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Safeguarding Biodiversity and Decarbonization with ISCC Certification

Dr Norbert Schmitz, Managing Director, ISCC System GmbH



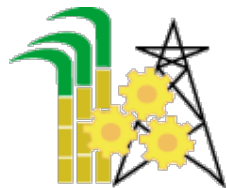
Content

- Key figures of ISCC development in the last 12 months
- Activities to safeguard biodiversity and to support decarbonization
- Credibility and integrity of the system
- Conclusions

ISCC shows continuous growth

- Since February 2016, overall number of **certificates increased by 5%** to 2,950
- **ISCC PLUS** shows a very positive development. Number of certificate holders **increased by 31%**. Important key accounts made decisions in favor of ISCC
- In total, **more than 13,400 certificates** have been issued since ISCC started operations in 2010
- ISCC has certificate holders in **105 countries** (latest newcomers: Albania, Benin, New Zealand, Oman, Pakistan)
- Share of certificates related to **waste and residues: 40%** (not volumes!)
- **657 auditors** from **33 certification bodies** from 16 countries verify compliance with ISCC requirements

The ISCC association is growing as well and has nearly 90 members now. Ten new members* joined in the last twelve months



Central Agro
Industrial
Guatemala



*: One individual membership

The re-recognition of ISCC EU by the European Commission has been a milestone in 2016

- Commission Implementing Decision (EU) 2016/1361 of **9 August 2016**
- ISCC **recognized for biofuels and bioliquids** in the framework of RED/FQD
- ISCC and RSB have been the two **first schemes** to be re-recognized
- Recognition (Implementing Decision) of Bonsucro, RTRS EU RED, RBSA and Greenergy **expired** on 09/08/2016
- **Updated ISCC System Documents** in new layout including amendments of RED, EC communications and notes and ISCC System Updates
- Comprehensive **overview of changes** available on ISCC Website
- **New ISCC Basic Training** – Extensive revision of content (Ten trainings with more than 300 participants conducted in six countries in 2016)

ISCC has been also recognized by the Polish authorities allowing a continuous operation in this important market

- Recognition by the EU is not sufficient to continue with sustainability certification in Poland, as **Poland requests additional requirements** from schemes
- Since November 2016 **ISCC is registered as the first foreign certification system** administrator by the Polish Agricultural Market Agency (ARR)
- With this registration ISCC fulfills all formal and legal requirements to **continue certification** in Poland in 2017 and beyond
- As a prerequisite for the registration as a system administrator, ISCC had to establish a **branch in Poland**
- Furthermore, the ISCC EU System Documents had to be **translated into Polish** (available on the ISCC website)

From a niche product to a future building block in the bio-based economy: biomethane

- ISCC has become a **leading certification system** for this growing niche market
- Currently, **ten biomethane plants in the EU and USA** and several biomethane traders in different are certified under ISCC
- ISCC certified biomethane is used in different markets: as a **biofuel** (biomethane), as a feedstock for **(liquid) biofuel production** (biomethanol) and as a feedstock in the **chemical industry**
- ISCC supports system users in the sector providing a **guidance document** and further system documents
- **ISCC EU** and **ISCC PLUS** certification ensure credible supply of sustainable biomethane for all markets

The demand for advanced and iLUC-free biofuels will increase in the future. ISCC already certifies such fuels

- DIR 2015/1513 proposes a **significant higher level of advanced biofuels** consumed in the EU
- **Definition** of advanced biofuels is not available yet
- Besides ongoing discussion on advanced biofuels strategies, ISCC certifies **innovative fuels** e.g.
 - wood based biofuels
 - MSW based biofuels
 - Non-bio renewable fuels
- Supporting its system users, ISCC developed **guidance documents** for the certification of *Low iLUC Risk Biofuels* and *Wood Based Biofuels*
- Different **options** exist for low iLUC risk agricultural feedstocks:
 - Double cropping in traditional crop rotation system
 - Use of degraded land
 - Alternative land use systems (e.g. silvopasture)
- ISCC and GRAS can be used verifying the implementation of **new agricultural production systems** and proving compliance with RED requirements

UPM in Finland has certified its BioVerno biofuel under ISCC EU and bio-based applications made of wood under ISCC PLUS

UPM Biofuels gains ISCC PLUS certification for bio-based applications

(UPM, Helsinki, 18 April 2016 at 13:00 EET) - UPM Biofuels has extended sustainability certification to cover all of its output streams from the Lappeenranta Biorefinery in Finland under the International Sustainability and Carbon Certification Scheme ISCC PLUS. UPM Biofuels produces renewable diesel and naphtha at the Lappeenranta Biorefinery in Finland. Wood-based renewable diesel UPM BioVerno for transportation is the main product. However, the process also generates a smaller share of renewable naphtha, which can be used as a biocomponent for petrol.

Existing biofuel sustainability certifications cover the use of these renewable fuels in transportation. However, with the new ISCC PLUS certificate, the wood-based fuels can now also be utilised as certified feedstock, for example in bioplastics production. Other output streams from the Lappeenranta Biorefinery are renewable turpentine, pitch and sodium bisulphite, which are formed as residues of biofuel production. Like the main products, all these residues have several applications in the chemical industry.

The Biofore Company **UPM**



Source: www.upm.com



ISCC certification of a plant converting municipal solid waste (MSW) into biomethanol. Application for chemicals and fuels



ENERKEM ALBERTA BIOFUELS

Capacity: 38 million litres per year (i.e. 1 X standard Enerkem system)

Feedstock: 25-year agreement with City of Edmonton for 100,000 dry tonnes of MSW per year

Products: Biomethanol, cellulosic ethanol



Source: Enerkem



ISCC is also recognized by SAI, major food companies, and in the feed sector

Examples

- **SAI:** Platform of the global food & drink industry. ISCC fulfils SAI Silver level, and with the add-on “SAI Gold”, compliance with the SAI Gold level provided
- **Consumer Goods Forum:** Compliance with the requirements for responsible soy
- **Coca Cola:** Coca Cola’s Sustainable Agriculture Guiding Principles has accepted ISCC as compliant with its requirements
- **Unilever:** Compliance with the Unilever Sustainable Agricultural code is achieved
- **FEFAC:** The European Feed Manufacturers’ Federation (FEFAC) has benchmarked ISCC. ISCC products can be sold as “in line with FEFAC Soy Sourcing Guidelines”

Aguaí has recently extended its certification to ISCC PLUS to expand positive impacts of sustainability certification to the food market

- Aguaí certified under **ISCC EU** and **PLUS**
- Aguaí sells certified **sugar** in Latin America and **ethanol** for international markets
- Cristóbal Roda Vaca, CEO of Aguaí: *“The efforts made by Aguaí have been backed by norms like ISCC PLUS. With ISCC we have **set ourselves apart as an example to our community, as the leaders in environmental and human rights protection.**”*
- With the ISCC certification Aguaí is creating **positive impact** and is addressing pressing ecological and social issues in Bolivia by:
 - **Prohibiting pre-harvest sugarcane field burning**
 - **Promoting reforestation and good agricultural practices**
 - **Prohibiting child labour**
 - **Implementation of health & safety policies for the manual harvest of sugar cane**



Companies increasingly display their ISCC certification on final products to highlight ISCC certification to customers



ISCC certified sunflower oil



ISCC certified sugar

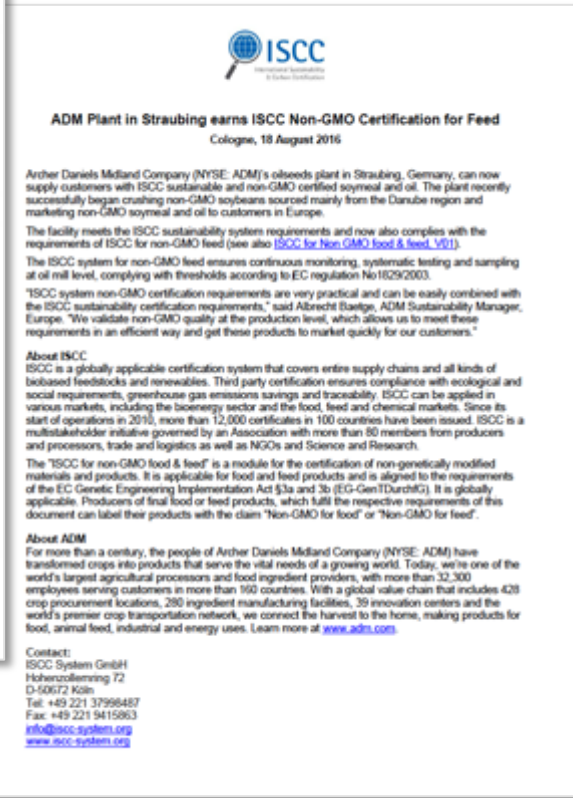


ISCC certified packaging solution

ISCC non-GMO certification for food and feed. First certificate has been issued



ISCC certificate for non-GMO food & feed



ISCC Press release from August 2016

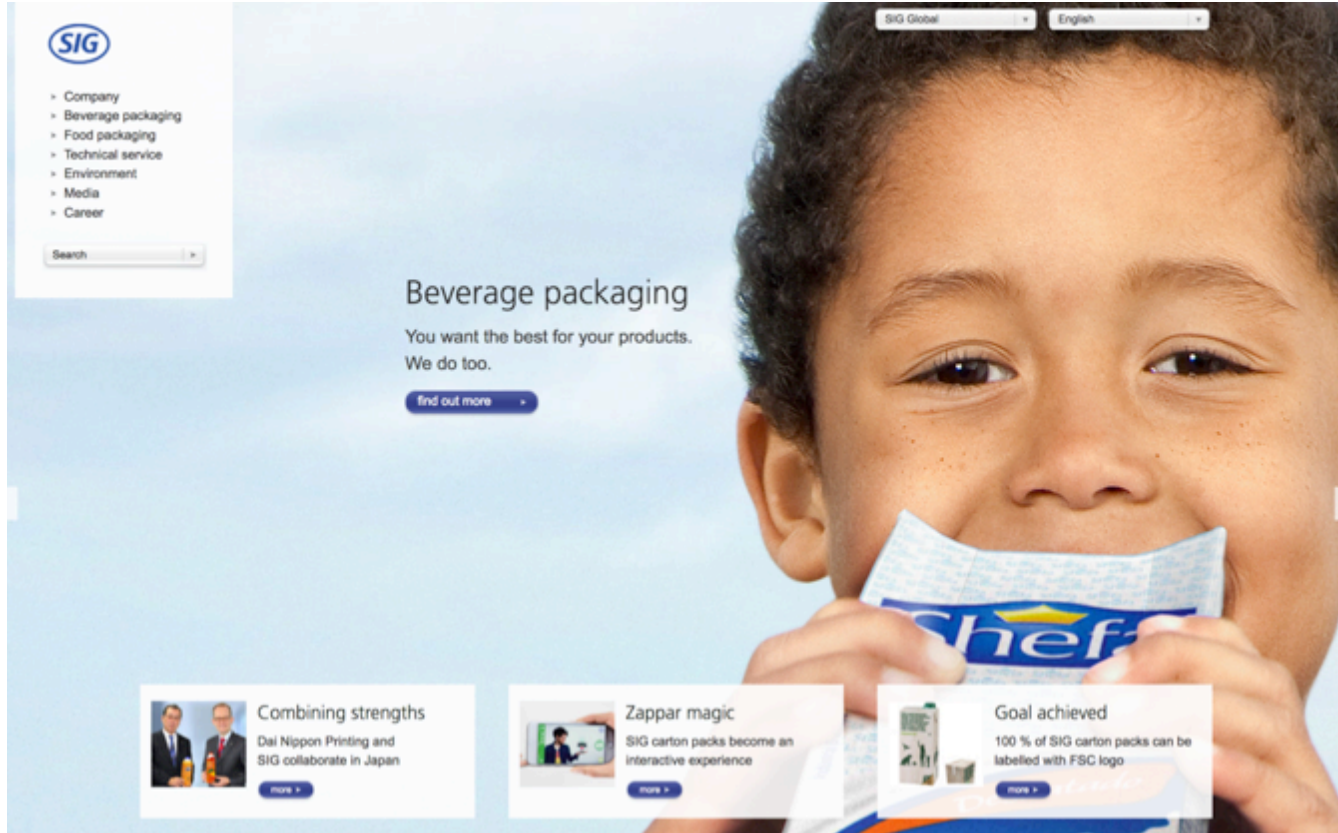


- “ISCC for non-GMO food & feed” is a **module** for the certification of non-genetically modified products
- **Globally applicable** for food and feed products
- Compliance with thresholds according to **EC regulation** on genetically modified food and feed* and alignment with EC Genetic Engineering Implementation Act**
- The ISCC System for non-GMO ensures **continuous monitoring, systematic testing** and **sampling** at oil mill level
- ISCC non-GMO certification can easily be **combined** with sustainability certification requirements

* Regulation (EC) No. 1829/2003

** §3a and 3b EG-GenTDurchfG)

SIG has recently received ISCC PLUS certifications for four operations to produce beverage cartons and closures



Source: www.sig.biz



- SIG Combibloc is **one of the world's leading suppliers** of carton packaging and filling machines for beverages and food
- SIG has over 5,000 employees in more than 40 countries
- Four certificates are issued for **manufacturers of beverage cartons** (coating of paperboard with bioplastic) and closures
- **Trader and storage facilities** are also covered by the certification

The ISCC Integrity Program is an essential part of ISCC's quality and risk management. Results help to further improve the system



Objectives

- **Monitoring compliance** of CBs and companies with ISCC requirements
- Ensuring **objective, consistent and reliable** certification process
- **Valuable feedback** from CBs and companies
- Important pillar for ISCC's quality policy and **continuous development**

Results in 2016

- **64** Integrity Assessments conducted
- Deficits and non-conformities detected especially in the areas **traceability, mass balance and GHG calculations**
- **Nine** certificates have been **withdrawn**
- **Five** companies have been **suspended from certification**
- Issuance of **six “warnings”** and **two “yellow cards”** to certification bodies

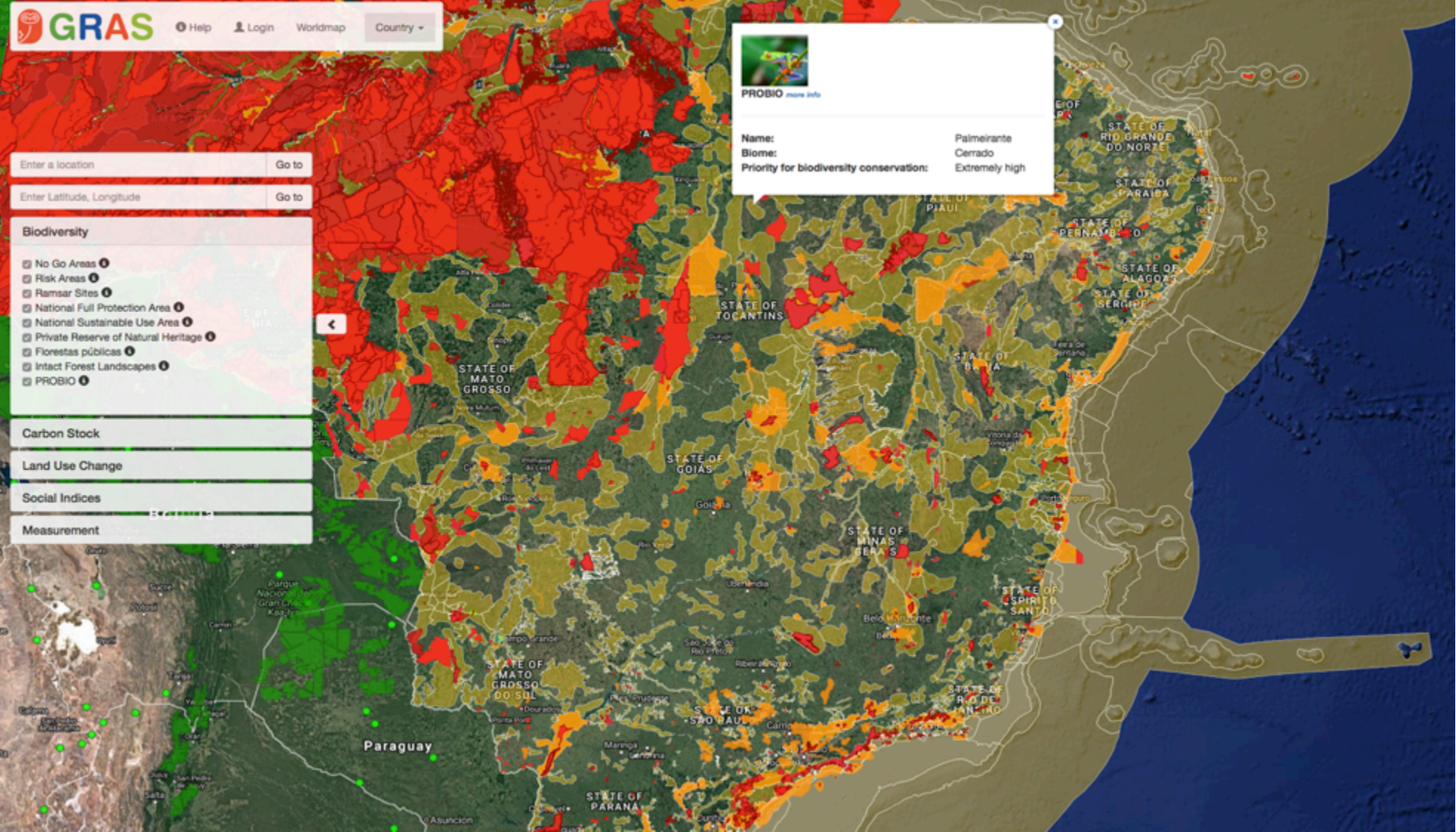
ISCC supports the implementation of the COP21 agreement

- **24% of global GHG emissions from agriculture, forestry and other land use (AFOLU)**. To reach the 2°C warming limit, emissions from AFOLU must be reduced significantly and quickly*
- **Carbon Capture and Storage (CCS)** must play an important role. Without CCS, large scale afforestation required to build up carbon sinks
- **Sustainable agriculture and forestry are key for climate protection** and part of the solution as they contribute to climate protection through storing CO₂ in soil, forests and wood products
- However, still **large scale deforestation ongoing** despite legal sustainability requirements for biofuels and voluntary zero deforestation commitments of large brand owners
- Continuous pressure by stakeholders to **deliver on promises**
- ISCC is a solution provider as it allows the **certification of sustainable and deforestation free supply chains**. Emissions from deforestation can be avoided
- The GRAS system supports ISCC in **strengthening the protection of valuable habitats and biodiversity**. GRAS provides accurate data on agriculture and forestry areas in more than 70 countries

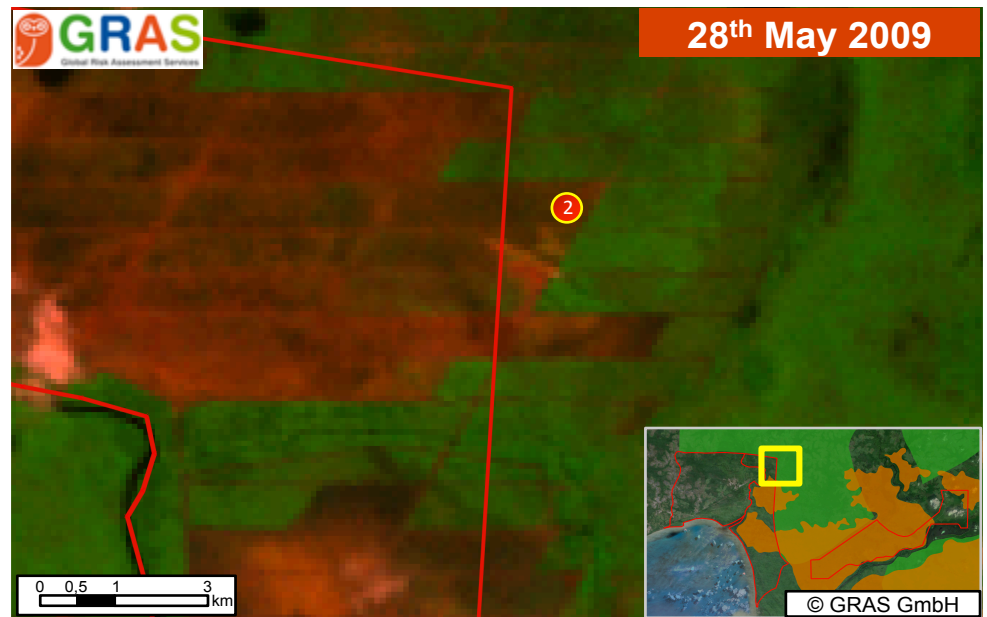
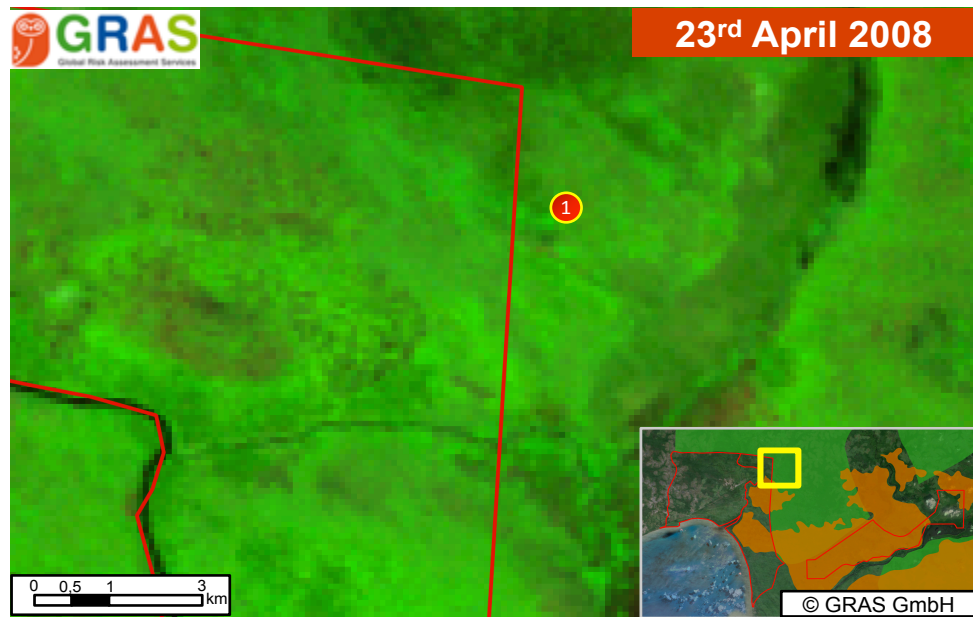
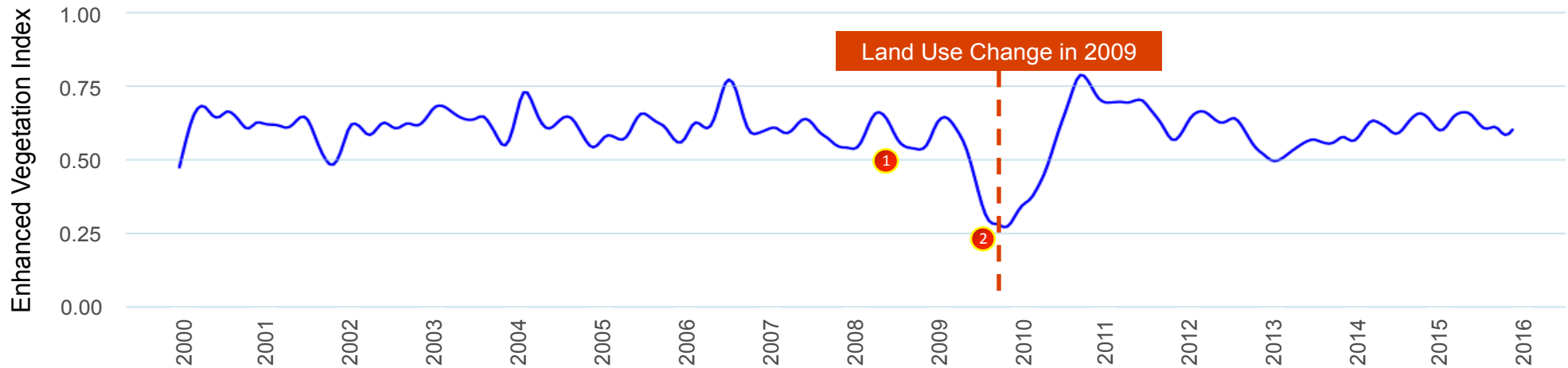
*: Agriculture, Forestry and Other Land Use

**: Source IPCC 2015, AR5

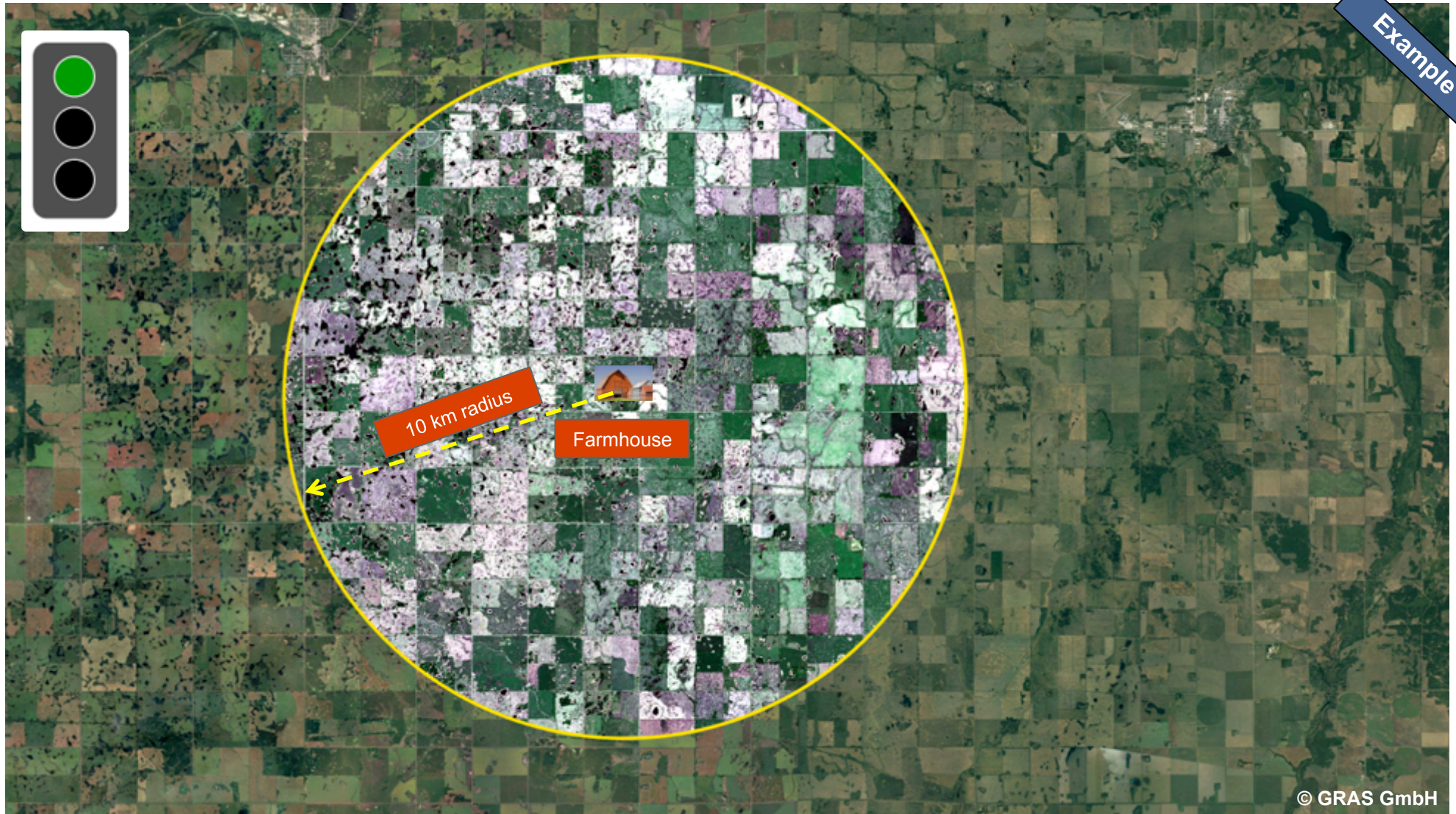
GRAS provides comprehensive information about areas with high biodiversity value. This supports risk assessments and verifications



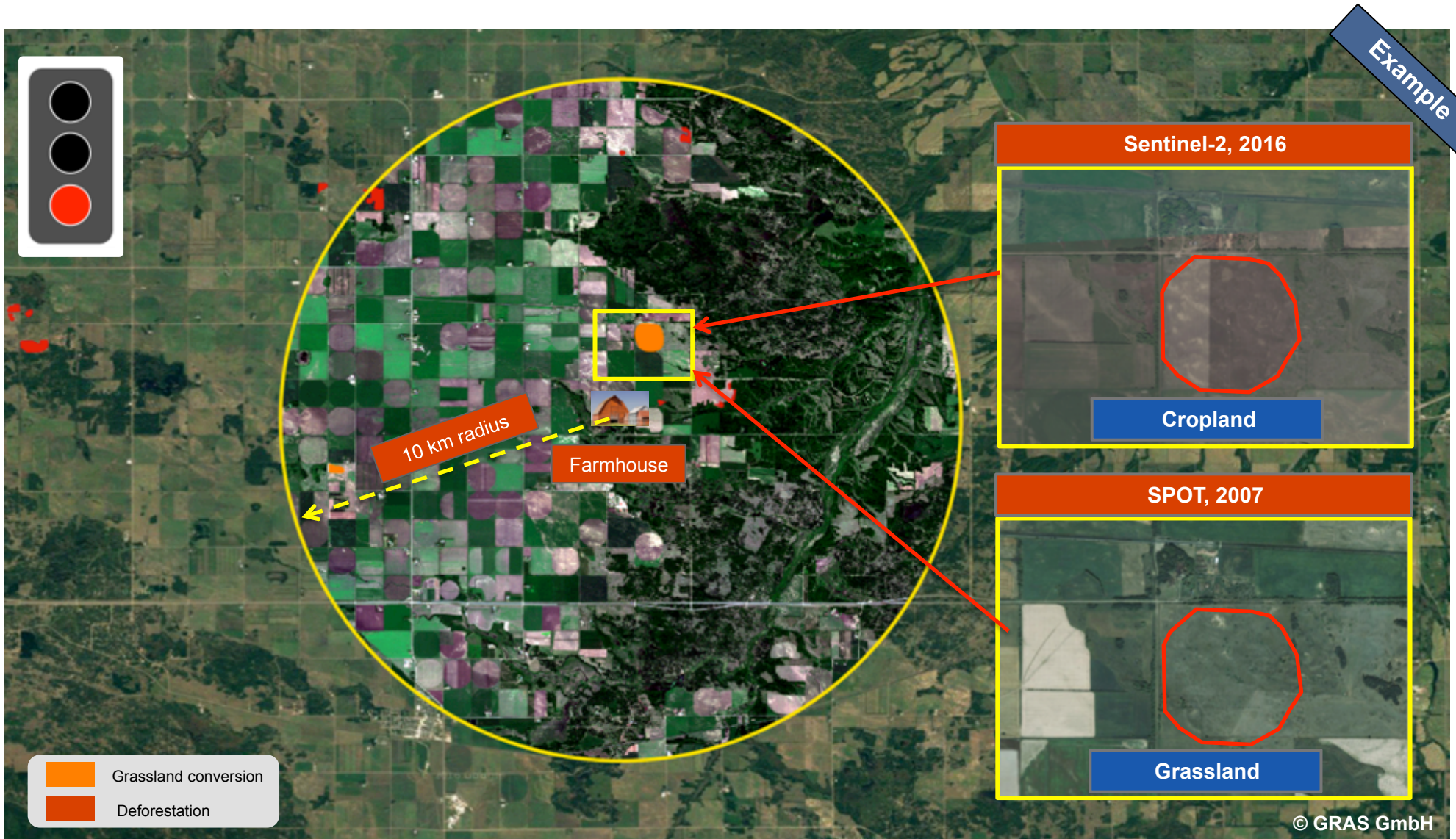
In addition, GRAS is used to clearly detect *if* and *when* deforestation took place within and/or in the close vicinity of plantations



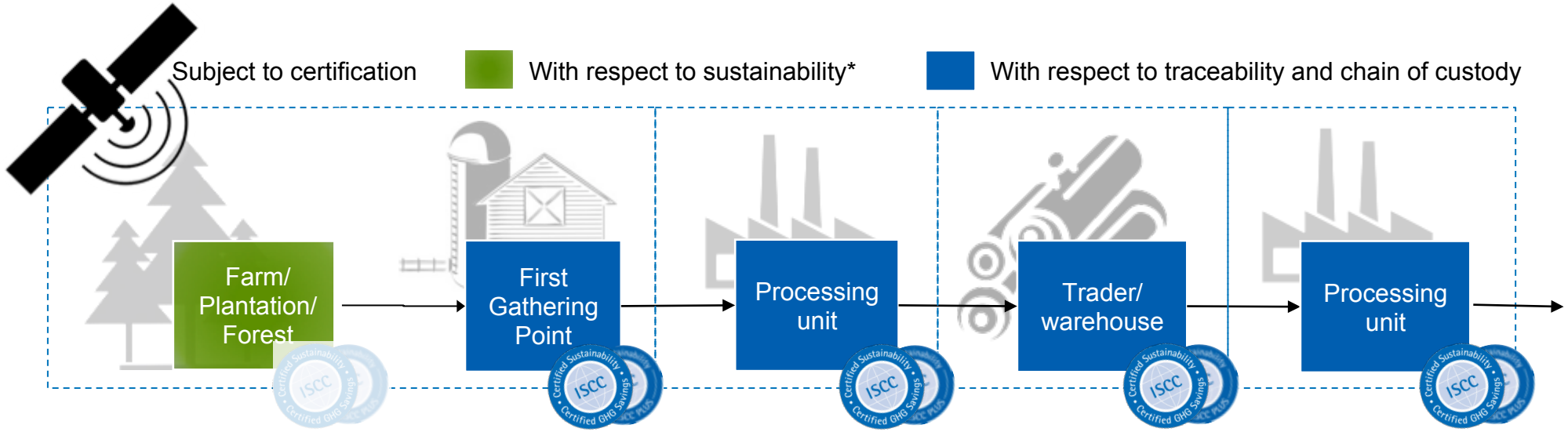
GRAS provides information about land use change. Example of No Risk Sourcing Area: No LUC has been detected



Example of Risk Sourcing Area: Grassland conversion to cropland



Combining ISCC with GRAS facilitates to conduct audits and increases at the same time the credibility of sustainability certification



GRAS
Global Risk Assessment Services



**Reliable verification and traceability
of sustainable products**

Sustainability certification in the biofuels market is a success story and should be extended to other markets

- Setting legal sustainability requirements for the biofuels has been a **pioneering undertaking** by European Parliament and Council
- **Significant improvements and investments** have been made **incentivized by mandatory sustainability requirements** (e.g. GHG emission savings, avoidance of land use change)
- A report of the **European Court of Auditors** states i.a. that the European Commission had not obligated the certification schemes in its recognition procedure to **verify socioeconomic criteria and ILUC** (Indirect Land Use Change)
- Mandatory socioeconomic criteria are **not set in the RED** – but covered in ISCC
- **Reliable and acceptable ILUC factors** for biofuels are **not available**
- **ILUC factors do not halt ongoing deforestation**
- **Direct land use change** can be addressed in existing sustainability certification schemes. If sustainability certification is extended to all markets, the indirect land use change issue disappears
- Sustainability certification for biofuels can be used as a blueprint for other markets **to combat deforestation and biodiversity loss**

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 1793 2966
Fax: +49 221 941 5863

