



Mass Balance and Allocation Rules for Renewable Fuels

Considerations from the Industry

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Back to (Mass Balance) Basics

- What is Mass Balance?
 - A Chain of Custody Model **allowing products** with a set of specified characteristics **to be mixed** according to defined criteria with materials or products without that set of characteristics (adapted from ISO 22095)
- What is “Allocation”?
 - **Assigning (“allocating”) defined criteria to consignments that are withdrawn from the mixture** (by issuing a Sustainability Declaration - SD or a Proof of Sustainability - PoS)
- Why Mass Balance under RED?
 - **“maintain the integrity of the system while at the same time avoiding the imposition of an unreasonable burden on industry”** (as per recital 76 of RED I)
- Mass balancing rules for EU RED compliant products (raw materials and fuels) are found in:
 - Article 30 RED III
 - Articles 15 (auditing) and **19 (implementation) of Implementing Regulation (IR) 2022/996**
 - EU recognized Voluntary Schemes

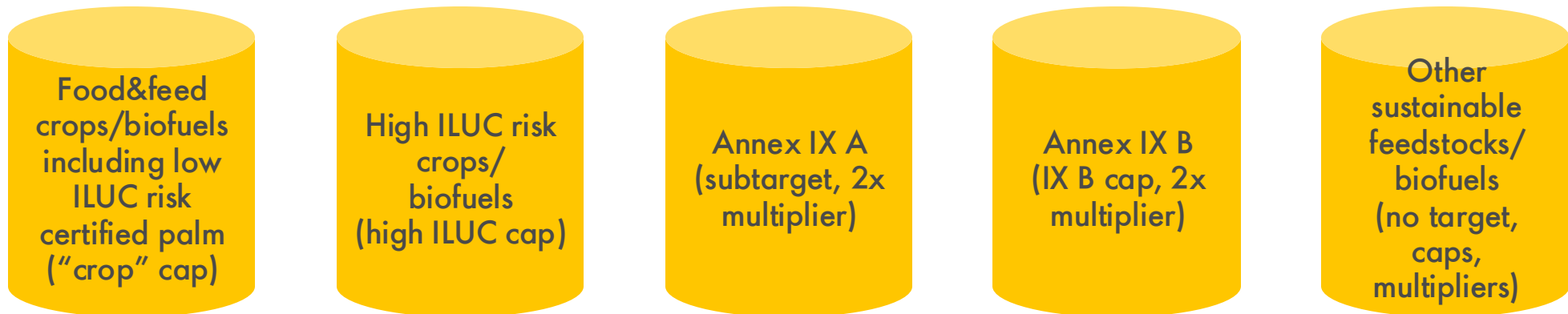
Attention law experts:

Article 19 (2) of Implementing Regulation (IR) 2022/996

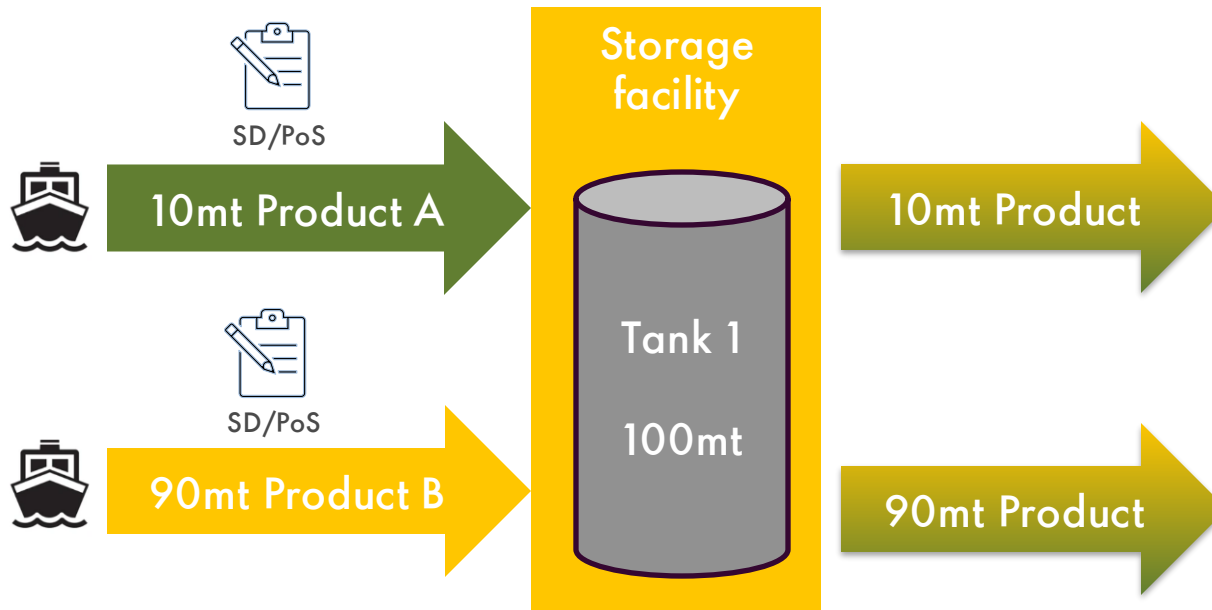
- (a) raw material or fuels shall only be considered to be part of a mixture if they are mixed in a container, at a processing or logistical facility, or at a transmission and distribution infrastructure or site
- (b) different raw materials shall only be considered to be part of a mixture if they belong to the same product group, except where the raw material is mixed for the purpose of further processing;
- (c) raw materials or fuels shall only be considered to be part of a mixture if they are physically mixed unless they are physically identical or belong to the same product group. (...)
- (e) economic operators shall be required to keep separate mass balances for raw materials and fuels which cannot be considered part of a mixture. Transfer of information about the sustainability and GHG emissions saving characteristics and sizes between different mass balances shall not be allowed. Pursuant to subparagraphs (a) to (c), raw materials inside biofuels, bioliquids or biomass fuels production facilities are considered to be part of a mixture. Therefore, the requirement to keep separate mass balances shall not apply to such facilities and a single mass balance can be kept; (...)
- (i) where biofuels, bioliquids or biomass fuels are blended with fossil fuels, the information about the sustainability and GHG emissions saving characteristics assigned to the blend shall correspond to the physical share of the biofuel, bioliquids or biomass fuels in the blend. For biofuels and bioliquids, Member States may further check the veracity of this information in accordance with Article 23;
- (j) the sustainability and GHG emissions saving characteristics of a consignment of raw material or fuel shall be considered as a set. **Where consignments are withdrawn from a mixture, any of the sets of sustainability characteristics may be assigned to them** provided that the sets of sustainability and GHG emissions saving characteristics are not split and the mass balance is achieved over the appropriate period of time; (...)

Mass Balance rules are complemented by the definition of a “product group” as per IR

- ‘product group’ means **raw materials, biofuels**, bioliquids, non-gaseous biomass fuels **with similar physical and chemical characteristics** and **similar heating values** or gaseous biomass fuels, and LNG with similar chemical characteristics that all are subject to the same rules set out in **Articles 7, 26 and 27 of Directive (EU) 2018/2001** for determining the contribution of biofuels, bioliquids and biomass fuels towards achieving the targets for renewable energy;
- “Rules set out in Articles 7, 26 and 27” in RED II lead to different “buckets” of product groups which must be distinguished
- Determines the level of flexibility in allocating sustainability and GHG saving characteristics



Translating the legal requirements into practical scenarios: Example 1

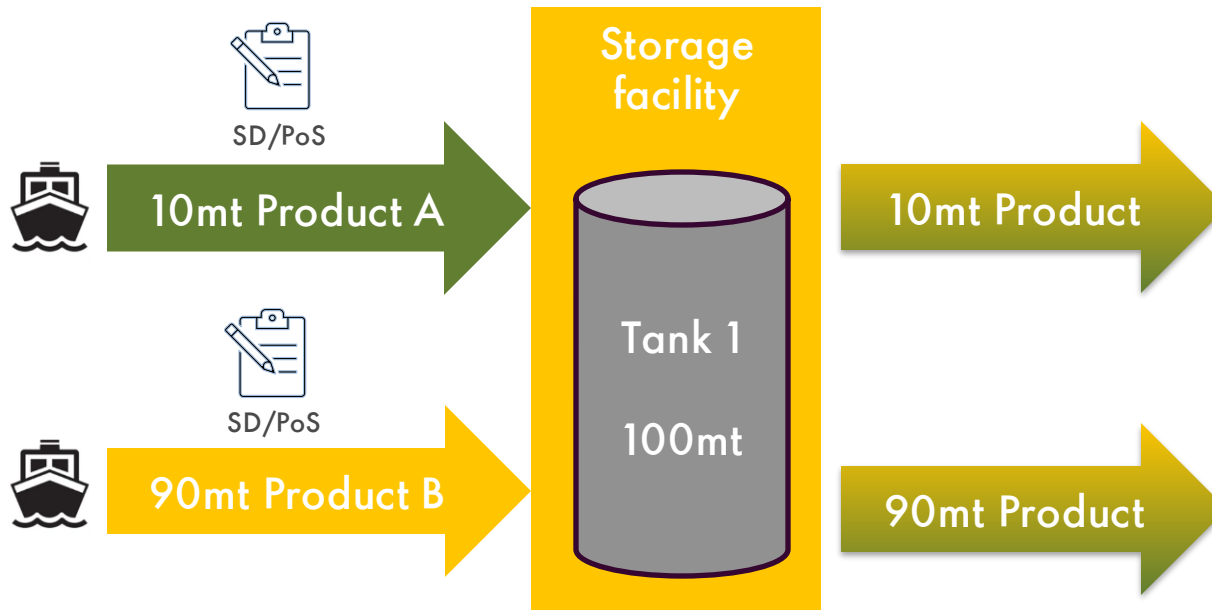


- Product A = UCO
- Product B = Refined Rapeseed Oil

Question:

- For the two outgoing deliveries, is it allowed to issue 1 SD for 10mt of UCO and 1 SD for 90mt of refined rapeseed oil ("flexible allocation")?

Translating the legal requirements into practical scenarios: Example 2

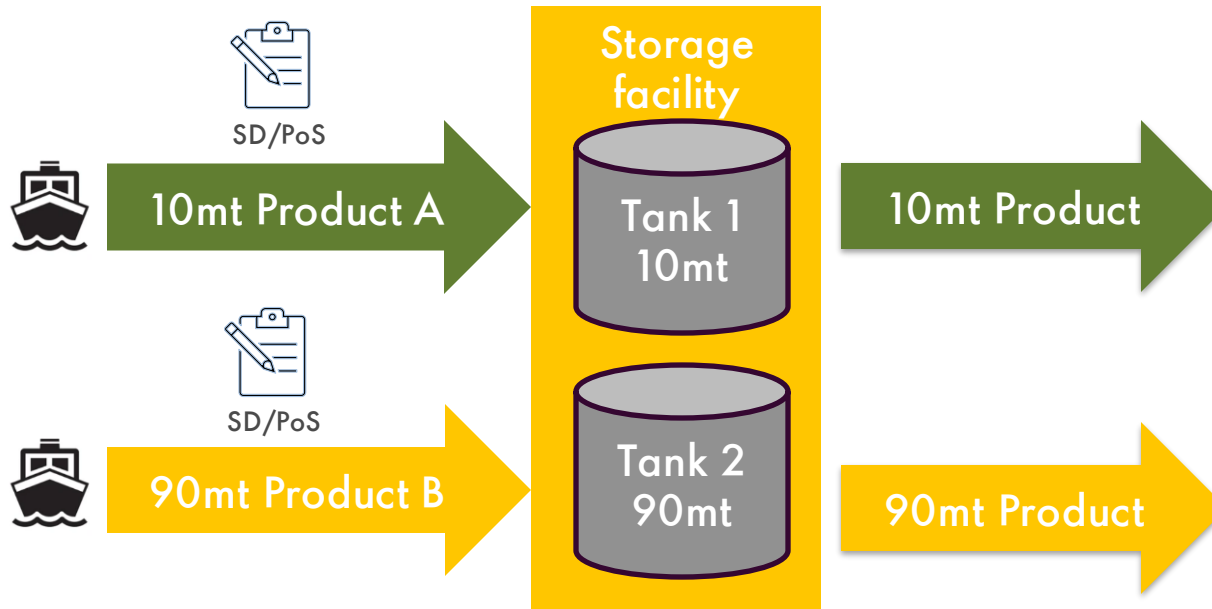


- Product A = FAME (UCO)
- Product B = FAME (Rapeseed)

Questions:

- For the outgoing deliveries, is it allowed to issue 1 PoS for 10mt of FAME (UCO) and 1 PoS for 90mt of FAME (rapeseed)?

Translating the legal requirements into practical scenarios: Example 3

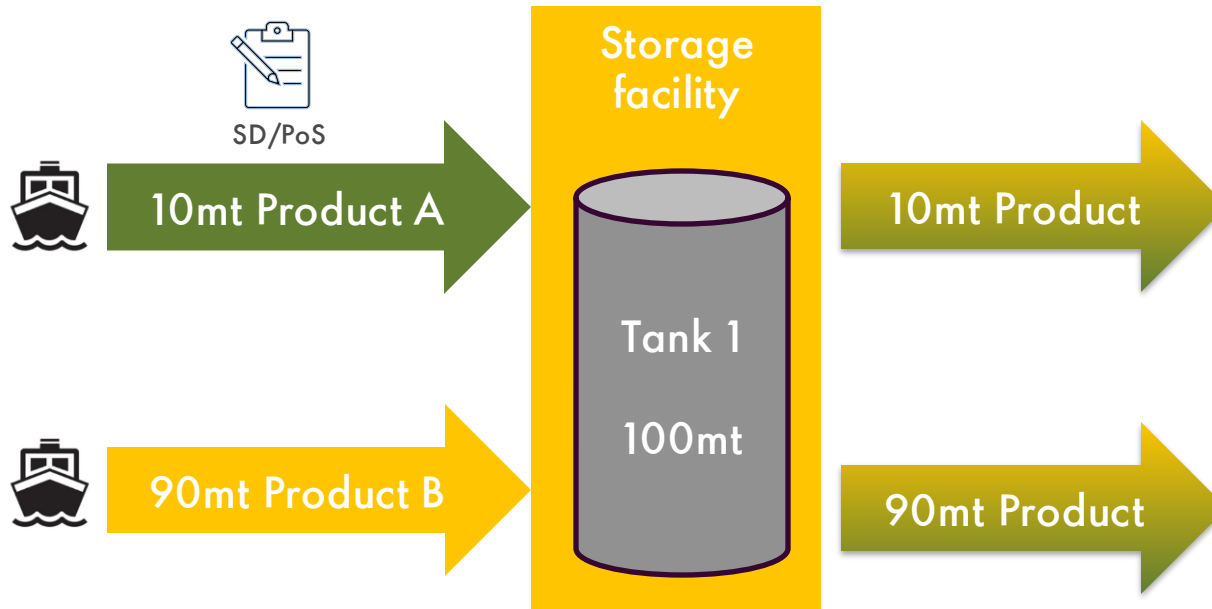


- Product A = FAME (UCO) in dedicated Tank 1
- Product B = FAME (Rapeseed) in dedicated Tank 2

Questions:

- How many mass balances must be kept for the storage facility?
- For the outgoing deliveries, is it allowed to issue 1 PoS for 10mt of FAME (UCO) and 1 PoS for 90mt of FAME (rapeseed)?

Translating the legal requirements into practical scenarios: Example 4



- Product A = FAME
- Product B = Fossil Diesel
- Note: The “blend” in the tank is a B10 (B10 can contain a maximum content of up to 10% bio)

Questions:

- For the outgoing delivery of 90mt B10, is it allowed to issue 1 PoS for 10mt of FAME (if no FAME PoS is issued to the 90mt)?
- Would it be allowed for the outgoing delivery of 10mt to issue 1 PoS for 0.5mt FAME and for the outgoing delivery of 90mt a PoS for 9.5mt FAME?

Conclusion

- Current EU RED mass balance rules are highly **complex**
- Rules are **open for interpretation** by economic operators, by auditors (and by authorities)
- Risk that the level of complexity makes mass balancing increasingly **difficult to verify/audit**
- Multiple EU regulations link to RED compliant (mass balanced) renewable fuels, hence making clear rules even more important
- What is needed?
 - **Reduced complexity** in the legal mass balancing rules (e.g. as part of review of Implementing Regulation)
 - Clear requirements and (audit) guidance for industry and auditors on allocation rules in different scenarios ensuring a **level playing field** for all economic operators under the EU RED
 - Expanding and reviewing ISCC scenarios (together with industry experts and auditors?)

Q&A