ISCC Technical Committee South America (ISCC TC SA)

5th Meeting
Buenos Aires, October 17, 2013

Update EU framework conditions
ISCC and ISCC PLUS – state of affairs and developments in South America
Waste and residues
Proposal biodiverse grassland of the European Commission
Content of the presentation

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3. Waste and residues
4. Proposal biodiverse grassland definition of the European Commission
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The RED and the FQD have set the framework for the implementation of the renewable energy regulations for the transport sector in the EU


- 10 % mandatory target (2020) for the use of renewable energy in transport
- Sustainability requirements (except for biofuels produced from waste and residues other than agricultural, forestry (..) residues)
- In addition, double counting options for biofuels produced from wastes and residues, including UCOME
- Minimum GHG savings
- Use of voluntary certification schemes


- The obligation for suppliers of fossil fuel to gradually reduce life cycle greenhouse gas emissions (decarbonization strategy) by a minimum of 6% by 2020

Both Directives have a strong impact on fuel markets and the share and type of renewables used in the fuel market
Last year the European Commission published a proposal to amend the RED and the FQD

- The main goal of the proposal is to tackle iLUC
- Reaching the 2020 targets of the RED (10% renewable fuels in transport sector) and of the FQD (minimum of 6% GHG reduction per energy unit of fuel supplied) will become more difficult
Amendments by the European Parliament to the Commission proposal on targets, multiple counting and iLUC emissions

<table>
<thead>
<tr>
<th>Targets</th>
<th>Multiple Counting</th>
<th>iLUC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cap of 6% of conventional biofuels, incl. dedicated energy crops on land</td>
<td>• Biofuels based on algae, renewable liquids, gaseous fuels of non-bio origin, CCS, bacteria qualify for advanced fuels sub-target and count 4 times toward target</td>
<td>• iLUC factors should be included in the FQD accounting from 2020 onwards</td>
</tr>
<tr>
<td>• Share of renewables in transport should be at least 7.5% by 2020 in each Member State</td>
<td>• UCOME and TME count twice, but fall outside the advanced sub-target</td>
<td>• Obligation of Member States to report on iLUC removed</td>
</tr>
<tr>
<td>• Share of advanced biofuels should be at least 0.5% by 2016, 2.5% by 2020</td>
<td>• Biofuels based on waste and residues, straw, husks etc. are single counted, but count on sub-target</td>
<td>• Review iLUC science by June 2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Review by end 2017 effectiveness of measures taken in tackling iLUC</td>
</tr>
</tbody>
</table>
In Germany, the market share of biofuels was nearly 6% in 2012.
As GHG thresholds increase and grandfathering no longer possible, individual GHG calculations become even more important.

% GHG saving according to default value from RED

- In 2017 minimum GHG saving requirements of 50%
- In 2018 60 % for installations in which production started from 2017 onwards. New EC Proposal: 60 % directly for new installations

GHG saving:
- UCONE/TME straw ethanol
- SME
- RME
- PME (methane capture)
- Sugar cane ethanol
- Sugar beet ethanol
- Wheat ethanol (NG, CHP)

GHG saving:
- 60%
- 50%
- 35%
The main reasons for high GHG emissions of biofuels are emissions during cultivation of biomass and the process energy for conversion.
Update RED: EC draft proposal for sustainability requirements of solid and gaseous biomass

Proposal EC – solid and gaseous biomass

- GHG savings of at least 60 %
- No biomass from land with high biodiversity value (no go areas)
- No biomass from converted land with high carbon stock
- Biomass from forests only if managed sustainable according to international principles and criteria (specification of principles and criteria is expected to come later)
- Biomass from agriculture shall comply with “Good Agricultural Practices” (GAP)
- Draft proposal resembles current RED requirements
Argentina and Indonesia are confronted with provisional anti-dumping duties for their biodiesel exports to the EU.
a final decision can be expected at the end of November 2013

Provisional anti-dumping (AD) duty on imports of biodiesel originating from Argentina and Indonesia

- Filed by European biodiesel producers (EBB)
- 104,92 € per net ton of biodiesel from Argentina
- 83,84 € per net ton of biodiesel from Indonesia
- Valid for six months. In November decision on extension to five years
- No anti-dumping measures for vegetable oils
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More than 4000 ISCC certificates have been issued – a sharp increase since the last TC SA meeting

* Numbers as of October 9, 2013
ISCC is used by companies in 81 countries (since last meeting +11 countries)

as of October 9, 2013
ISCC is a global system

* Numbers as of October 10, 2013
ISCC cooperates with 24 certification bodies and has trained more than 400 auditors

Certification bodies using the ISCC scheme
ISCC e.V. – About 70 members have joined the association
Five Technical Committees (TCs) are active within ISCC

TC 1: Implementation of the RED in Europe
TC 2: Latin America
TC 3: Wood
TC 4: North America
TC 5: South East Asia

ISCC Technical Committees (TCs) can be established by the ISCC Board to work on specific topics and regional issues and to further promote ISCC.
Isccc checklist 202 – New Excel tool to facilitate farm audits

<table>
<thead>
<tr>
<th>No.</th>
<th>Criterion</th>
<th>Major Must</th>
<th>Minor Must</th>
<th>Findings</th>
<th>Conformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>Contracts with all first gathering points to which sustainable biomass will be or was delivered</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.2</td>
<td>Copy of the signed self declarations</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.3</td>
<td>Weighbridge protocols of delivered biomass for each truck/tractor as received from first gathering point (according to ISCC 203 requirements)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.4</td>
<td>Only, if default values are not applied: GHG calculation</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5</td>
<td>Only, if default values are not applied: List of GHG data e.g. emission factors, lower heating values and their sources</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.6</td>
<td>Contracts with subcontractors (if relevant e.g. for spraying, harvesting etc.)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.7</td>
<td>Status as CC farmers proved by valid copies of the CC application forms</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Principle 1:** Biomass shall not be produced on land with high biodiversity value or high carbon stock (according to Article 17(1), (4) and (5) of the Directive 2009/28/EC. HCV areas shall be protected.

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<th>Findings</th>
<th>Conformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Biomass is not produced on land with high biodiversity value</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Price premiums are paid for certified products

Source: © 2013 Argus Media Limited
Assuming a market share of SME in the European biodiesel market of 11% would require approx. 2.8 mill. ha certified soy bean production area.

Source: Euroobserver (2013), Meo (2013)
Soy bean cultivation is increasing while the share of certified production remains low

Quelle: USDA, Foreign Agricultural Services, 2013

© ISCC System GmbH
ISCC is third party supporter of the SAI Platform (initiative of leading food producers for sustainable agriculture) and will offer soon SAI audits

Source: http://www.saiplatform.org/
ISCC also supports Unilever’s Sustainable Agriculture Code which sets high standards for agricultural production.
50 years WWF in Germany: For this reason, WWF and Playmobil produced a key chain from bioplastics using ISCC certified biomass.

Source: www.wwf.de
Under ISCC PLUS several certificates for food, feed, bioplastics and other chemicals have already been issued.
More and more companies use ISCC to proof sustainable supply chains: Two examples

„All raw materials used for our yogurt cups were processed according to the requirements of the ISCC PLUS certificate. These cups are a first step to develop more packing materials based on renewable raw materials...“

Marion Fürst, DANONE GmbH

„Renewable raw materials shall be used and processed as sustainable as possible. Agricultural land and water resources are limited. This is the reason why BASF is an active member of ISCC... and supports producers in their sustainability efforts. “

Christine Stiehl, BASF
# Current projects on European and global level

<table>
<thead>
<tr>
<th>Category</th>
<th>Europe</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardisation process</td>
<td>▪ CEN/TC 411: Bio-based products</td>
<td>▪ ISO 13065: Sustainability criteria for bioenergy (global)</td>
</tr>
</tbody>
</table>
| Food                                  | ▪ Plants for the Future  
▪ Food for Life  
▪ Several company specific initiatives | ▪ SAI (global)  
▪ Consumer Goods Forum                                                                |
| Feed                                  | ▪ IDH – Sustainable Trade Initiative                                   |                                                                        |
| Chemical / technical applications     | ▪ Horizon 2020 – Bridge 2020  
▪ Lead Market Initiative  
▪ SusChem  
▪ Plants for the Future  
▪ KBBPPS  
▪ ERRMA  
▪ European Bioplastics  
▪ Chimie du végétal | ▪ Bioplastic Feedstock Alliance Forum (USA)                                |
| Energetic use (solid / gaseous biomass) | ▪ Sustainability proposal EU  
▪ BIOPATH                        |                                                                        |
ISCC in South America

- 113 ISCC certificates have been issued in 11 countries in South America since 2010
- Most common feedstock are soy and sugar cane
- Three ISCC EU certificates are related to waste and residues: two in Argentina and one in Uruguay
- Currently, two countries are recognized by the BLE for activities under the 36th BImSchV: Argentina (since October 2013) and Peru (since January 2013)
- ISCC information events in Buenos Aires, Rio de Janeiro, Sao Paulo, Asuncion, Montevideo
- Three trainings in South America (2 X Rio de Janeiro, 1x Buenos Aires)
- 5th Technical Committee meeting
- Pilot on biodiverse grassland in Argentina
- Training considered in Q1 2014
55 valid ISCC certificates in South America*

*Each certificate may be valid for more than one type of operation

Numbers as per October 9, 2013

© ISCC System GmbH
Number of certificates in South America per ISCC system*

- 55 certificates are currently valid
- 47 ISCC EU
- 5 ISCC PLUS
- 3 ISCC DE

*Each certificate may be valid for more than one type of operation

Numbers as per October 9, 2013

© ISCC System GmbH
Types of operations certified in South America (without ARG)*

- Farm/Plantation: 4
- Oil Mill: 16
- Sugar Mill: 3
- Biodiesel Plant: 7
- Ethanol Plant: 1
- Trader: 8
- Warehouse/Logistics Center: 4
- Point of origin/Waste: 4

*Each certificate may be valid for more than one type of operation
Numbers as per October 9, 2013

© ISCC System GmbH
Types of operations certified in Argentina*

*Each certificate may be valid for more than one type of operation

Numbers as per October 9, 2013
Current activities: Development of desk-based analysis tools for risk assessment of LUC and biodiversity (Auditor support)

Source: http://earthengine.google.org/#intro/Amazon

Savannah

Agriculture

Draft of ISCC web-tool

Source: http://www.dsr.inpe.br/laf/series
Biodiversity databases and satellite images are gathered for risk assessment: Farm audit measures can be directly derived from platform

- Example below: High biodiverse areas and organic soils in Brazil (from National and International databases)
Biodiversity risk assessment: Check of farm location with respect to protected and high-biodiverse areas (I)

- Example: Farm of interest in Argentina, province of Buenos Aires
- Check of large-scale and global databases (provided by UNEP, Conservation International, WWF, Greenpeace)
- The area of interest appears rather clear of most of protected and biodiverse areas
- Nevertheless, a sound and reliable assessment calls for a closer look on a small-scale
Biodiversity risk assessment: Check of farm location with respect to protected and high-biodiverse areas (II)

- Distance analysis shows that the investigated farm is far away from protected and biodiverse areas.

- Result of desk-based analysis: Low risk of violation of sustainability criteria.

- Desk-based analysis gives hints for closer investigation of critical aspects but cannot replace the on-site audit.
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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

- Double Certification of waste derived biofuels
  - 36. BImSchV
  - modalités du double comptage
  - Regeling dubbeltelling betere biobrandstoffen
  - Bekendtgørelse af lov om bæredygtige biobrændstoffer og om reduktion af drivhusgasser fra transport
  - Decree 23/01/12
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
Due to double counting, high price premiums for UCONE are paid on top of FAME 0

Price premiums UCONE

- 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.
Certification requirements for double counting material are different under ISCC DE 36th BImSchV compared to those under ISCC EU

**Certification requirements for double counting material under ISCC – Example UCOME**

- **Product Identity (Nämlichkeit)**
- **Mass balance**

- Three additional on site checks within 12 months, for sources of waste origination (restaurants) based on samples defined by BLE

- **ISCC EU**
  - Audit > 10 mt p.m.
  - Points of origin with more than 10 metric tons of material (e.g. UCO) per month need to be audited. Sampling could be applied.

- **ISCC DE 36th BImSchV**
  - Mass balance

\[\text{Self declaration waste/residue} \rightarrow \text{Multi-site certificate} \rightarrow \text{Site-specific certificate} \rightarrow \text{Multi-site certificate}\]
For Germany system users need to be certified under the ISCC DE extension 36th BlmschV for double counting material

Certification requirements for double counting material entering the German market
Argentina has been recognised by the BLE for activities in the framework of the 36th BmSchV*
Under the 36th BImSchV only 2 certification systems were recognized with the number of eligible countries limited

Recognized certification systems
- ISCC DE and REDcert DE

Eligible countries
- Argentina
- Austria
- Belgium
- Bosnia Herzegovina
- Bulgaria
- Cambodia
- Canada
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Hongkong (without China)
- Hungary
- Indonesia
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malaysia
- Netherlands
- Northern Ireland
- Norway
- Peru
- Poland
- Portugal
- Republic of Korea
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- UK
- USA
Self-declaration options under the 36. BImSchV

- **Self-declaration for every delivery**: point of waste origination signs the self-declaration for every product delivery
- **Self-declaration for all deliveries of a contract**: point of waste origination signs the self-declaration for all deliveries of a contract with a collector (limit 1 year)
- **Self-declaration as part of the contract**: the text of the self-declaration can be included (identically) into the contract which is signed by point of waste origination and the collector (limit 1 year)
For raw materials and biofuels not covered by the BLE lists users could apply via ISCC for amendment/specification by the BLE

Prerequisite for entering the application process:
- Biomass or biofuels are not claimed to be waste due to exceeding date of expiry
- Waste or residues are not produced on purpose to become waste or residues
Under ISCC EU there are special certification requirements for waste and residues based biofuels

For markets other than Germany ISCC EU must be used to certify waste and residue based biofuels. ISCC DE + extension for 36. BImSchV is (so far) not recognized by any other member state.
ISCC EU certified system users can accept deliveries of waste and residue material from other certification schemes only after a positive benchmark.

So far 2 other EU recognized certification schemes have been benchmarked for equivalence by ISCC:

- REDCert EU: equivalence benchmark positive
  - Traceability requirements and certification requirements are equivalent to ISCC EU requirements
  - Deliveries of waste and residues can be accepted by ISCC EU certified system users
- RSB: equivalence benchmark negative
  - As certification only starts at conversion unit, traceability up to the point of origin can not be guaranteed
  - Deliveries of waste and residues can not be accepted by ISCC certified system users
ISCC EU requires the use of a self-declaration for points of origin

There are three options for the use of a self-declaration:

1. The self-declaration is filled in and signed for each single delivery of waste and residues
2. The self-declaration is used for all deliveries within a contract between the point of origin and the collecting point
3. The content of the self-declaration can be transferred with exactly the same words into the contract of the collecting point with the point of origin

The self-declaration as such or as part of a contract has a validity of one year at the most, starting from the date of issue
ISCC EU does not certify eligibility for double counting but only waste and residue based biofuels

The acceptance of different waste and residues for double counting always depends on member state requirements

- Determine target market(s)
- Check requirements in these markets and positive list, if available
- Waste or residue?
- yes → Certification according to ISCC EU waste and residue
- unclear → Contact ISCC for guidance
- no → Certification according to ISCC EU
For ISCC EU and ISCC DE extension supplementary documents on waste and residues based biofuels include the specific requirements
For up-to-date information please always consult the ISCC webpage

Archive of ISCC Communications

Please find here the e-mail communication of ISCC to the members, CB’s and system users of ISCC. This communication contains urgent information on concretion of the BioKraft-NachV, as well as examples and changes (updates) of the system. Changes which are not yet documented in the procedures and other ISCC documents are a valid part of the ISCC system and must be considered during certification.

20 August 2013
New procedures for inspections according to the 36th BImSchV, Small and Micro entities under the 36th BImSchV, Amendments of the lists of materials and biofuels under the 36th BImSchV, Mass balance requirements in the framework of the RED

18 July 2013
BLE: Updated biomass codes for Naboy, Updated data description for cavi fories for PoS in Naboy, New countries under the 36th BImSchV

05 July 2013
ISCC EU Farm Checklist 202: Excel-tool, ISCC EU: Recognition of REDcert EU for waste and residues; Communication by the BLE: Naboy; Communication by the BLE: Updated lists of the 35, BImSchV
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So far no definition of biodiverse grassland. This results in major practical problems in sustainability certification.....

Example:
Typical pasture land in Brazil
- Artificial grassland
- Only one aggressive specie
- No signs of biodiversity
...but the European Commission prepared a regulation on highly biodiverse grassland

**EUROPEAN COMMISSION**

Brussels, XXX
 [...] (2012) XXX draft

**COMMISSION REGULATION (EU) No .../.. of XXX**


- Definitions can be implemented by voluntary schemes
- Schemes recognized for grassland today do not allow conversion of any type of grassland. This can be changed with the new definition
- Independent expert assessments necessary for grassland conversion
ISCC developed procedures: „Assessment guidelines for determination of biodiverse grassland area“

- Developed by ISCC
- Pilot assessment in the “Pampa”
- Optimization of ISCC procedures based on the results of the pilot
Become part of the ISCC family.
www.iscc-system.org