New Biofuels Legislation in the EU, Re-Recognition of ISCC and latest Developments in ISCC PLUS

Dr Norbert Schmitz and Dr Jan Henke, ISCC System GmbH
#### Quo vadis biofuels in the EU? The four phases of the EU biofuel policy

<table>
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<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
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**Voluntary use** of biofuels in transport; two indicative targets set (but never achieved)

**Phase II**

A mandatory use of renewables for transportation fuels set (10%) and to be achieved by 2020.

The use of biofuels is restricted to those fuels that comply with a set of sustainability criteria; a GHG emissions saving threshold (compared to ff) is introduced (35%)

**Phase III**

Limiting the use of biofuels from feed/food crops (7% cap); boosting measures for Advanced Biofuels and renewable electricity; GHG emissions saving threshold increased; ILUC principle accepted as a policy tool; tougher rules on Voluntary Schemes

**Phase IV**

Phasing out mandates for 1G biofuels; possibly mandate for Advanced biofuels; possibly more strict sustainability criteria for mandated biofuels; no longer a specific target for the transport sector; no longer targets at MS level but at EU level

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<th>2003</th>
<th>2009</th>
<th>2015</th>
<th>2020</th>
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The RED/ FQD from 2009 set the framework for the implementation of renewable energy regulations for the transport sector in the EU.

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<td>2009/28/EC from 2009</td>
<td>2009/30/EC from 2009</td>
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- **10% mandatory target** (2020) for the use of renewable energy in transport
- **Minimum GHG savings** for biofuels
- **Sustainability** requirements
- **GHG calculation methodology**
- **Voluntary certification schemes**

- **Decarbonization** strategy: gradually reduce life cycle GHG emissions by a minimum of **6% by 2020**
New requirements from the European Commission have an impact on certification schemes and their system users*

- Note on conducting & verifying **actual calculations of GHG** emission savings
- Re-recognition of **ISCC EU** under EU RED
- **Due date for transposition in all EU Member States**
- **Amendment enters into force**
- Compulsory implementation of GHG Note
- **Publication RED/FQD Amendment (2015/1513)** official journal

* The European Commission has sent additional letters/communications to the VS, e.g. on transparency measures, wastes and residues, reporting requirements, highly biodiverse grassland.
The RED/ FQD Amendment (2015/1513/EC) from 2015 will affect biofuel markets

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<td>2015/1513/EC from 2015</td>
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- **7% cap** on food/feed crop biofuels
- **0.5%** reference value for **advanced biofuels**
- Provisional **iLUC factors**, only for reporting
- New obligations for **voluntary schemes**: Regular **reporting** to the EC, increased **transparency**
- **Review clause for**:  
  - ILUC factors  
  - Options to certify **low iLUC biofuels**  
  - Annex V  
  - Annex IX: **double counting** feedstocks and fuels
The Amendment includes changes in GHG saving thresholds for biofuels


2015/1513/EC from 2015

% GHG saving compared to fossil fuel

- 60 %
- 50 %
- 35 %

GHG saving requirements:

- 35 % for existing installation until Dec 2017
- 50 % from 1 Jan 2018
- 60% for new installations directly
By decision of 09 August 2016, ISCC was among the first two schemes to be re-recognized by the European Commission.

**COMMISSION IMPLEMENTING DECISION (EU) 2016/1361**

of 9 August 2016


HAS ADOPTED THIS DECISION:

**Article 1**

The ‘International Sustainability and Carbon Certification system’ (hereinafter ‘the scheme’), submitted for recognition to the Commission on 23 June 2016, demonstrates that consignments of biofuels and bioliquids produced in accordance with the standards for the production of biofuels and bioliquids set in the scheme comply with the sustainability criteria as laid down in Article 7b(3), (4) and (5) of Directive 98/70/EC and Article 17(3), (4) and (5) of Directive 2009/28/EC.

The scheme also contains accurate data for the purposes of Article 17(2) of Directive 2009/28/EC and Article 7b(2) of Directive 98/70/EC.
So far only three schemes have been successfully re-recognized based on the new requirements*

<table>
<thead>
<tr>
<th>Schemes which were due for re-recognition in August 2016</th>
<th>Schemes not re-recognized so far</th>
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<tbody>
<tr>
<td>ISCC EU (re-recognized as of 09 August 2016)</td>
<td>Ensus</td>
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<tr>
<td>Bonsucro EU (recognition expired)</td>
<td>Red Tractor</td>
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<tr>
<td>RTRS EU RED (recognition expired)</td>
<td>SQC</td>
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<tr>
<td>RSB EU RED (re-recognized as of 09 August 2016)</td>
<td>REDcert EU</td>
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<tr>
<td>2BSvs (re-recognized as of 26 August 2016)</td>
<td>NTA 8080</td>
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<tr>
<td>RBSA (recognition expired)</td>
<td>RSPO RED</td>
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<tr>
<td>Greenergy (recognition expired)</td>
<td>Biograce GHG calculation tool</td>
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<td>Neste HVO Renewable Diesel Scheme</td>
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<td>Gafta Trade Assurance Scheme</td>
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<td>KZR INIG System</td>
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<td>Trade Assurance Scheme for Combinable Crops</td>
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<td>Universal Feed Assurance Scheme</td>
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* As of 19 September 2016
ISCC is being used by companies in more than 100 countries

- **System users in 100+ countries**
- **12,500+ certificates**
- **3,000+ system users**
- **33 certification bodies**
- **660+ ISCC trained auditors**
- **51 Trainings** (Basic, GHG, LUC, Waste)
- **Stakeholder dialogue:** 84 ISCC Association members
- **Integrity Program**
  - 3 auditors
- **Innovative fuels**
  - (low iLUC, non-bio renewable, etc.)
- **New procedures**
  - (e.g. due to GHG quota)
- **Strong regional stakeholder dialogue:** 5 TCs
- **300+ ISCC PLUS certificates**

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ISCC is a multistakeholder initiative. It is governed by an association with 80+ members. New members are welcome.
ISCC cooperates with 33 certification bodies from 16 countries to conduct the audits for ISCC certification.

Some CBs are cooperating with branches in different countries.
ISCC supports the Sustainable Development Goals and Paris Cop21

Governments agreed:

- A long-term goal of keeping the increase in global average temperature to **well below 2°C** above pre-industrial levels
- To aim to limit the increase to **1.5°C**, since this would significantly reduce risks and the impacts of climate change
- On the need for **global emissions to peak as soon as possible**, recognising that this will take longer for developing countries
- To undertake **rapid reductions thereafter** in accordance with the best available science

GHG requirements already implemented in ISCC. Detailed methodology for international supply chains in place
ISCC is member of the United Nations Global Compact initiative

- World’s leading corporate sustainability initiative with more than 12,000 corporate participants and other stakeholders based in more than 160 countries
- Participants agreed on two objectives:
  - Integrate ten UN universal principles in the areas of human rights, labour, environment and anti-corruption in business activity around the world, and
  - Catalyse actions in support of broader UN goals, such as the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs)
- ISCC offers knowledge and support to platforms and special workstreams; promotes partnerships projects; engages with stakeholders and support companies in engaging and implementing the UN Global Compact sustainability efforts
Several NGOs are ISCC members contributing to the further development of the scheme and cooperating with ISCC (I)

<table>
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<tr>
<th>ISCC Members</th>
<th>Examples</th>
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<tr>
<td>WWF Germany</td>
<td><strong>Examples</strong></td>
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<td>Welthungerhilfe</td>
<td><strong>Examples</strong></td>
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<td>Danube Soya</td>
<td><strong>Examples</strong></td>
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<td>Kiel Institute for the World Economy</td>
<td><strong>Examples</strong></td>
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**Examples**

- "A Standard for the standard"
- Pilot ISCC PLUS
- Certified WWF-panda key chain
- Project on Food markets, Danone project
- IKI land use change project
- Development of practical criteria and checklists for food security
- Planning pilot audits
- Use of social indices for certification
- Integration of social indices into GRAS
- Non-GMO
- Carbon mapping
- GHG calculation
- LUC analysis and GHG emissions from LUC
- Identification of low iLUC risk biofuels
- Policy advice
Several NGOs are ISCC members contributing to the further development of the scheme and cooperating with ISCC (II)

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| **University of Illinois at Chicago, United State** | - Land-use change analysis  
- GHG emission calculations  
- Analysis of grassland to cropland conversion in the Prairies  
- Policy advice |
| **Fachhochschule Nordwestschweiz Switzerland** | - Development of project on sustainable supply chain management  
- Sustainability in the Swiss energy sector  
- Nomination for Swiss innovation price |
| **University of Twente** | - Utilization of remote-sensing data for certification |
In addition, various NGOs are conducting joint projects together with ISCC

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<th>Cooperating Institutions</th>
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<tbody>
<tr>
<td>SNV Netherlands Development Organisation</td>
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<td>• Development of smallholder certification for palm oil</td>
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<tr>
<td>• SNV as “strategic partner” of ISCC</td>
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ISCC Sustainability Certification in 2016: A quick overview on recent changes

- **Re-recognition** of ISCC EU by the European Commission.
  - **Key changes:**
    - Certification of non-highly biodiverse **grassland** possible
    - Farms that are partially compliant with ISCC principles 2 – 6 can become certified if they engage in a continuous improvement process
    - New reporting requirements
    - Mandatory certification of “paper traders”
    - Adjustments regarding GHG methodology

- ISCC fulfils **SAI/FSA Silver and Gold** standard for the food industry

- Guidance documents for the certification of **Biogas** and **Biomethane**, **Wood-Based** Supply Chains, Co-Processing, and the collection of wild growing **Shea fruits**

- Concepts for the certification of “**Power-to-X**” and “**Waste-to-X**”

- Non-GMO Module for Food and Feed

*Overview available on the ISCC website*
ISCC offers solutions to address sustainability requirements in different markets

Energy

Food

Feed

Chemistry
Companies looking for sustainability standards encounter a fragmented landscape.
ISCC is a One Stop Shop for all feedstocks and markets. ISCC is accepted by SAI and FEFAC as to be meeting their requirements.
Example SAI compliance: ISCC certified companies fulfill sustainability requirements of important customers in the food sector

**Performance Levels**

<table>
<thead>
<tr>
<th>Level</th>
<th>Threshold</th>
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<tbody>
<tr>
<td>Bronze</td>
<td>Compliance to 100% ‘Essential’ questions and a minimum of 75% ‘Basic’ questions.</td>
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<tr>
<td>Silver</td>
<td>Compliance to 100% ‘Essential’ questions, 80% ‘Basic’ questions and less than 50% ‘Advanced’ questions.</td>
</tr>
<tr>
<td>Gold</td>
<td>Compliance to 100% ‘Essential’ questions, 100% ‘Basic’ questions and a minimum of 75% ‘Advanced’ questions.</td>
</tr>
<tr>
<td>Not yet Bronze</td>
<td>Indicates that the level of performance does not meet the bronze threshold yet.</td>
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ISCC fulfills **SAI SILVER** and **SAI GOLD**

* For ISCC compliant material. For SAI Gold the respective add-on has to be applied
Examples of ISCC PLUS certifications (I): ISCC certified sunflower oil

“This bottle of Venusz edible oil has ISCC PLUS certification. The required quantity of sustainable sunflower seed is certified according to the ISCC PLUS International Sustainability Standards. We are tracking the certified supply chain, and are monitoring the emission of greenhouse gases.”*

* Market entry to come
Examples of ISCC PLUS certifications (II): ISCC certified sugar
Examples of ISCC PLUS certifications (III): ISCC certified packaging

Arla is using PurePak® from Elopak
Milk cartons with ISCC logo available in Denmark
Companies are using GRAS as user-friendly mapping tool to implement deforestation free supply chains

With GRAS sustainability can be checked from your desktop

The development of GRAS has been supported by:

- [Image of logo]
- [Image of logo]
- [Image of logo]
New tools based on satellite imagery for risk assessments of sourcing areas

Palm Oil Mill 1

Palm Oil Mill 2

50 km
GRAS can conduct detailed analysis on plantation level for the selected sourcing areas with a high risk.
On plantation level GRAS can identify date and type of LUC. GRAS can differentiate between replanting and actual deforestation.
GRAS can detect if, when and where deforestation has taken place in a certain area of interest.

- April 2008: natural vegetation
- September 2009: cleared areas
- February 2016: established plantations

![Graph showing Enhanced Vegetation Index from 2000 to 2016 with a peak drop in 2009 indicating deforestation.](image)
Many thanks for your attention!

Contact

Dr Norbert Schmitz
ISCC System GmbH
Hohenzollernring 72
D-50672 Cologne, Germany
Email: schmitz@iscc-system.org
Tel: +49 221 3799 8487
Fax: +49 221 941 5863