ISCC Technical Committee South East Asia
Bangkok, 24 March 2015

Update EU framework conditions and ISCC developments

Bangkok, 24 March 2015
Content of the presentation

1. Update EU framework conditions
2. ISCC developments
1. Update EU framework conditions
RED contains GHG requirements for biofuels and bioliquids – with increasing threshold importance of individual GHG calculations is growing.

% GHG saving compared to fossil fuel

- 35 %
- 50 %
- 60 %

GHG saving requirements:
- Today: 35 %
- 2017: 50 %
- 2018: 60 % for installations in which production started from 2017 onwards

Methodology:
- The RED contains “default values” and “disaggregated default values” that can be used in certain cases*
- The RED contains a calculation methodology for “actual values”

* Certain restrictions are in place for the use of the default value for cultivation
In addition, the FQD implements a decarbonization strategy for transport. Importance of individual GHG calculations will rise further.

### Fuel Quality Directive (FQD) (2009/30/EC)

- **2010**
- **2015**
- **2020**

Decarbonization strategy for the transport sector

- **European Union:**
  - FQD requires a **6% GHG reduction** per unit of energy from fuel supplied*

- **Germany:**
  - Switch from energetic quota to GHG reduction quota already in 2015 (**no more double counting**)
    - (2015: 3.5% (initially 3%); 2017: 4.0% (initially 4.5%); 2020: 6% (initially: 7%))

  ➜ **The importance of the individual GHG performance of biofuels will increase.** It can influence market position and prices

  ➜ **Individual calculations and audits of individual calculations will increase**

  ➜ **Fraud potential**

* Obtained through the use of biofuels, alternative fuels and reductions in flaring and venting at production sites (additional 4% by CCS, electric vehicles and CDM possible).
ILUC is still heavily discussed – A proposal from the European Commission to amend the RED and FQD is on the table

- ILUC factors for reporting purposes only
- Cap on food crop-based biofuels (6% - 7%)
- Subtargets for advanced biofuels?
- List of double counting materials (annex IX)
- Post-2020 policy?
Note from the Commission to all voluntary schemes clarifying the requirements for the certification of waste/residue based biofuels (I)

Note from the Commission all voluntary schemes clarifying the requirements for the certification of waste/residue based biofuels (II)

Criteria from the Commission

- "...the whole chain of custody needs to be covered starting from its origin"
- "...all operators need to be audited individually. Only at the origin of the chain of custody can group auditing approaches be considered"
- "Frequency and intensity of the auditing procedure need to reflect the level of risk"

Example UCO

- "Collecting points "are required to maintain a thorough documentation back to the origin and are subject to regular audits, while no regular on-site audits are required in restaurants"
- Auditors must have the possibility to conduct on-site audits at restaurants e.g. via signed self-declarations
- In case of multiple certifications (under several schemes), auditors must verify all relevant information including mass balance records and reports from previous audits

Commission Regulation on highly biodiverse grassland shall apply from 01 October 2015

- Regulation was published on 08 December 2014 and **shall apply from 01 October 2015**
- Regulation further specifies natural and non-natural highly biodiverse grassland
- Specification of geographic regions which “shall always be regarded as highly biodiverse grassland”
- ISCC EU is one of the certification schemes also recognized for grassland: **until now, any conversion of grassland was prohibited under ISCC EU** (until the Commission publishes a definition)
- With regulation coming into effect a conversion of grassland may be possible under ISCC EU if it can be **demonstrated that grassland is not highly biodiverse according to the regulation**
Letter from the Commission from 29 January 2015 regarding the implementation of the new grassland criteria

- **VS may stick to strict approach** to protect all grassland regardless of the biodiversity value
- **VS may opt to limit protection of highly biodiverse grassland, if this grassland can be distinguished from other land**
- Verifying compliance with protection criterion requires technical knowledge that may go beyond competences from auditors
- For this purpose **external and independent experts with specific qualifications** may be used
- Assessment would not need to be done annually
- **ISCC to develop further guidance**
Note from the Commission to all voluntary schemes on transparency measures and methodology of GHG calculation (I)

- Improvement of transparency in the context of EC’s negotiations to limited indirect land use change
- Adjusted system documents and procedures have to be linked to website of EC
- EC defined set of information that should be available on website of voluntary schemes, e.g.:
  - Valid and expired certificates
  - Certification Bodies cooperating with scheme
  - List of all other schemes the scheme is recognizing
  - Latest versions of the system documents
- ISCC Website already fulfils almost all measures
- EC may require further measures in the future

Note from European Commission from 12 March 2015
ISCC developments
ISCC started its operation in 2010. More than 250 stakeholders contributed to ISCC’s development.
The ISCC Global Sustainability Conference in Brussels on 4 February 2015 marked the 5th anniversary of ISCC operations

- Almost 200 participants
- High profile speaker from the European Parliament and Commission, Authorities, Industry, NGOs and Organizations
- Chew Jit Seng from Genting spoke on the impact of ISCC certification in South East Asia
- Further main topics:
  - EU policy and implementation of GHG quota
  - Sustainability certification and impact assessment
  - ISCC PLUS and tangible benefits for non-regulated markets
ISCC is used in almost 100 countries by more than 3,200 companies
ISCC offers solutions for different markets

- **Energy**
  - Biofuels
  - Bioliquids
  - (Solid biomass)

- **Waste & Residues**
  - UCO
  - Animal fat
  - Spent bleaching earth
  - Palm sludge oil
  - ...

- **Food**
  - Cereals
  - Sugar
  - Vegetable oils (canola / rape, soy, palm)
  - Potatoes
  - ...

- **Feed**
  - Canola / rape meal
  - Soy meal
  - DDGS
  - ...

- **Chemicals**
  - Sugar
  - Vegetable oils
  - Starch
  - Cellulose
  - ...

**ISCC Standards**
- ISCC EU
- ISCC DE
- ISCC PLUS
- ISCC EU (with Guidance Waste & Residues)
- ISCC DE 36th BImSchV
- ISCC PLUS
- ISCC PLUS
- ISCC PLUS

© ISCC System GmbH: For personal use only. Reproduction and distribution is prohibited.
More than 8,100 ISCC certificates have been issued since 2010 (cumulative)

Number of ISCC certificates issued

* Numbers as of 19 March 2015
161 ISCC PLUS certificates have been issued since February 2012 – 87 are currently valid

* Numbers as of 19 March 2015
85% of all certificates are issued in the ISCC EU system. The DE system is loosing market relevance, ISCC PLUS is gaining importance.

* Shares of valid certificates as of 19 March 2015
**Certificates exclusively or partly dealing with waste & residues
While most of the system users are still located in Europe, the share of Asian participants is increasing substantially*

* Numbers as of 19 March 2015
ISCC PLUS offers high standard of ISCC certification for food, feed and bioplastics – Voluntary add-ons provide customized solutions

<table>
<thead>
<tr>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application</strong></td>
</tr>
<tr>
<td><strong>Core requirements</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Voluntary Add-ons</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
ISCC PLUS: New Add-on Non-GMO for feed and food and for technical markets available

- Feedback from Public Consultation has been included
- Non-GMO Add-on was separated for two different markets: feed/food and technical markets
- Additional guidance document
- Add-on audit procedure currently under final review
ISCC PLUS customized solutions for bio-based materials – dedicated labels and claims for processes using fossil/bio mixtures
ISCC PLUS supports and works closely with companies and initiatives to promote sustainability for food, feed and chemicals

- ISCC PLUS is recognised as fully compliant with Unilever’s principles for sustainable agriculture
- ISCC is supporter of the Sustainable Agriculture Initiative, SAI.
- ISCC is a recommended scheme to prove compliance with the requirements of the Consumers Goods Forum
- ISCC is recognized by INRO – German Initiative for the Sustainable Supply of Raw Materials for the Industrial Use of Biomass.
- ISCC participates in the Green Deal – Initiative from Dutch authorities and chemical companies to implement sustainability criteria for biobased polymer products
- ISCC cooperates with idh – the sustainable trade initiative
FONAP – Network to boost use of sustainable palm oil and palm kernel oil in food, feed and chemical markets in Germany, Austria and Switzerland

- FONAP (Forum for Sustainable Palm Oil) was founded in 2013
- Network of companies, associations and NGOs to support sustainable palm/kernel oil in the food, feed and chemical sector in Germany, Austria, Switzerland
- Currently, 36 members (including Unilever, WWF, Nestle, Henkel, Control Union…)*
- Supported by German Federal Government
- ISCC PLUS is recognised
- Issue to be tackled: Supply of sustainably produced palm/kernel oil available as well as demand from consumers. However, according to producers of final products and retailers sustainable input material not available
- FONAP aims to bridge this “black hole” in palm supply chains
- Commitments of FONAP members:
  - From 2015: Use of 100% sustainable palm/kernel oil
  - From 2020: 100% segregated palm/kernel oil supply chains

* Source: www.forumpalmoel.org. Numbers as March 2015
Bio-based chemicals are a strong driving force behind the ISCC PLUS growth. Certificates are published on the ISCC website.

<table>
<thead>
<tr>
<th>Number of certificate</th>
<th>certificate holder</th>
<th>certified as</th>
<th>in put</th>
<th>additions</th>
<th>product cat.</th>
<th>valid from</th>
<th>valid until</th>
<th>issued by</th>
<th>map</th>
<th>certificate</th>
<th>audit report</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCC-PLUS-Cert-83000002</td>
<td>Cargill SRL, Castelmassa (RO), Italy</td>
<td>MC</td>
<td>Cor</td>
<td>ISCC-PLUS-Cert-61729104</td>
<td>Baskem S.A., Triunfo, Rio Grande do Sul, Brazil</td>
<td>OT</td>
<td>Ethanol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCC-PLUS-Cert-60144257</td>
<td>Sarawak Oil Palms Bhd., Mukah, Malaysia</td>
<td>FG, OM</td>
<td>Pali</td>
<td>ISCC-PLUS-Cert-41401181</td>
<td>Cargill Incorporated, Boring, Oregon, United States</td>
<td>FG, MC, OT</td>
<td>Corn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCC-PLUS-Cert-60144096</td>
<td>Sarawak Oil Palms Bhd., Niah, Miri, Sarawak, Malaysia</td>
<td>FG, OM</td>
<td>Pali</td>
<td>ISCC-PLUS-Cert-70400153</td>
<td>3M Old Hickory, Old Hickory, TN, United States</td>
<td>OT</td>
<td>Polylactic acid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCC-PLUS-Cert-60144258</td>
<td>Sarawak Oil Palms Bhd., Miri, Sarawak, Malaysia</td>
<td>FG, OM</td>
<td>Pali</td>
<td>ISCC-PLUS-Cert-10014041</td>
<td>Neste Oil Singapore Pte Ltd, Singapore, Singapore</td>
<td>HVO, WR, TR, LC, WH</td>
<td>Palm, Spent bleaching earth, Palm oil sludge, UCO, Animal Fat Cat. 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCC-PLUS-Cert-DE120-10150006</td>
<td>Novamont S.p.A., Terni, Italy</td>
<td>OT</td>
<td>Star</td>
<td>ISCC-PLUS-Cert-10014038</td>
<td>Neste Renewable Fuels Oy, KA Moosiranta, Kotka, Finland</td>
<td>HVO, WR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCC-PLUS-Cert-DE105-83452701</td>
<td>Braskem S.A., Triunfo RS, Brazil</td>
<td>OT, LC</td>
<td>Eth</td>
<td>ISCC-PLUS-Cert-1990466</td>
<td>Neste Renewable Fuels Oy, Kuopio, Finland</td>
<td>OT</td>
<td>Lactic Acid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCC-PLUS-Cert-DE105-82948365</td>
<td>Braskem S.A., Triunfo, Rio Grande do Sul, Brazil</td>
<td>OT</td>
<td>Ethylene</td>
<td>ISCC-PLUS-Cert-10014035</td>
<td>Neste Renewable Fuels Oy, Kuopio, Finland</td>
<td>HVO, WR, TR, LC</td>
<td>Camelina, Animal Fat Cat. 2 &amp; 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© ISCC System GmbH: For personal use only. Reproduction and distribution is prohibited.
ISCC cooperates with 31 certification bodies from 14 countries
ISCC trainings already scheduled for 2015 – further dates still to be confirmed

- **ISCC Basic Training:** 18 – 20 May in Cologne
- **ISCC GHG Training:** 9 & 10 June in Cologne
- **ISCC PLUS Training:** 23 & 24 June in Cologne
- **ISCC Plantation Audit and Land Use Assessment Training:** Presumably in Q3/2015 in Jakarta *(tbc)*
- Further dates will be announced via the ISCC Newsletter and on the ISCC website
ISCC e.V. - different stakeholders are united in one association. Today, the ISCC association has 77 members.
Different technical committees to discuss national and biomass specific adaptations

TC North America
Next meeting: 24 June 2015 in Miami
Working groups:
- National adaptations
- ISCC PLUS

TC Europe
Last meeting: 04/11/14 in Berlin
Working groups:
- National adaptations

TC South East Asia
Next meeting: 24/03/15 in Bangkok
Working groups:
- Land use
- Waste and residues
- Smallholders
- Canola/ Australia

TC Wood
Last meeting: 2013
Issues:
- Sustainability certification solid biomass

TC Latin America
Next meeting: 24 June 2015 in Miami
Working groups:
- National and biomass specific adaptations
- Biodiverse grassland
- ISCC PLUS
Trailer ISCC Introduction 2015 and five country specific case studies available on the ISCC Website

To view and download all trailer go to www.iscc-system.org
Case study Genting, Malaysia: Zero discharge system and organic compost production results in significant GHG emission reduction
Case study Brazil: ISCC helps to improve agricultural practices at the Fazenda Xanxere, Bahia

The program helped us to improve our process.

The ISCC certification has a direct impact on the farms.

A mindset change on farm level had to be achieved.

We made all the necessary changes.

Our area also comprises 1.001 ha of protected land.
Case study Alco Bio Fuel, Belgium: Setting up sustainable supply chains and improving energy efficiency, thus reducing GHG emissions
Case study Thywissen, Germany: Addressing market needs with ISCC PLUS in the food industry for sustainable products
Case study Lantmännen Agroetanol, Sweden: Reducing GHG emissions and using food waste for biofuels production
Become part of the ISCC family. www.iscc-system.org