



Traceability

2.3 Mass Balance

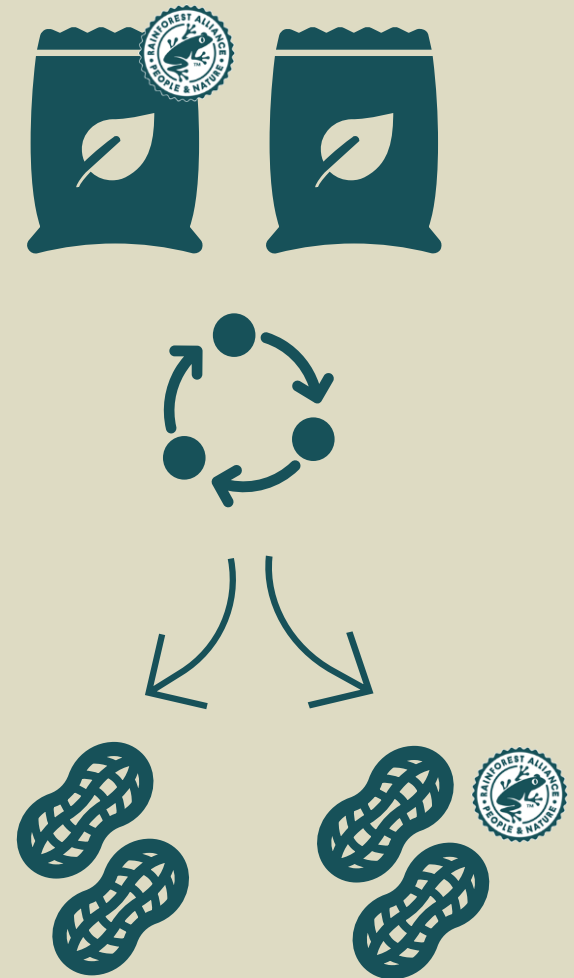
Applicable to Certificate Holders applying mass balance in the crops that permit this traceability type.

Mass Balance

For some products, the supply chain or manufacturing process is very complex, making it logistically **challenging** or **costly** to **segregate certified** from **non-certified** products.

The mass balance traceability type allows sectors with complex supply chains to participate in the certification program.

Under mass balance, **both certified and non-certified products can be processed together**, and you can claim the equivalent volume of certified inputs as certified outputs.



Please see: Traceability Annex

2.3 Mass Balance

Applicable to Certificate Holders applying mass balance in the crops that permit the traceability type mass balance.

No.	Base requirements	Group certification			Ind. cert.
		S-farms	L-farms	Group mgt.	S/L
2.3.1	Volumes are only converted for processes that can occur in reality; product conversion cannot revert to a previous product. <i>Please see A-05-SCRL-B-CH Traceability Annex</i>			✓	✓
2.3.2	Volumes sold as <u>mass balance</u> are 100% covered by volumes purchased as certified. A negative volume balance is not permitted at any time.			✓	✓
2.3.3	Mass balance volumes must always be accompanied by a physical shipment when transferred between Certificate Holders. Volume trading without a physical shipment is only allowed between sites under the same certificate.			✓	✓
2.3.4	Volumes sold as certified meet the minimum percentage requirements for origin information. This requirement is only applicable for cocoa mass balance products for which origin matching rules are required. <i>Please see A-05-SCRL-B-CH Traceability Annex</i>			✓	✓
2.3.5	Purchase and sales documentation for volumes sold as certified must include origin information to country level for both incoming certified and non-certified volumes. This is only applicable for cocoa mass balance products for which origin matching rules are required. <i>Please see A-05-SCRL-B-CH -Traceability Annex</i>			✓	✓

Read the requirements and their applicability
before you move on to the next page

2.3.1

Volumes are only converted for processes that can occur in reality

Converting certified volumes to conventional volumes is only allowed for the **same products** or in the **direction of physical processing**.

Let's look at examples of allowed conversions that Amina, manager of an individually certified farm **can** make:



- ✓ Certified fresh fruit- coconut to conventional copra
- ✓ Certified copra to conventional crude coconut oil
- ✓ Certified in-shell hazelnuts to conventional hazelnut kernel
- ✓ Certified hazelnut kernel to conventional roasted hazelnut kernel

Please see: Traceability Annex

2.3.1

No backwards conversion



Please note that it is **not allowed** to convert a product by reverting to a previous product in the physical processing line.

Let's look at an example what conversions Amina **cannot make**:



Certified crude coconut oil to conventional copra



Certified crude coconut oil to conventional fresh fruit- coconut



Certified hazelnut kernel to conventional in-shell hazelnuts



Certified roasted hazelnut kernel to conventional hazelnut kernel

Please see: Traceability Annex

2.3.2

Volumes sold as mass balance are 100% covered by volumes purchased as certified

If Sonia applies mass balance for the traceability for her group, she needs to ensure that:

- 100% of the **outputs** that are sold as **certified** are covered by a **sufficient volume of certified inputs**.

A negative volume balance is not permitted at any time.

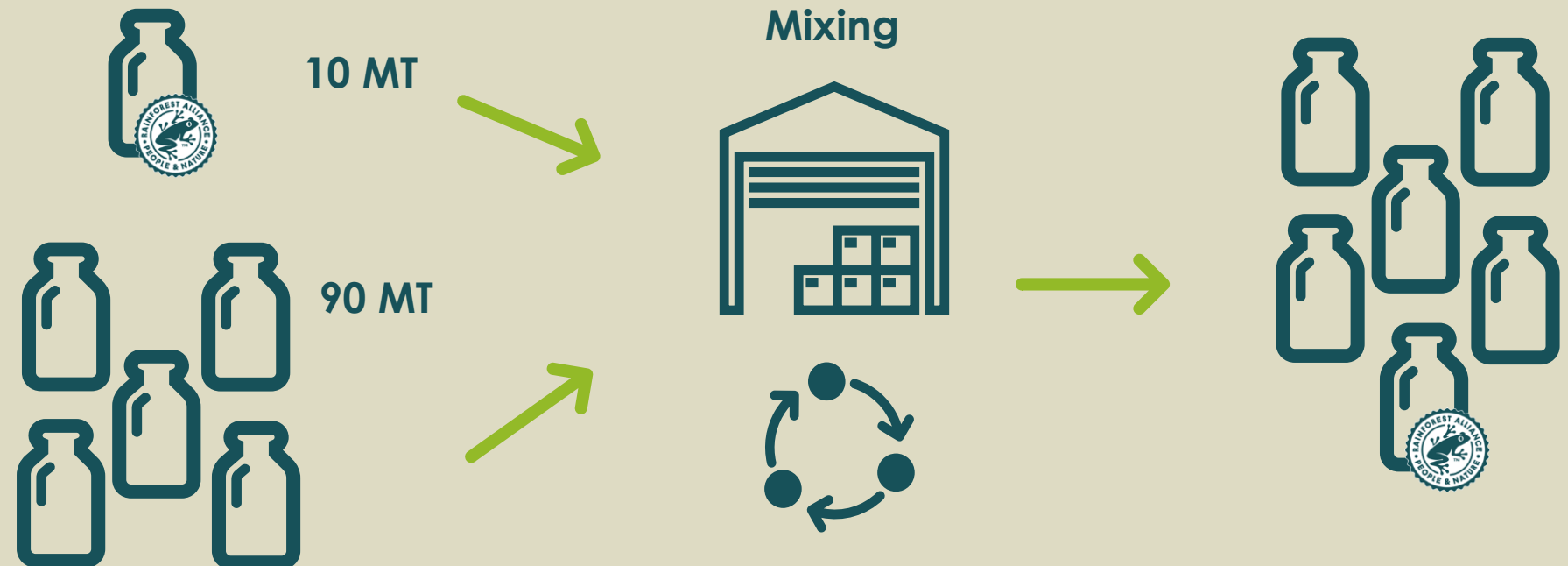


2.3.2

Output volume needs to be proportional to the input volume

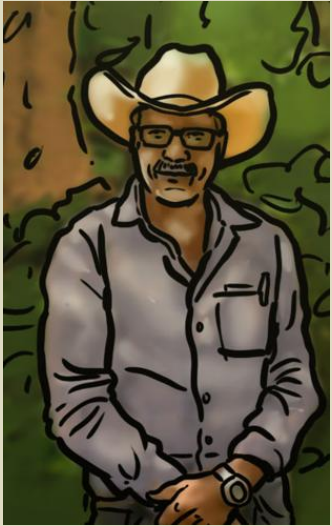
For example, Certificate Holder produces **10 MT of certified coconut oil** and stores it with **90 MT of uncertified coconut oil** (total 100MT). The Certificate Holder can then take **maximum 10 MT** out of that store and claim it certified.

Alternatively, the total 100 MT of coconut oil can also be sent to further processing after which volume worth of 10 MT coconut oil can be claimed as certified and 90 MT as uncertified.



Case scenario

Let's look at an example to understand the requirement 2.3.2 better.



A coconut processing factory **bought 800 kg** of certified copra and **400 kg** of non-certified copra from farmer James.

The factory **used 300 kg** of certified copra and **250 kg** of non-certified copra to produce **one batch of crude coconut oil**.



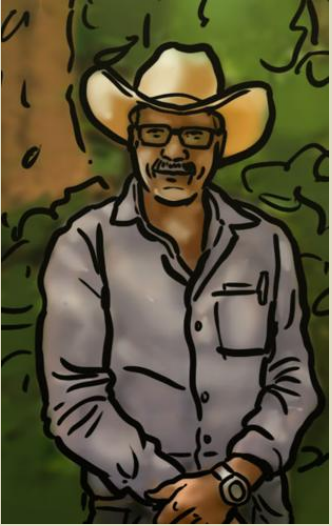
?

Can the factory sell this batch of crude coconut oil as certified?



Think about the answer before you move on to the next page

Case scenario - Solution



The answer is “Yes”, the factory can sell the batch of crude coconut oil as certified.

The factory **used 300 kg of copra**, which still leaves **500 kg of copra volume credit**.

The conversion rate of copra to crude coconut oil is **0.62**

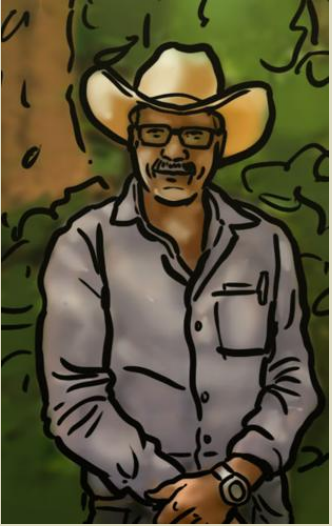
500 kg of copra volume credit can be converted to **310 kg of crude coconut oil volume credit**.

The factory can use this **volume credit** to cover the **250 kg of non-certified copra** that was used to produce the crude coconut oil.



Therefore, this factory has all the volumes covered by its credit to sell this batch of crude coconut oil as certified.

Case scenario – Further considerations



When you apply mass balance, you need to **calculate volume credits very carefully** according to the conversion that takes place in reality.

Let's see an example of coconuts.

- Fresh coconuts are processed into copra.
- Copra are then processed into crude coconut oil.
- Crude coconut oil is further processed into refined coconut oil (RBD or hydrogenated).

Therefore, if you have a **volume credit for certified coconut oil**, you **cannot** use it to claim **certified coconuts**, as fresh coconuts are not produced from coconut oil.

Case scenario

Let's understand requirement **2.3.3** through an example of two farm Certificate Holders who use **mass balance** traceability type to sell their Rainforest Alliance certified hazelnut volumes.

Farm A and farm B grow and sell both Rainforest Alliance certified and conventional hazelnuts.

Farm A had a much **smaller** total **harvest** than expected and decides to **buy certified** hazelnuts from **farm B** to meet the demands for certified hazelnuts.

Farm B ships the hazelnuts to farm A to complete the sale.



Is this allowed?

Think about the answer before you move on to the next page



Case scenario - Solution

The answer is "**Yes**", this is allowed.

If two **different certificate holders** wish to trade volume, there must be a **physical shipment of the corresponding product**.

Farm B must send a physical shipment of hazelnuts to farm A.



2.3.4

Volumes sold as certified meet the minimum percentage requirements for origin information



The requirement on origin matching aims to prevent companies **to buy certified volumes** from countries **where they are easier to get** and **use those** certified volumes as **credits to sell non-certified products** (from origin countries where getting certified products is difficult) **as certified**



Compliance needs to be demonstrated by **purchase and sales documentation** that contain **origin information**. An example of this is an **invoice** for the sale of certified cocoa beans should show **which countries of origin** they come from).

Please see: Traceability Annex



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