ISCC Approach Towards Sustainable Forest Management

Dr. Peter Hawighorst
## Agenda

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About 16,000 certificates have been issued under ISCC so far. Currently, more than 3,000 system users are ISCC certified.

System users in 100+ countries

16,000+ certificates
3,000+ system users

32 certification bodies
670+ ISCC trained auditors

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

Several tools and procedures to facilitate audits (combined-audits)

Use of innovative methods to verify land use change

6 Voluntary add-ons to address specific customer requirements

Stakeholder dialogue: 90 ISCC Association members

Strong regional stakeholder dialogue: 5 Technical Committees

Integrity Program
3 auditors

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ISCC is a multistakeholder initiative. It is governed by an association with 90+ members that are also coming from the forestry sector.
BioVerno is the first lignofuel certified under ISCC. UPM also received ISCC PLUS certification for wood-based biomaterials.

### ISCC EU

**Certificate**

- **Certificate Holder**: UPM Kymmene Oyj
- **Location**: Lappeenranta, Finland
- **Product Type**: Lignocellulosics

**Achievements:**
- Production of lignocellulosics
- First ISCC certified wood-based biofuel
- EU Biofuels, H2
- Low scCO2
- Promotes: ISCC PLUS certification for wood-based biomaterials

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**ISCC PLUS Certificate**

- **Certificate Number**: ISCC PLUS UPM-53-2018
- **Issuing Body**: SGS
- **Location**: Lappeenranta, Finland
- **Product Type**: Lignocellulosics

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**Example**
Certification starts at the pulp mill, where crude tall oil (CTO) occurs. Besides the biofuel, further valuable bio-materials for the chemical industry are produced.
ISCC certified Italian Bio Products is processing bioethanol using straw, solid biomass from SRC and processing residues as a feedstock.
The certification for the bioethanol starts at the farm managing the SRC, or at the Point of origin, where residues from forestry and forest based industry occur.
## Agenda

1. **ISCC: State of Affairs of the Scheme and Certification of Lignofuels**

2. **Implementation of RED Sustainability Criteria for Forest Biomass by ISCC**

3. **Actual and Future Challenges for Solid Biomass Certification**
Solid biomass for biofuel production can be cultivated in agriculture (SRC) and forestry. For both, certification starts on the level of biomass production.
In order to ensure the “same level playing field” for both production systems under ISCC, equal sustainability requirements must be applied.
Addressing requests from lignofuels producers, ISCC developed system documents for the certification of wood from forestry based on the RED requirements

- ISCC certified lignofuels with high GHG emission savings available
- Certification based on w/r process or solid biomass from SRC (agriculture). Option: certification process based on forest biomass
- Focus: Development of requirements for RED compatible production of sustainable forest biomass
- ISCC conducted pilot audits in the forest and forest-based industry (Forest Management Unit (FMU), saw mill, pulp mill, trader, First Gathering Point (FGP))
- ISCC Technical Committee “Wood” => Stakeholder input
  - ISCC developed procedures for FMUs
Based on the findings of the pilot audits conducted, ISCC developed a RED compatible certification approach along the whole supply chain

- Land-based sustainability criteria - development of ISCC procedures for Forest Management Units (FMU)
  - ISCC requirements for sustainable agricultural practices translated for sustainable forestry (criteria for sustainable forest biomass production)
  - These criteria are in line with the proposed criteria from the RED II (§ 25 (5))

- GHG emission calculation conducted based on RED methodology

- Mass Balance and Traceability:
  - ISCC pilot audits conducted for processing units from forestry industry (saw mill, pulp mill) and a first gathering point
  - Verification of Chain of Custody requirements along a typical forestry supply chain
The RED II sets out sustainability criteria for forest biomass addressing sustainable forest management practices

- (. .) forest biomass (. .) shall meet the following requirements to minimise the risk of using unsustainable forest biomass production:
  a) Harvested in a country with national and/or sub-national laws for harvest, monitoring and enforcement systems in place ensuring:
     1) Legal harvesting (harvesting permit within legally gazetted boundaries)
     2) Forest regeneration takes place
     3) Protection of areas of high conservation value, including wetlands and peatlands
     4) Minimizing impacts of forest harvesting on soil quality and biodiversity
     5) Harvesting does not exceed long-term production capacity

Source: COM (2016) 767 final 2
Example: ISCC Implementation of criteria for sustainable forest biomass production set out in RED II (I)

ISCC Procedures for FMU, 2.1.2
Where production of raw material does not interfere with protection purposes (set in Principle 1), appropriate management measures shall be implemented to avoid damage or deterioration of habitats. Illegal or inappropriate hunting, fishing, trapping or collecting activities in these areas are controlled as far as possible and, if necessary, prohibited. Existing ecological corridors and important landscape elements shall be maintained or, if necessary, restored to minimize fragmentation of the protected habitats. This shall take place in accordance to the type of terrain, wildlife and forest management practices.

ISCC Procedures for FMU, 2.1.3
The cultivation of highly invasive species shall be prevented. If species are officially prohibited in the country of operation, they are not used.

Source: COM (2016) 767 final 2

Article 26 (5)

1. forest biomass (..) shall meet the following requirements to minimise the risk of using unsustainable forest biomass production:
   a) Harvested in a country with national and/or sub-national laws for harvest, monitoring and enforcement systems in place ensuring:
      1) Legal harvesting (harvesting permit within legally gazetted boundaries)
      2) Forest regeneration takes place
      3) Protection of areas of high conservation value, including wetlands and peatlands
      4) Minimizing impacts of forest harvesting on soil quality and biodiversity
      5) Harvesting does not exceed long-term production capacity
Example: ISCC Implementation of criteria for sustainable forest biomass production set out in RED II (II)

**ISCC Procedures for FMU, 2.1.5**
During forest harvest, damages to remaining trees shall be minimized. A monitoring system can be used to determine damages and ensure a continuous improvement.

**ISCC Procedures for FMU, 2.1.6**
Where possible, natural regeneration shall be preferred for the cultivation of young stand.

**ISCC Procedures for FMU, 2.1.7**
Adequate tree species shall be selected for cultivation and regeneration.

**ISCC Procedures for FMU, 2.1.10**
Harvesting practices shall be adjusted to the location.

**ISCC Procedures for FMU, 2.1.11**
Trees and deadwood safeguarding the biodiversity of the forest shall be preserved and left in the forest.

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**Article 26 (5)**

... forest biomass (...) shall meet the following requirements to minimise the risk of using unsustainable forest biomass production:

1) Legal harvesting (harvesting permit within legally gazetted boundaries)
2) Forest regeneration takes place
3) Protection of areas of high conservation value, including wetlands and peatlands
4) Minimizing impacts of forest harvesting on soil quality and biodiversity
5) Harvesting does not exceed long-term production capacity

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Source: COM (2016) 767 final 2
Example: ISCC Implementation of criteria for sustainable forest biomass production set out in RED II (III)

ISCC Procedures for FMU, 2.3.1
Conservation of soils.
Tree species should only be grown on suitable soils. In order to ensure a sustainable treatment of soils, good forest management practices with respect to soil quality, soil contamination and soil erosion are addressed in the soil management. Damages to the soil shall be avoided. Applied practices shall refer to:
- Prevention and control of erosion;
- Maintaining and improving soil structure;
- Maintaining and improving soil biodiversity.

ISCC Procedures for FMU, 2.3.2
Cultivation techniques shall be used to reduce the possibility of soil erosion.

Source: COM (2016) 767 final 2
Example: ISCC Implementation of criteria for sustainable forest biomass production set out in RED II (IV)

ISCC Procedures for FMU, 2.0.1
A forest management plan, correlating with the size and the management intensity of the forest management unit shall promote sustainable use and management of all areas of the FMU

ISCC Procedures for FMU, 2.3.4
The wood production capacity of the site shall be taken into consideration when harvesting woody biomass

ISCC Procedures for FMU, 2.4.6
The level of sustainable allowable cut shall not be exceeded in the area of the forest management unit in the long term

Article 26 (5)

• (1) forest biomass (..) shall meet the following requirements to minimise the risk of using unsustainable forest biomass production:
  a) Harvested in a country with national and/or sub-national laws for harvest, monitoring and enforcement systems in place ensuring:
     1) Legal harvesting (harvesting permit within legally gazetted boundaries)
     2) Forest regeneration takes place
     3) Protection of areas of high conservation value, including wetlands and peatlands
     4) Minimizing impacts of forest harvesting on soil quality and biodiversity

5) Harvesting does not exceed long-term production capacity

Source: COM (2016) 767 final 2
Example: ISCC Implementation of criteria for sustainable forest biomass production set out in RED II (IV)

1) **ISCC Principle 5**

- Harvested in a country with national and/or sub-national laws for harvest, monitoring and enforcement systems in place ensuring:
  1) Legal harvesting (harvesting permit within legally gazetted boundaries)
  2) Forest regeneration takes place
  3) Protection of areas of high conservation value, including wetlands and peatlands
  4) Minimizing impacts of forest harvesting on soil quality and biodiversity
  5) Harvesting does not exceed long-term production capacity

2) **ISCC Procedures for FMU, 2.1.6**

Where possible, natural regeneration shall be preferred for the cultivation of young stand

3) **ISCC Principle 1**

- Adequate tree species shall be selected for cultivation and regeneration

Source: COM (2016) 767 final 2
## Agenda

1. ISCC: State of Affairs of the Scheme and Certification of Lignofuels
2. Implementation of RED Sustainability Criteria for Forest Biomass by ISCC
3. Actual and Future Challenges for Solid Biomass Certification
Sustainability assessment for regions provide valuable data on the risk of sourcing non-sustainable wood. This information can be linked with data on wood origin.

- Sustainability assessments on certain geographic regions provide valuable information for verifying the risk of sourcing non-sustainable material.
- This information can be used in order to determine audit intensity or the main focus of an audit.
- Using innovative technologies, information on geographic regions shall be linked with data on wood origin, transport and/or stockpiling of wood.
- Technology options are e.g.:
  - GPS tracking
  - RFID coding
  - App: platform for data exchange and analysis
  - (Continuous) Remote sensing of certain areas of interest (monitoring).
Current and future challenges for solid biomass certification under ISCC

**Same feedstock – same sustainability requirements**

Specification of proposed criteria for sustainable forest biomass adequate with GAP requirements (e.g. adequate measures to minimise the impact on soil quality and biodiversity) and ISCC requirements for sustainable biomass from agriculture.

**Same feedstock – same verification set-up**

Verification process is equal for sustainable solid biomass from forestry and agriculture. The process shall ensure traceability throughout the whole supply chain and back to forest holding, plantation and/or farm level.

**Minimizing audit efforts**

High number of small forest owners in the EU may lead to increased audit efforts for solid biomass from forestry. The utilisation of innovative technologies (e.g. satellite data, satellite images) may support the certification leading to minimized audits efforts for system users.

**Risk assessment for forest biomass**

Risk assessments are a crucial part of the ISCC system determining audit intensity. Forestry has different sustainability risks in comparison to agriculture (e.g. biodiverse forests, risk of LUC). Addressing these differences, a forest specific risk assessment shall be developed.
Well prepared forest owner and wood processors may benefit from a future „RED II market“ for RED complaint solid biomass

• Lessons learnt from liquid biofuels:
  • High price premiums for RED complaint feedstocks and biofuels short time after the implementation of the RED
  • Over the years, continuous price premium of about 10-50 €/t for RED compatible biofuels vs. Non-RED biofuels
  • Price premium for double-counting feedstocks and biofuels

Forest owner and processor may benefit from future RED II