



Netherlands Enterprise Agency

Identifying certification scheme improvement opportunities

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Task 39
IEA Bioenergy



Introduction

- › Review certifications used for oleochemical- and lignocellulosic-based biofuel supply chains to identify certification scheme improvement opportunities
- › Concerns on certification integrity limit the commercialization of biofuels



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April 2020: Presentation Ted Knijn
'Integrity of certification frameworks for E-fuels'

Summarized results of comparison of three chain-of-custody options for RFNBOs

	Segregation	Mass balance	Book & claim
Additional/separate infrastructure	Yes	No	No
Availability/access of fuel to all operators	No	No	Yes
Administrative complexity	High	Medium	Low
Fraud protection	High	Medium	Low
Physical link to consumption	Yes	Yes	No

C-O-C choice provides no conclusive solution for improvement in E-fuels certification

Accessibility and traceability in sustainable biofuel supply chains

SQ Consult & Jinke van Dam Consulting
2020



Suppliers that bring renewable fuels to the Netherlands transport market own the sustainability information of these fuels and provide a Proof of Sustainability (PoS) to the Netherlands Emission authority to fulfill their national obligation. What does the information on such PoSs entail? How to judge whether and which risks in the supply exist? The Netherlands Platform Sustainable Biofuels asked SQ Consult to provide insight in the (perceived) risks and how to address them. Their findings are now available in a report.

3 main risks that can arise from lack of adequate and available information:

- (1) Non-compliant feedstock/residue at origin,
- (2) information altered at gathering/collection point
- (3) unclear Chain of Custody management.**



Summary findings on risk, supply chain effected, level of concern and possible solutions with examples (2)

Risk	Supply chain affected	Level of concern	Possible solution	Available examples
Unclear Chain of Custody management	Land-based feedstock supply chains.	Large concern for volumes sold wrongly designated as sustainable.	Improving the overall quality of supply chain management. Harmonizing definitions and terminologies.	Standard Business Reporting (SBR). Alignment of data structuring and interpretation (IDDS). TRASE.
	Biodiesel (UCO) supply chain.	Large concern for materials and documents duplication and fraud (selling certified batch twice, f. ex. to 2 different countries).	Improving the overall quality of supply chain management.	Fashion sector: Sourcing from sustainable hubs.
	Advance biofuels and complex supply chains	Medium concern for incorrect mass balance and allocation. Expected more complexity in allocation rules due to trade of blends, multiple outputs, and new fuels with complex proof of bio-origin.	Improving the overall quality of supply chain management. Harmonizing definitions and terminologies.	Standard Business Reporting (SBR). Alignment of data structuring and interpretation (IDDS). TRASE.



Work packages (to be discussed):

- WP1. Review of existing and emerging/proposed certifications for oleochemical and lignocellulosic feedstock-to-biofuel supply chains in **selected** legal frameworks with specific attention to varying C-O-C and legal requirements.
- WP2. Methodology assessment of biofuel supply chain certification identifying significant differences and implications in transferring ultimately necessary sustainability information;
- WP3. Risk analysis of identified differences/implications (WP2) in case of mutual recognition of subsequent verification systems (**Table 1**);
- WP4. Overview of how risks related to information transmission in specific supply chains are or can be addressed by regulation, by certification schemes and by the biofuel sector itself.



Legal framework (to be discussed):

- ✓ Brazil
- ✓ California
- ✓ Canada
- ✓ EU-REDII*
- ✓ Germany
- ✓ ICAO-CORSIA
- ✓ The Netherlands
- ✓ US
- ✓

The EU-REDII contains some extra requirements for information transfer through the chain of custody (Art. 30.1):

....the mass balance system shall ensure that each consignment is counted only once for the purposes of calculating the gross final consumption of energy from renewable sources and shall include information on whether support has been provided for the production of that consignment, and if so, on the type of support scheme.

Do other legal systems contain the same kind of requirements to avoid double claiming of sustainability in different certification systems?



Table 1. Subsequent C-O-C configuration (e.g. physical/non-physical/hybrid) in case of mutual recognition (to be discussed)

from to	1. mass balance	2. segregation	3. book&claim	4. hybrid	5.
1. mass balance	x	x	x	x	x
2. segregation		x	x	x	x
3. book&claim			x	x	x
4. hybrid				x	x
5.					x



Extra slides



Summary findings on risk, supply chain effected, level of concern and possible solutions with examples (1)

Risk	Supply chain affected	Level of concern	Possible solution	Available examples
Non-compliant feedstock or residue at origin	Land-based feedstock supply chains	Relatively small concern of feedstock not complying with biomass criteria. Higher when smallholders are involved.	Tools using satellite imaging to improve accessibility and completeness of land-use based information.	GRAS tool. RSPO Fire monitoring. Fashion sector: Sourcing from sustainable hubs. Food sector: Regular Due Diligence.
		Medium concern. Land-use based sustainability risks (ILUC) associated.	ILUC Directive as regulatory response, but not certain if concern for its implementation are valid. Tools using satellite imaging.	GRAS tool.
	UCO supply chain	Medium concern of UCO alteration at origin. Concern is smaller for UCO at points of origin delivering small amounts (less incentive for fraud).	Tools and approaches to better assess compliance at origin.	RUCO: Registry of Points of Origin in India. Fashion sector: Sourcing from sustainable hubs. Food sector: Regular Due Diligence.
	Lignocellulosic advanced biofuels	Currently small concern for modification of virgin forest material into sawdust and mixed with residues at origin. Concern will increase when uptake of volume grows.	Tools and approaches to better assess compliance at origin.	NEPcon sourcing hub. Fashion sector: Sourcing from sustainable hubs.
Information altered at collection / gathering point	Waste and residues UCO supply chain	Medium to large concern of wrongfully labelling UCO.	Stringent information verification and audits. Some certification schemes (as ISCC) has adapted its audit requirements.	EWABA standard of transparency. Adoption and further development of tests. Fashion sector: Sourcing from sustainable hubs. Various sectors: Setting standards for good practices.
	Lignocellulosic advanced biofuels	Currently small concern of wrongfully labelling of lignocellulosic waste for energy. Concern will increase when uptake of volume grows.	Stringent information verification and audits.	EWABA standard of transparency. Various sectors: Setting standards for good practices.