3rd ISCC Global Sustainability Conference

Double and Quadruple counting –
Key Challenges and Practical Handling

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RED Article 21, 2 allows for double counting. More and more member states implement it. So far in a non-harmonized way.

**RED, Article 21, 2**

... the contribution made by biofuels produced from

- Wastes
- Residues
- Non-food cellulosic material
- Ligno-cellulosic material

shall be considered to be **twice** that made by other biofuels.

**Examples of Member State implementation**

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<td>Double Certification of waste derived biofuels</td>
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The new EC Proposal includes the option of quadruple counting and provides “positive lists” for double and quadruple counting.

### EC Proposal, Annex IX

#### Double counting
- UCO
- animal fats cat. I, II
- non-food cellulosic material
- ligno-cellulosic material except saw logs and veneer logs

#### Quadruple counting
- Algae
- Biomass fraction of mixed municipal waste and industrial waste
- Straw
- Animal manure and sewage sludge
- POME, EFBs
- Tall oil pitch
- Crude glycerine
- Bagasse
- Grape marcs and wine lees
- Nut shells, husks, cobs, bark, branches, leaves, saw dust and cutter shavings
Double counting mechanisms and the new EC Proposal lead to a run on non-iLUC biofuels causing many challenges

Biodiesel Germany 2011

- **biodiesel, volume related**: rape 80%
- **other**: 0.3%
- **palm oil**: 5%
- **waste**: 14%

Source: BLE 2012

Biofuels Netherlands

- **biofuels for fulfilling targets**
  - FAME double counting: 32%
  - ethanol: 25%
  - other: 8%

Source: nea 2012

Biodiesel UK

- **biodiesel, volume related**
  - UCO: 89%
  - other: 11%

Source: RTFO 2012
Declining price premiums for certified biofuels compared to non-certified biofuels

- Increasing volumes of certified biofuels available
- Decreasing market volumes for non-certified biofuels
- Cap traditional biofuels

Example FAME 0 vs. FAME 0 RED ($/mt)

Source: 2013 Argus Media Limited.
Due to double counting, high price premiums for UCOME are paid on top of FAME 0

Price premiums UCOME

- Fraud at restaurant level unlikely as UCO prices paid to restaurants are low
- Closer attention should be paid to large sources of waste origination
- UCO collectors, traders and conversion units must be controlled

Source: Starsupply Commodity Brokers, 2013.
Lists of material eligible for double counting and certification procedures are not harmonized across the EU

- Non-harmonized lists in EU
- No update procedures
- Double counting material in one country, single counting in the other
- Certification for multiple markets necessary
- Certification as co-product and waste at the same time
- No harmonization of certification and documentation requirements
Impact monitoring of double counting for wastes/ residues is necessary

- Prices and volumes
- Intentional modification of product to become waste
- Intentional production of waste
- Declaring non-waste as waste
- Possible iLUC effect of wastes and residues?
- Effects on other industries
- Effects in other countries
So far, double counting has not initiated the market penetration of advanced biofuels

- Mainly UCOME as a traditional biofuel with an established technology is benefitting
- No really advanced biofuel (new technology, new feedstock) established
- Doubtful whether double counting will sufficiently promote advanced biofuels
- Fulfillment of the 10% target for renewable energy in transport will be difficult
- Fulfillment of decarbonization (FQD) targets more difficult with the implementation of double and quadruple counting
- Authorities increasingly tighten control mechanisms for double counting biofuels
Certification of double counting biofuels for the German market according to 36. BlmSchV – example UCOME

- **Source of waste origination**
  - self declaration waste/ residue
- **Collection point**
  - site-specific certificate
  - On site check by the auditor based on sampling
  - Sample size depends on risk and number of suppliers of the collection point
- **Melting plant**
  - site-specific certificate
  - Product identity of batches required
  - Associated collectors who gather UCO on behalf of the collector (first gathering point) are audited based on a 5% sample
- **Refinery/biodiesel plant**
  - site-specific certificate
  - Product identity of batches required (Nämlichkeit)
  - Batch documentation must include conversion factor
- **Nabisy**
  - UCOME
  - Proof of sustainability data (csv file)
  - Issuance of a “double weighting proof”
  - Mass balance applicable

3 additional on site checks by the auditors between regular certification audits
Practical and secure handling of waste and residue to biofuel certification according to ISCC EU

- Points of waste/residue origination providing
  - less than 10 metric tons of material (e.g. UCO) per month do not need to be certified. They need to fill in and sign a self-declaration
  - more than 10 metric tons of material per month have to be certified
- Collectors (first gathering points) of wastes and residues must be certified
- Dependent collectors which are acting on behalf of a certified collector must be inspected during the audit of the first gathering point based on a sample
- Traders with warehouses or storage facilities, storing and passing on treated wastes or residues need to be certified
- All conversion units need to be certified
Due to increasing verification requirements and need for security the use of a database is beneficial

- A database for incentivized biofuels
  - Guarantees increased security along the entire supply chain starting at the source of waste origination
  - Allows for more effective audits at lower costs and supports certification
  - Provides high quality data input to national databases
  - Helps market participants in fulfilling the different member state requirements
  - Is a key for functioning markets of certified products
  - ...