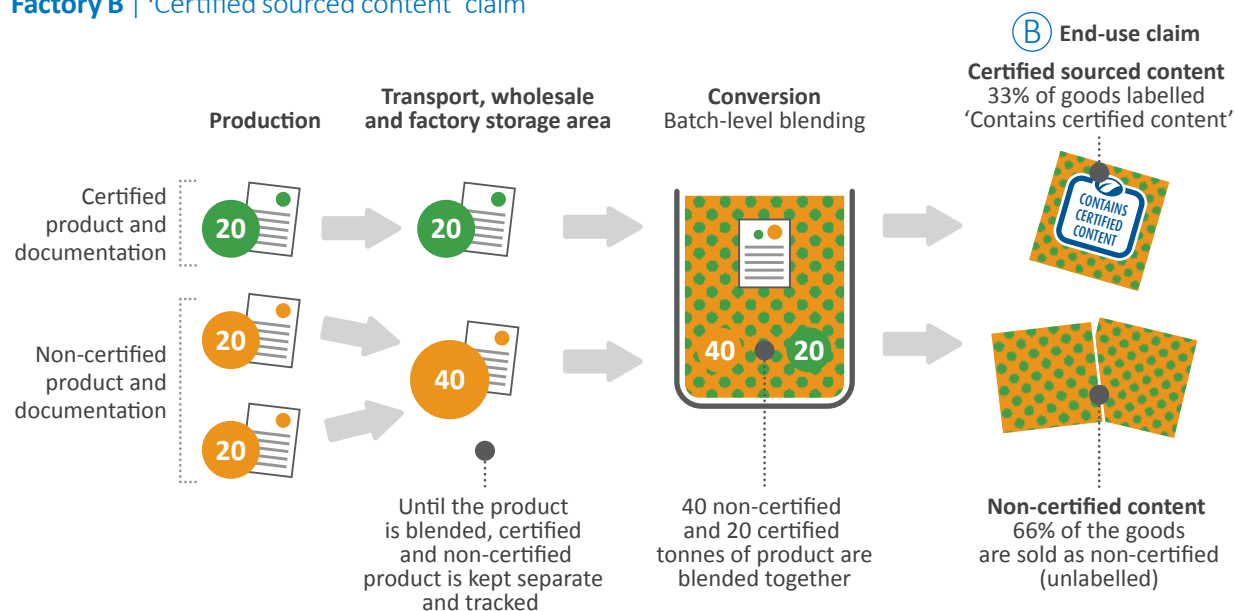
For **Factory B**, even though a good made using batch blending is unlabelled, it will contain certified content, and vice-versa.

**Figure 3** Batch-level mass balance

**Factory A** | 'Declared percentage' claim



**Factory B** | 'Certified sourced content' claim





## 2.3.2 Site-level mass balance Also ‘controlled blending’, ‘factory gate mass balance’

This model maintains segregation until the manufacturing or processing stage in the supply chain, when the certified product can then be mixed with non-certified product, and the proportions of certified and non-certified product at the overall site level are recorded and reconciled.

The proportion of certified content entering and leaving the site is known, though the proportion in each final product may not be known.



### Key factors

#### Site-level mass balance

#### In addition to the Key Factors

##### General factors for mass balance, page 9:

- › Until the point of blending or mixing certified with non-certified product, ‘identity preserved’ or ‘segregation’ models are followed for the certified component.
- › Proportion of certified and non-certified components within the business is recorded.
- › The percentage of certified content actually contained in the final product is not known.
- › Certified and non-certified components may be mixed within an actual product, or in numbers of products in the overall business.
- › When a producer or company delivers a quantity of certified product to a site, only an equivalent or lesser amount of processed product leaving that site may be sold as certified.
- › **C** 100% of the ingredient volume needed for labelled products must be delivered to the factory over the period of reconciliation.

The reconciliation period (or ‘trade-conversion-trade cycle’) can be shorter or longer depending on the commodity/product or systems, but would not normally exceed one year.

### Worked examples

#### Figure 4 Site-level mass balance

In **Figure 4** opposite, Factory C buys in equal amounts of non-certified product and certified product (1:1) to make goods.

#### Factory C’s reconciliation period

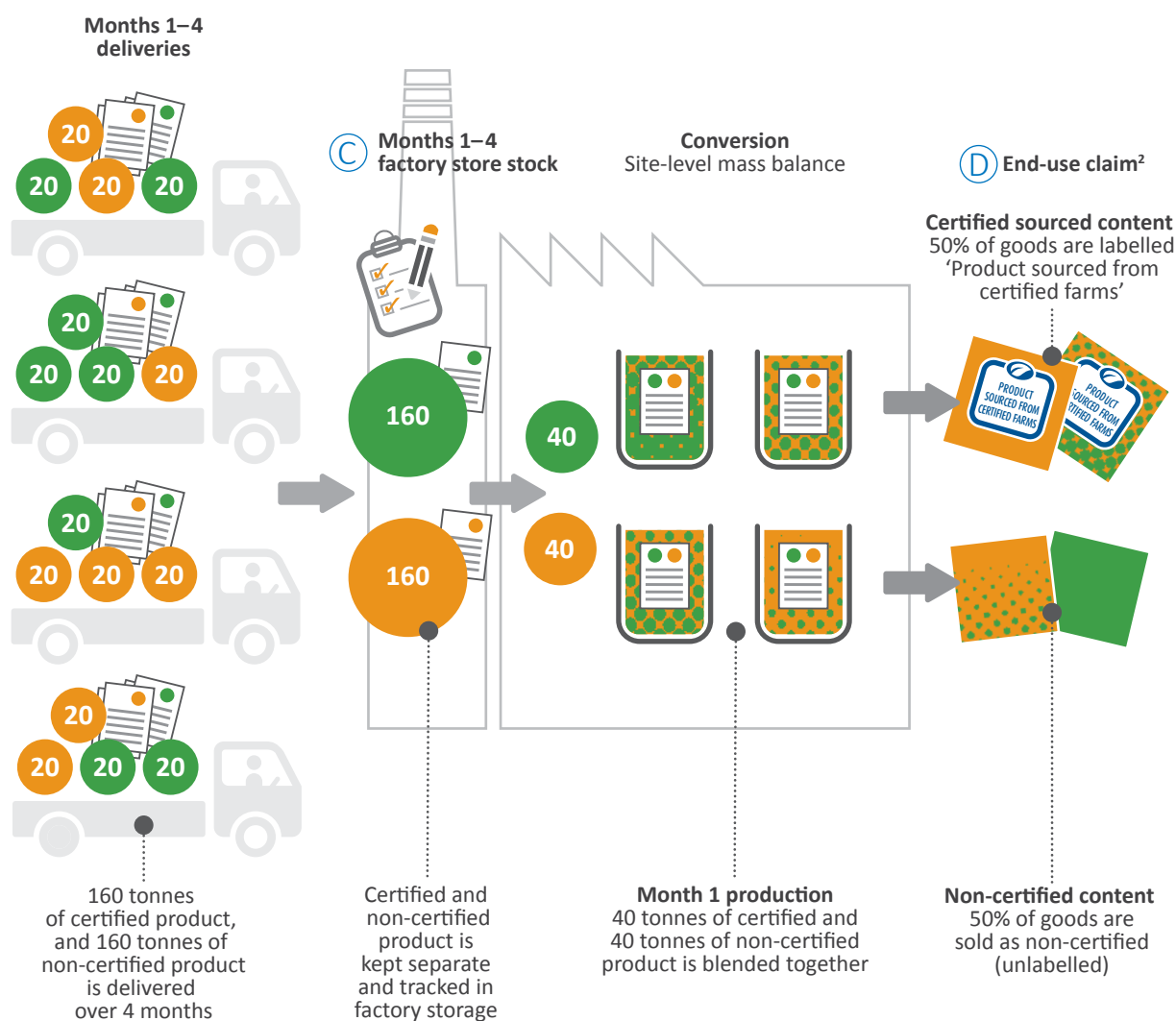
In the example shown in **Figure 4** and in **Annex 1**, the reconciliation period for Factory C’s certification is 4 months<sup>1</sup>.

- › **C** **Factory C** needs to sign in 50% certified product into factory stores over its 4-month reconciliation period to claim certification for its goods.
- › **C** **Factory C** buys in 160 tonnes of non-certified product (orange) and 160 tonnes of certified product (green) over the 4-month period (50% of each).

#### Factory C’s end-use claim

**D** **Factory C** labels 50% of goods at the factory gate ‘Product sourced from certified farms’. The other 50% are sold as non-certified (unlabelled).<sup>2</sup>

**Figure 4** Site-level mass balance | Factory C 'certified content' claim overview<sup>1</sup>



<sup>1</sup>**Figure 4** illustrates an overview of Factory C's 4-month reconciliation period. To see how the balancing allowed in Factory C's reconciliation scheme affects the output of goods at the factory gate on a month-by-month basis, see **Annex 1**, page 17.

<sup>2</sup> **Alternative end-use claim** Alternatively, Factory C could include the claim '33% of our product is sourced from certified farms' on all of their outputs. See **Figure 3**, page 11 for more information.

## 2.3.3 Group-level mass balance Also 'multi-site'

'Groups' here may refer to a company with several sites, a country, or any other combination of more than one site where volumes are tracked.

In this model physical mixing or volume reconciliation of certified and non-certified product is allowed at any stage in the production process provided that the quantities are controlled in documentation. The volume of certified product purchased by the group is controlled and an equivalent volume of product leaving the group can be sold as certified.

The sustainability data or 'certified' claim (with related documentation that is sometimes controlled by the standard-setter) may be disassociated from the physical certified product. The 'sustainability data' or 'certified' claim can be allocated to any physical product leaving the system as long as the volumes are appropriately balanced.



### Key factors

#### Group-level mass balance

#### In addition to the Key Factors

##### General factors for mass balance, page 9:

- › It is important to understand the scope of the 'group' as this can vary widely (a collection of sites, countries, regions, zones, etc).
- › When a producer or company delivers a quantity of certified product to the group, only an equivalent or lesser amount of processed product leaving that group may be sold as certified.

### Worked example

#### Figure 5 Group-level mass balance

**Group D** manages its three factories, D1, D2 and D3 from Head Office. Certification and product distribution is managed from Group D Head Office.

#### Group D 'certified content' claim

Group D's three factories make a range of goods using 33% certified sourced content (1:2).

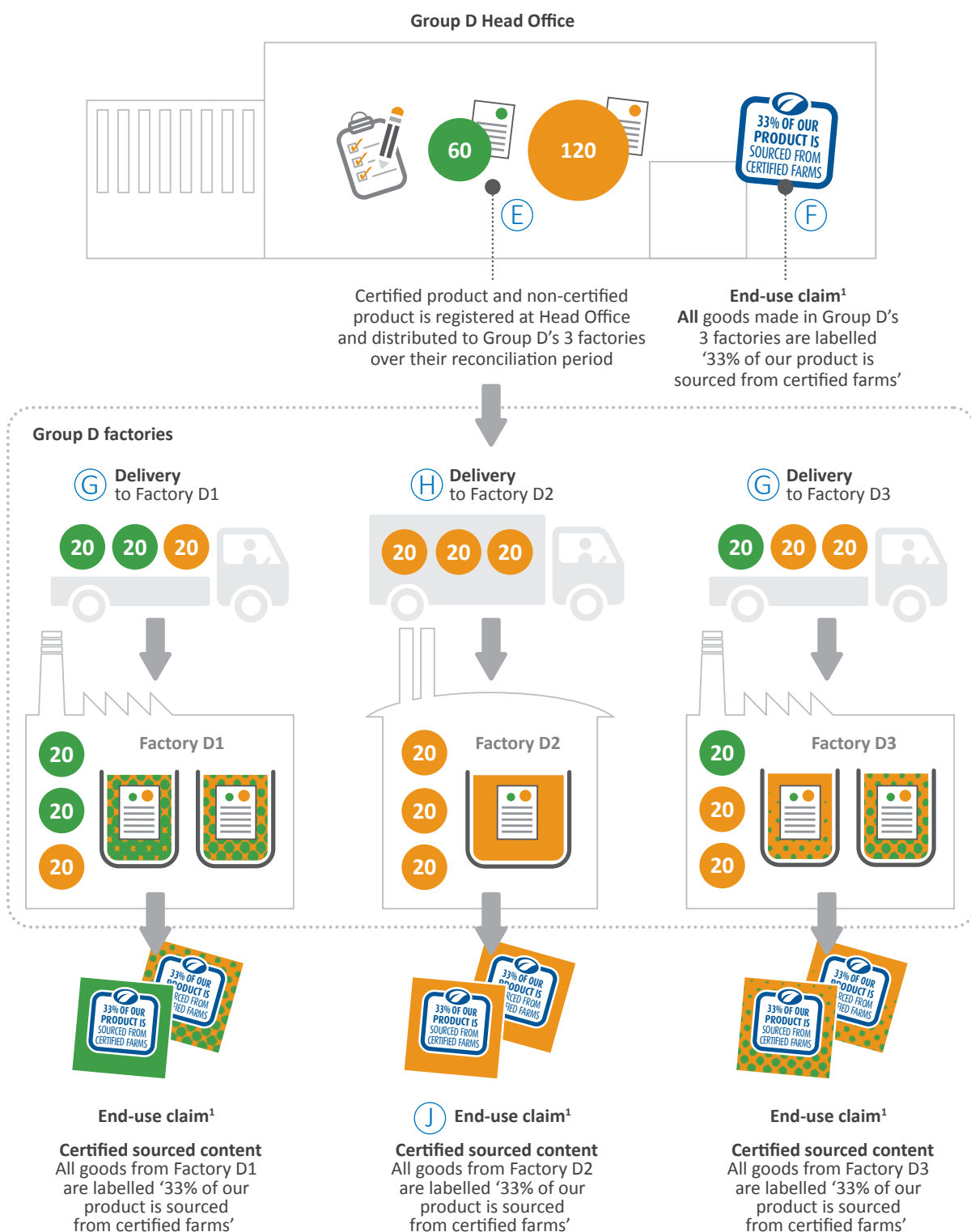
- › **E** A stated percentage of certified product (33%) is registered and reconciled at Head Office over a fixed period.
- › Certified and non-certified product deliveries are made to Group D's factories.
- › **F** Goods made at **all** Group D's factories are labelled '33% of our product is sourced from certified farms'.<sup>1</sup>

#### Group D production

Factories D1, D2, D3 are all part of the same group-level reconciliation scheme, managed at Group D Head Office.

- › **G** **Factories D1 and D3** receive varying amounts of certified and non-certified product.
- › **H** **Factory D2** receives **only** uncertified product.
- › Even though a good made contains some or no certified content, **all goods** leaving Factory D1, D2 and D3's gates are labelled identically: '33% of our product is sourced from certified farms'.<sup>1</sup>
- › **J** Although **Factory D2** never receives certified product to make goods, it too labels **all** goods leaving its factory gate as '33% of our product is sourced from certified farms'.<sup>1</sup>

**Figure 5** Group-level mass balance | Group D Head Office and factories



<sup>1</sup> **Alternative end-use claim** Alternatively, Group D company could include the claim 'sourced from certified farms' on 33% of their outputs, and have no claim on the remainder. See Figure 3, page 11 for more information.

## 2.4 Certificate trading Also 'book and claim', 'credit trading'

In this model certified material is completely decoupled from sustainability data.

Certified and non-certified product flows freely through the supply chain. Sustainability certificates or credits are issued at the beginning of the supply chain by an independent issuing body and can be bought by market participants, usually via a certificate or credit trading platform.

It is important to acknowledge the certificate trading model as it is widely used by many manufacturers to meet their sustainable sourcing targets, especially when sourcing the required volumes of CoC certified product directly is not possible. However, it should be noted that certificate trading is not strictly a CoC model: the end product contains no known certified product, or an equivalent volume that has been controlled under the CoC system, and there is no physical traceability through the supply chain.

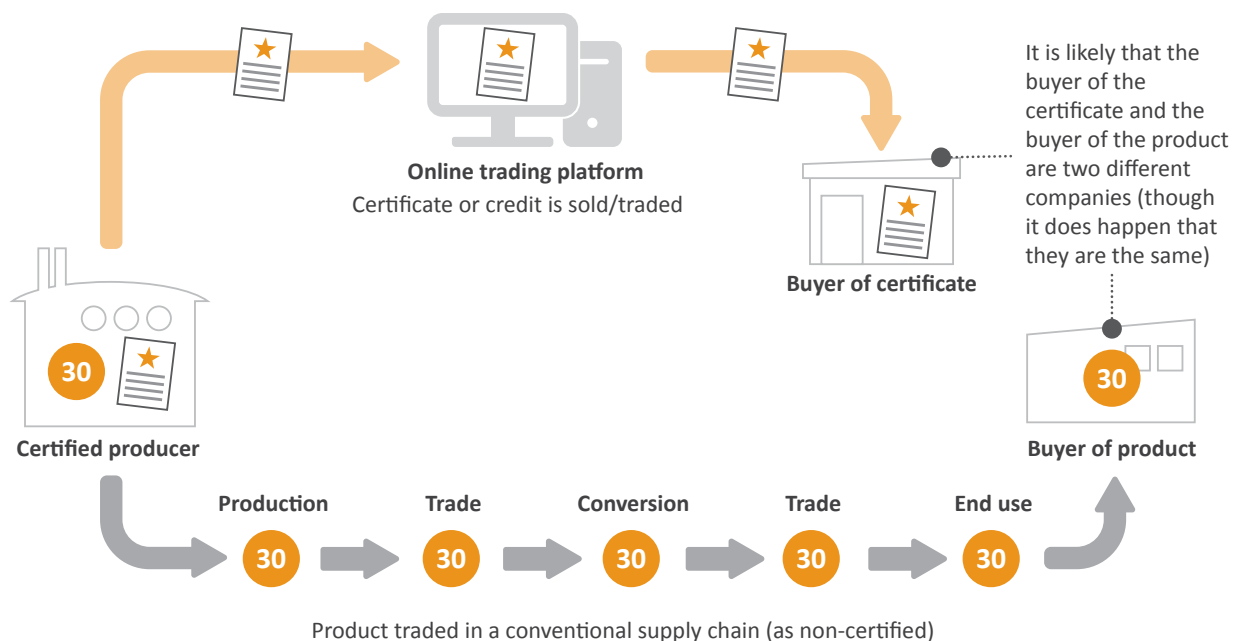


### Key factors

#### Certificate trading

- › Provides tradeable certificates for certified product to the supply chain.
- › Allows for the claim to be decoupled from the certified product.
- › Intended to reward responsible production where the physical supply chains make sourcing the actual product very difficult.
- › Allows outputs to be sold with a credit claim corresponding to the quantity of certified inputs.
- › Sometimes also referred to as 'book and claim', though this is a trademarked name of 'GreenPalm'.

Figure 6 Certificate trading





# Annex 1 Mass balance and reconciliation periods

Mass balance allows manufacturers to buy and use certified product over a fixed period of time: the 'reconciliation period'.

For an overview of Factory C's four-month reconciliation period, see **Figure 4**, page 13.

## Factory C's reconciliation period

The reconciliation period for Factory C's certification is 4 months.

- › Factory C needs to sign 160 tonnes of certified product into factory stores over the 4-month reconciliation period to claim certification for its goods.
- › Factory C buys in 160 tonnes of non-certified product (orange) and 160 tonnes of certified product (green) over the 4-month period.

## Factory C's end-use claim

Factory C labels 50% of goods at the factory gate 'Product sourced from certified farms'. The other 50% are sold as non-certified (unlabelled).

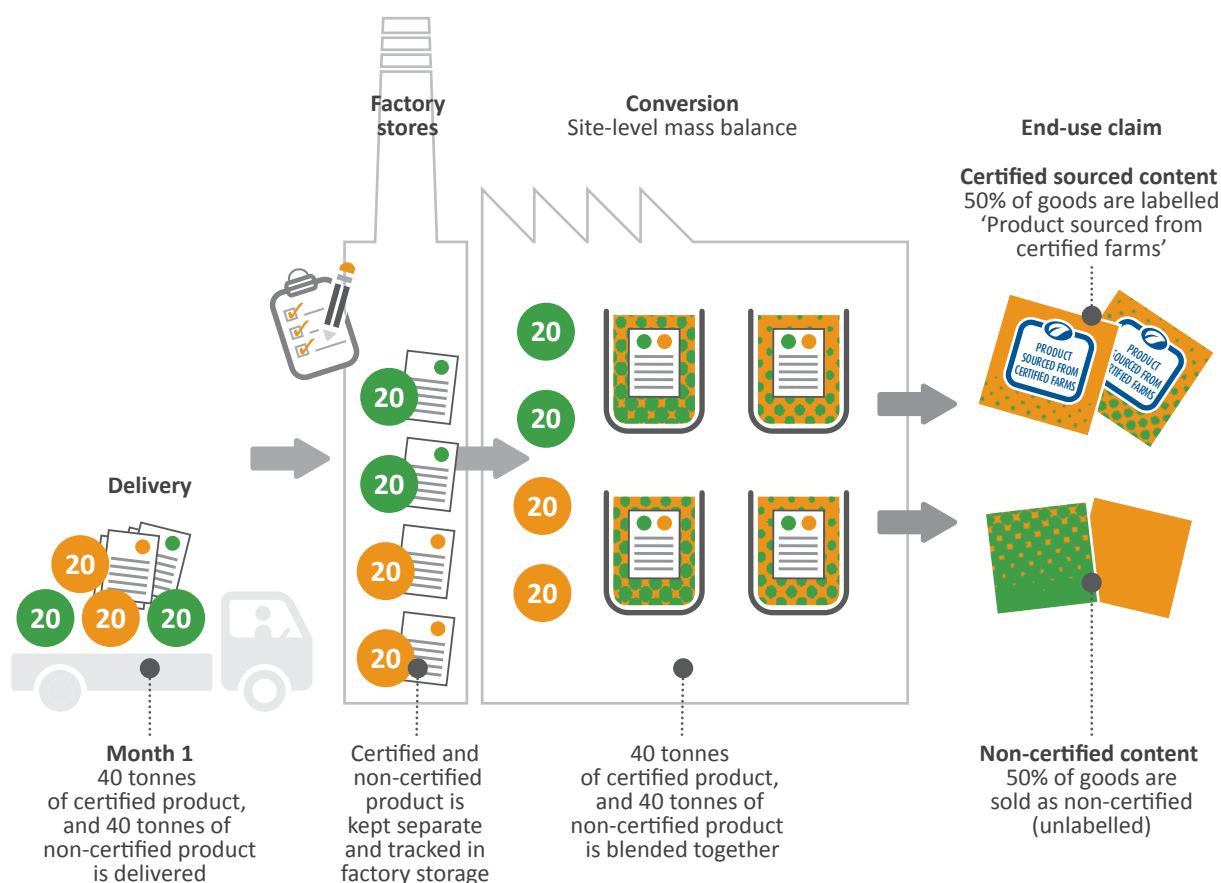
## Factory C | Month 1 delivery and manufacture

Month 1, Factory C signs in 40 tonnes of certified product and 40 tonnes of non-certified product to Stores.

The factory manager uses 40 tonnes of certified and 40 tonnes of non-certified product to make Month 1's goods.

50% of its goods leaving the factory gate are labelled as 'Product sourced from certified farms', 50% are unlabelled.

**Figure 7** Site-level mass balance | Month 1 delivery and manufacture for Factory C



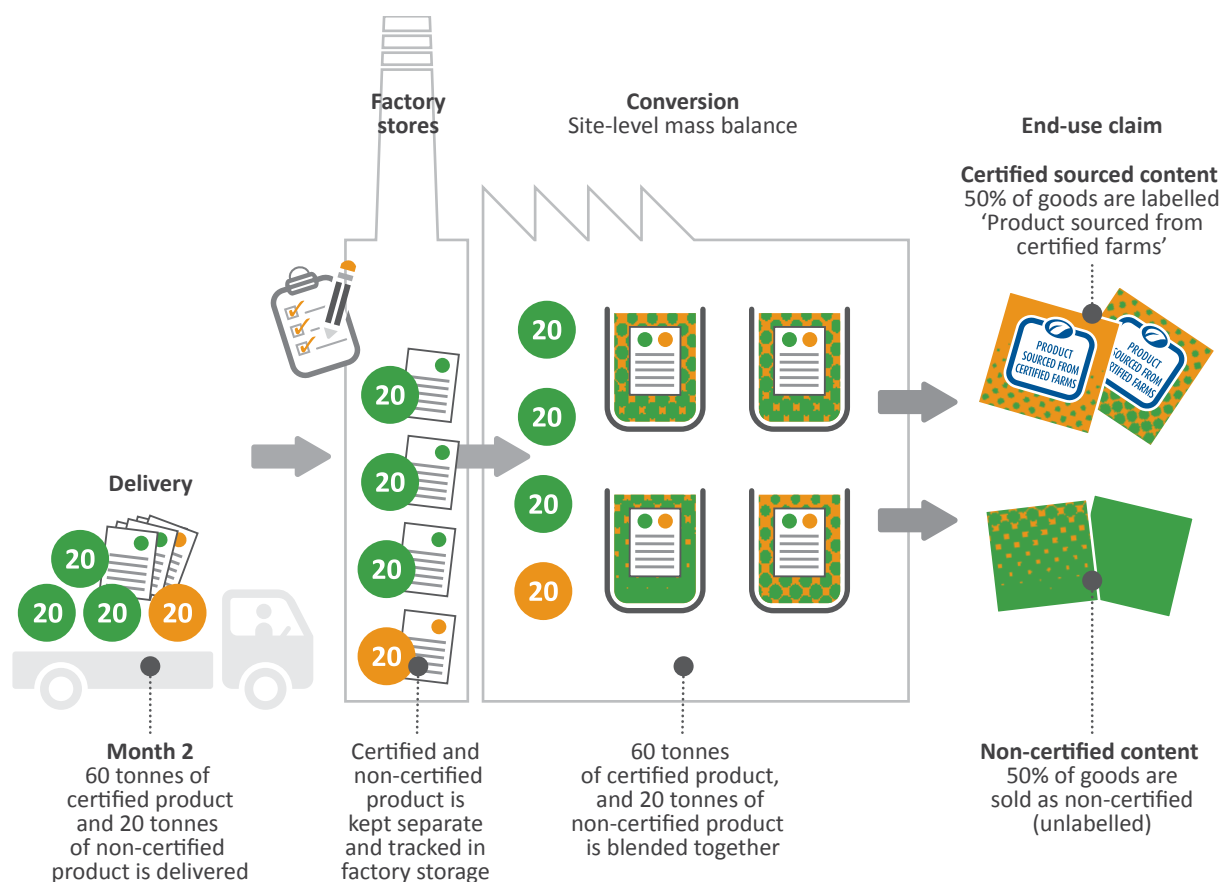
## Factory C | Month 2 delivery and manufacture

Month 2, Factory C signs in 60 tonnes of certified product and 20 tonnes of non-certified product to Stores.

Month 2 the factory uses 60 tonnes of certified product and 20 tonnes of non-certified product to make Month 2's goods.

Again, 50% of goods are labelled as 'Product sourced from certified farms' and 50% are unlabelled, even though in Month 2 goods leaving the factory gate are made from an average of 75% certified product.

**Figure 8** Site-level mass balance | Month 2 delivery and manufacture for Factory C



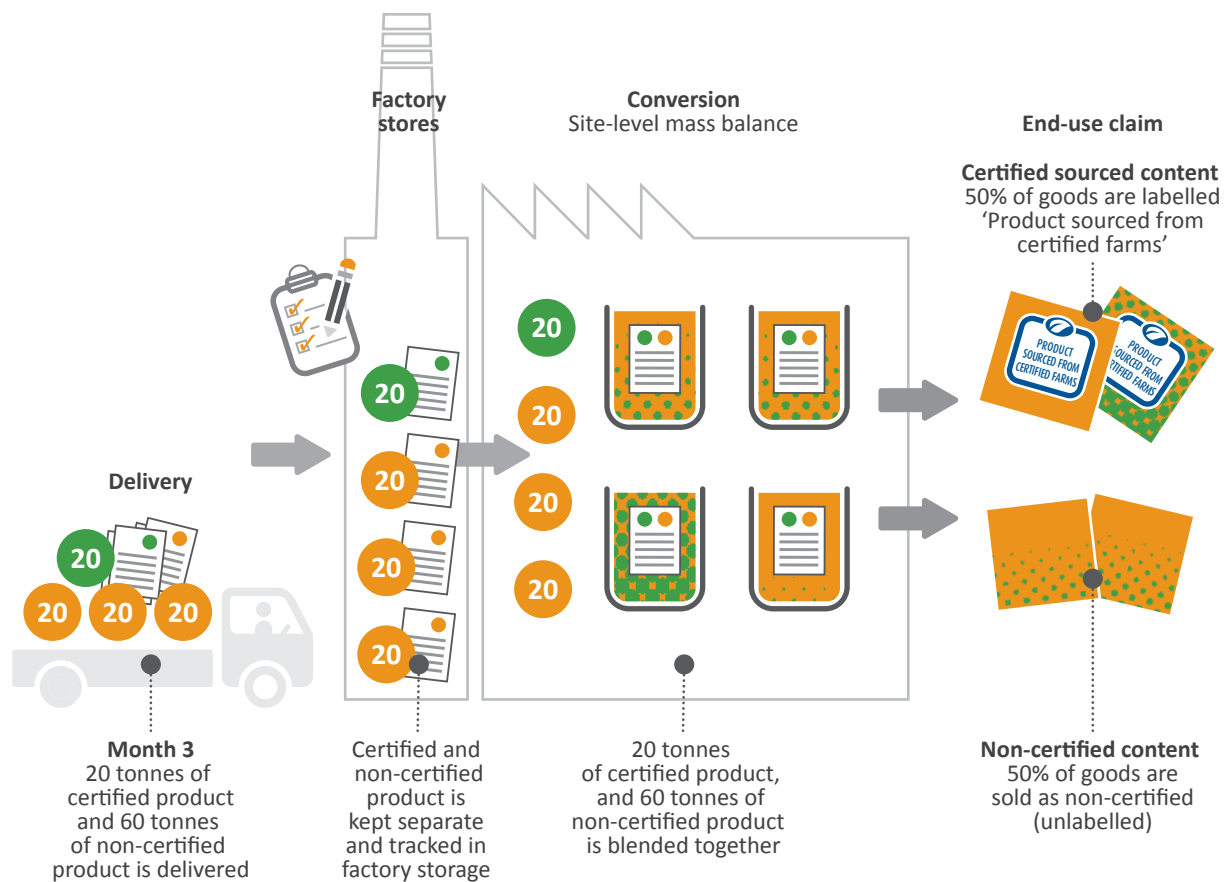
### Factory C | Month 3 delivery

In Month 3, Factory C signs in 20 tonnes of certified product and 60 tonnes of non-certified product to Stores.

Month 3 the factory uses 60 tonnes of non-certified product and 20 tonnes of certified product to make Month 3's goods.

Again this month, 50% of goods are labelled as 'Product sourced from certified farms' and 50% are unlabelled, although goods leaving the factory gate in month 3 are made from an average of 25% certified product.

**Figure 9** Site-level mass balance | Month 3 delivery and manufacture for Factory C



### Factory C | Month 4 delivery

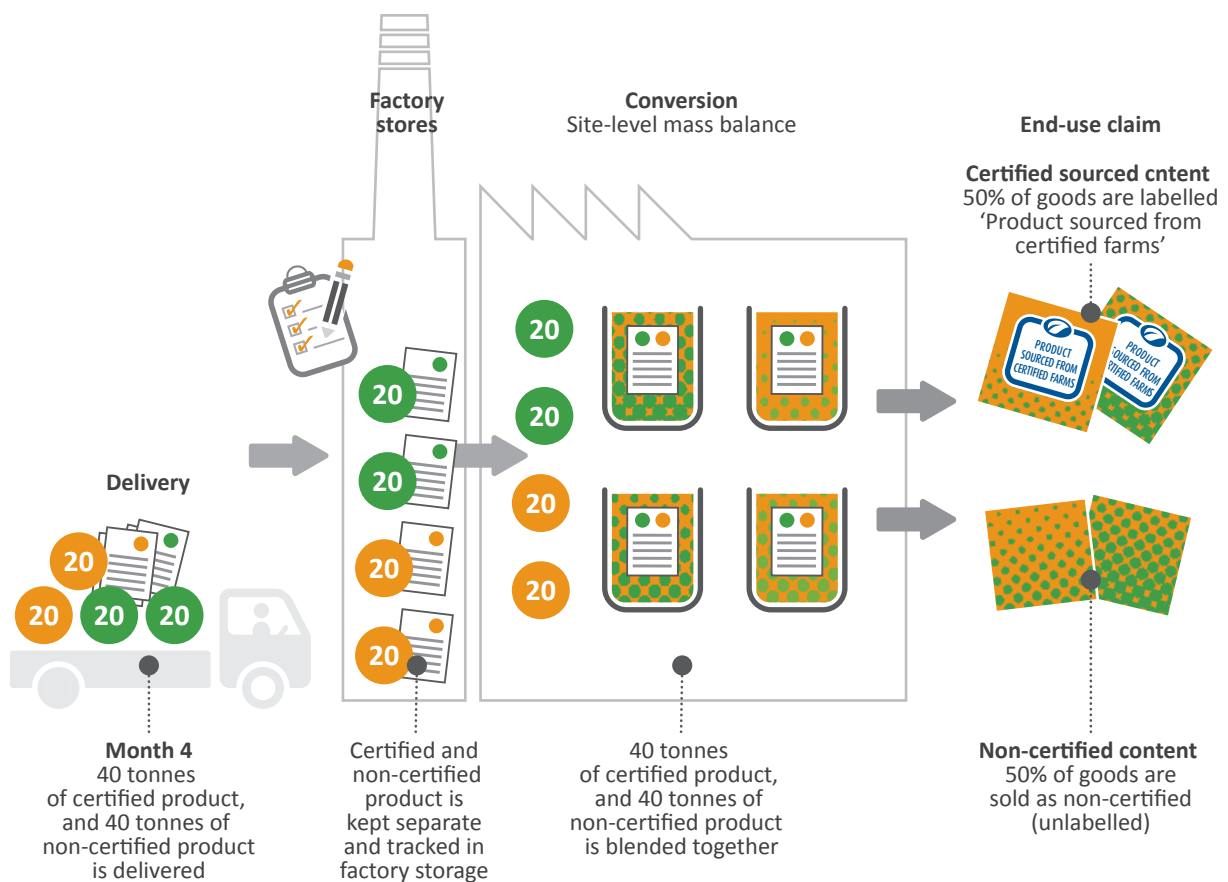
In Month 4, Factory C signs in 40 tonnes of certified product and 40 tonnes of non-certified product to Stores.

The factory manager decides to use 40 tonnes of certified product and 40 tonnes of non-certified product to make Month 4's goods.

50% goods manufactured in Month 4 are labelled as 'Product sourced from certified farms' and 50% are unlabelled.

Over the 4 months the ratio of non-certified to certified product leaving the factory gate is 1:1 so Factory C has met its certification obligations.

**Figure 10** Site-level mass balance | Month 4 delivery and manufacture for Factory C



## Referenced publications

ISEAL, [Sustainability Claims Good Practice Guide](#) May 2015

Challenge the Label [www.challengethelabel.org](http://www.challengethelabel.org)

ISEAL Glossary [www.isealliance.org/online-community/resources/iseal-glossary-of-terms](http://www.isealliance.org/online-community/resources/iseal-glossary-of-terms)

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It draws from and builds upon a previous document developed by Proforest for ISEAL in 2013.

Some of the diagrams were inspired by those produced by GIZ as part of the documentation of an expert workshop on Chain of Custody (2012).

## About ISEAL Alliance

ISEAL Alliance is the global membership association for sustainability standards. ISEAL is a non-governmental organisation whose mission is to strengthen sustainability standards systems for the benefit of people and the environment.

ISEAL is the global leader in defining and communicating what good practice looks like for these sustainability standards.

The four goals of ISEAL are to:

- Improve the impacts of sustainability standards
- Define credibility for these standards
- Improve their effectiveness, and
- Increase their uptake.

Further information about the ISEAL Alliance and its membership is available at [www.iseal.org](http://www.iseal.org)





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