ISCC Update

Dr Norbert Schmitz, ISCC System GmbH
ISCC Regional Stakeholder Committee North America, Las Vegas, 27 November 2018
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ISCC facts & figures

System users in 100+ countries

19,000+ certificates
3,300+ system users

32 certification bodies
360+ ISCC trained auditors

Training Program
(68 Trainings so far for auditors and system users)

Innovative tools and procedures to facilitate audits

8 Voluntary add-ons to address specific customer requirements

Multi-stakeholder standard:
108 ISCC Association members

Stakeholder dialogue:
4 Regional and 2 Technical Committees

ISCC Integrity Program
3 auditors

Use remote sensing to verify land use change

Innovative tools and procedures to facilitate audits

8 Voluntary add-ons to address specific customer requirements

Multi-stakeholder standard: 108 ISCC Association members

Stakeholder dialogue: 4 Regional and 2 Technical Committees

ISCC Integrity Program 3 auditors

Use remote sensing to verify land use change
ISCC is increasingly being recognized for the sustainability verification of biofuels and bioliquids around the world

**European Union**: Recognition for all Member States

- 2010: Recognition
- 2011:
- 2016: Re-recognition in 2016 for all Member States

**Queensland (Australia)**: Recognition as certification standard for biofuels

- 2017:
- 2018:

**Colombia**: ISCC can be used to support calculation of GHG emission and reductions of biofuels

- 2017:
- 2018:

**Japan**: Recognition for verification of compliance with sustainability requirement for ethanol

- 2018:

**European Union**: Implementation or RED II; certification of low ILUC risk biofuels

- Ongoing

**Germany**: Recognition

- 2010
- 2011

**Japan**: Recognition for verification of compliance with sustainability requirement for ethanol

- 2018

ISCC in discussions with regulators in different parts of the world regarding recognition (not only for liquid bioenergy, also solid biomass and non-bio renewables)
ISCC is still mainly used for biofuels, but interest in other markets is increasing, in particular in food and bio-based chemicals markets.
Example SAI compliance: ISCC certified companies fulfill sustainability requirements of important customers in the food sector
Production capacities of bioplastics are increasing. Packaging is the largest sector for the application of bioplastics.
Companies make commitment to increase the use of bio-based materials

“With Arla we have found a partner who shares our vision of creating a more sustainable future (...) and reducing the consumption of fossil resources. The Signature cartons are made from 77% paperboard and 23% plant-based polymers.”

“Danone and Nestlé Waters have joined forces (...) to form the Natur’ALL Bottle Alliance. Their aim is to be the first to commercialize 100% bio-based and recyclable PET bottles. (...) First bottles are expected to hit the shelves by 2020.”

“The ultimate goal for Elopak is that both our company and our products shall become carbon neutral, meaning that we have a zero net impact on the drivers of climate change.”

“PlantBottle packaging (...) is the first ever fully recyclable PET plastic beverage bottle made partially from plants. The material looks and functions just like traditional PET plastic, but has a lighter footprint on the planet and its scarce resources.”

As a member of the Consumer Goods Forum (CGF), we share their commitment to net-zero deforestation by 2020 through the sustainable sourcing of pulp, paper, packaging and palm oil.

Source: Company websites; press releases, articles (2017 & 2018)
Major companies in the bioplastic market are already ISCC PLUS certified. ISCC also engaged in recycling of mixed plastic wastes.
Certification of agricultural and forestry feedstocks under ISCC

Examples

- Soy
- Canola
- Palm
- Sunflower
- Cereals
- Corn
- Sugarcane
- Sugarbeet
- Wood
- Cotton
- Shea Nuts
- Camelina
Top 10 of agricultural materials covered currently under ISCC

- Rapeseed/Canola: 14%
- Corn/Maize: 10%
- Wheat: 9%
- Palm (FFB + Palm Kernel): 8%
- Sunflower: 8%
- Soybean: 5%
- Triticale: 1%
- Sugar cane: 0.4%
- Shea: 0.3%
- Barley: 0.3%

* Numbers as of 25 September 2018. Each certificate may be issued for more than one raw material.
All kinds of waste-related materials becoming more relevant for ISCC

- Waste and processing residues:
  - UCO
  - Landfill gas
  - Tall oil
  - End-of-life tires
  - Municipal solid waste
  - Crude glycerine

- Renewable non-bio feedstocks:
  - Power-to-Gas
  - Power-to-Energy
  - CO2

- Forestry / agricultural crop residue:
  - Forestry residue
  - Husks
  - Straw

Examples
Top 10 of waste and residue materials covered currently under ISCC

* Numbers as of 25 September 2018. Each certificate may be issued for more than one raw material.

Share of valid certificates
The ISCC multi-stakeholder association is growing. Currently, it has 108 members*

*As of 20 November 2019
17 companies joined the ISCC e.V. in 2018 – four from the USA

- LanzaTech – USA
- EcoEngineers LLC – USA
- Green Plains Inc - USA
- Renewable Energy Group (REG) Inc – USA
- Reoil Sp. z.o.o – Poland
- DuPont - Netherlands
- Europarc Deutschland e.V. – Germany
- Vertex Bioenergy – Spain
- IATA - International Air Transport Association – Switzerland
- Alco Bio Fuel NV – Belgium
- APPA Biocarbonantes – Spain
- DBFZ Deutsches Biomasseforschungszentrum gGmbH – Germany
- Hungrana Ltd. – Hungary
- Kuala Lumpur Kepong Berhad – Malaysia
- Eni Trading & Shipping SpA - Italy
- Biochem Trade SL – Spain
- HMLP Co. Ltd – Japan
94 valid ISCC certificates are issued for companies located in North America.

Examples:

- American Green Fuels
- Marquis Energy
- RPMG
- CHS
- Darling Ingredients
- Morrow Renewables
- Green Plains
- Kolmar
- Neste
- REG
- NatureWorks
- ADM
- Green Energy
- World Energy
- Green Star Biodiesel
- Shell
- Atlantic Bio Fuels
- Baker Commodities Inc.
- ENSYN
- Pliemston Energy
- UPM
- OCI Beaumont
- Valley Proteins, Inc.
- DTE Energy
- 3M
- Tropicana
- Air Liquide
- Lakeview Energy
- Amato International
- Conestoga
- Pasternak, Baum & Co., Inc.
Raw materials and scopes which are ISCC certified in North America

Raw materials as indicated on certificates*

- Corn 20%
- UCO 24%
- Rapeseed/Canola 8%
- MSW 8%
- Animal fat 7%
- Sewage Sludge 7%
- w/r processing of veg. or animal oil 9%
- Other 17%

Numbers as of 20 November 2018.
Each certificate may be issued for more than one material and type of operation
* No (raw) materials are indicated on certificates only issued for trader and/or storage

<table>
<thead>
<tr>
<th>Type of operation</th>
<th>No. of certificates</th>
</tr>
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<tbody>
<tr>
<td>Trader/Storage</td>
<td>49</td>
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<tr>
<td>Collecting Point (w/r)</td>
<td>28</td>
</tr>
<tr>
<td>First Gathering Point</td>
<td>12</td>
</tr>
<tr>
<td>Biogas/Biomethane</td>
<td>8</td>
</tr>
<tr>
<td>Ethanol Plant</td>
<td>7</td>
</tr>
<tr>
<td>Crushing Plant/Oil Mill</td>
<td>5</td>
</tr>
<tr>
<td>Other Conversion Unit</td>
<td>5</td>
</tr>
<tr>
<td>Refinery</td>
<td>3</td>
</tr>
<tr>
<td>Methanol Plant</td>
<td>2</td>
</tr>
<tr>
<td>HVO Plant</td>
<td>2</td>
</tr>
<tr>
<td>Biodiesel Plant</td>
<td>2</td>
</tr>
<tr>
<td>Point of Origin (w/r)</td>
<td>2</td>
</tr>
</tbody>
</table>
Update of ISCC System Document 203 “Traceability and Chain of Custody“

- A summary of changes is incorporated
- Relevant changes include (among others):
  - Clarification regarding the issuing of a PoS for a batch of material that has already been counted towards a national biofuel quota (following the clarification by the EC)
  - Adjusted statement for waste/residue raw materials (“proof of non-modification” relevant for recognition in The Netherlands)
  - Clarifications regarding mass balance requirements
- Updated document comes into effect on 01 January 2019
- Earlier application is possible
- Templates for Sustainability Declarations and Proofs of Sustainability have also been updated to incorporate the adjusted wording
New ISCC PLUS Document to reduce overall number of ISCC System Documents

- ISCC EU and ISCC PLUS are widely harmonized → ISCC EU System Documents also apply for ISCC PLUS

- Document is a description of specific different requirements between ISCC PLUS and ISCC EU, e.g.
  - Some information requirements for sustainability declarations
  - Credit transfer
  - Emission factors
  - Aggregation of GHG values

- System Users that are both ISCC EU and ISCC PLUS certified only have to refer to one set of System Documents
ISCC PLUS guidance for deliveries of biofuels to Japan

- In April 2018 the Japanese government has recognised ISCC certification for verification of compliance of imported ethanol with sustainability requirements

- Detailed information within the presentation on „ISCC certification approach for Japan“
ISCC certification approach for independent smallholders

- ISCC has developed an approach for Independent Smallholder (ISH) certification

- Approach enables ISH to increase their productivity and income without further pressure on land to increase agricultural activities

- Specific training for ISH approach available
  - Online training available as of 25 October 2018 for auditors and master trainers
  - Target group: Company representatives, certification bodies/auditors, NGO’s, research bodies/authorities

Interested? Find further information here:
https://www.iscc-system.org/trainings-events/trainings/registration-for-trainings/
ISCC certification module for non GMO material

- Stand-alone certification of GMO-free feed and food products
- No certification of entire supply chain necessary
- No need for system user to fulfill ISCC sustainability requirements
- Based on EU Regulations (EC) No. 1829/2003 and No. 1830/2003, the German national law EGGenTDruchfG and the VLOG „Ohne Gentechnik“/ „VLOG geprüft“ standard
- System document and audit procedure available
More and more companies use ISCC to make credible claims about their sustainable products (I)
More and more companies use ISCC to make credible claims about their sustainable products (II)

- ISCC certified rum from Guatemala
- ISCC certified rapeseed oil from Poland
- ISCC certified sugar from Guatemala
- ISCC certified sunflower oil from Hungary
- ISCC certified sugar from Bolivia

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ISCC puts major emphasis on a regular and regional stakeholder dialogue. New TC on waste, residues and advanced low carbon fuels introduced in 2018
9th ISCC Global Sustainability Conference in Brussels in February 2019

Date: February 14, 2019
Place: Brussels, Belgium

- Established and vital platform for industry, trade, NGOs, associations, authorities and research
- As in previous years, 200 participants are expected
- Excellent networking opportunities
- Relevant topics around sustainability will be discussed
- ISCC e.V. General Assembly is taking place right after the conference (for ISCC e.V. members)
Many thanks for your attention!

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