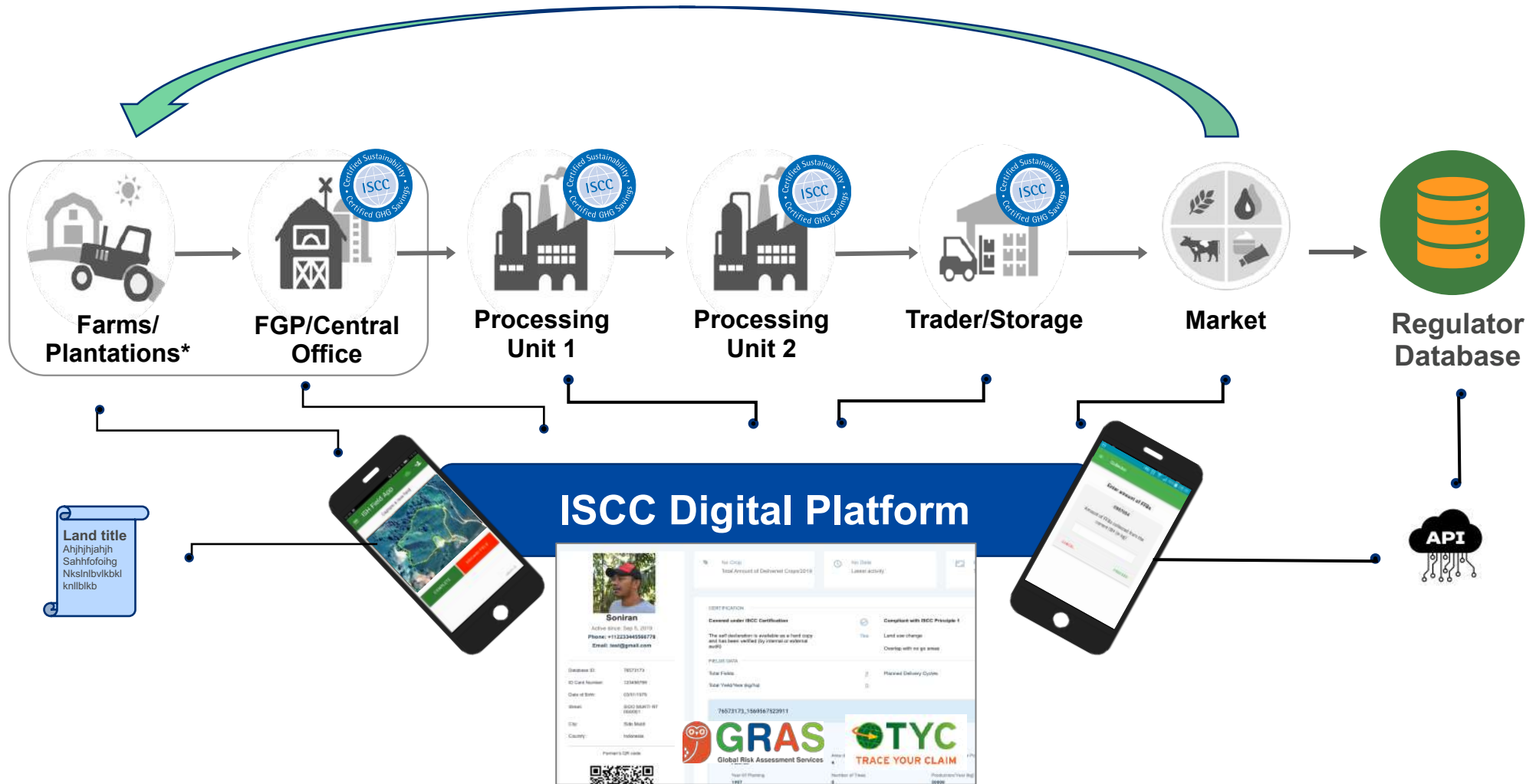




# Database Solutions and Implementation Challenges

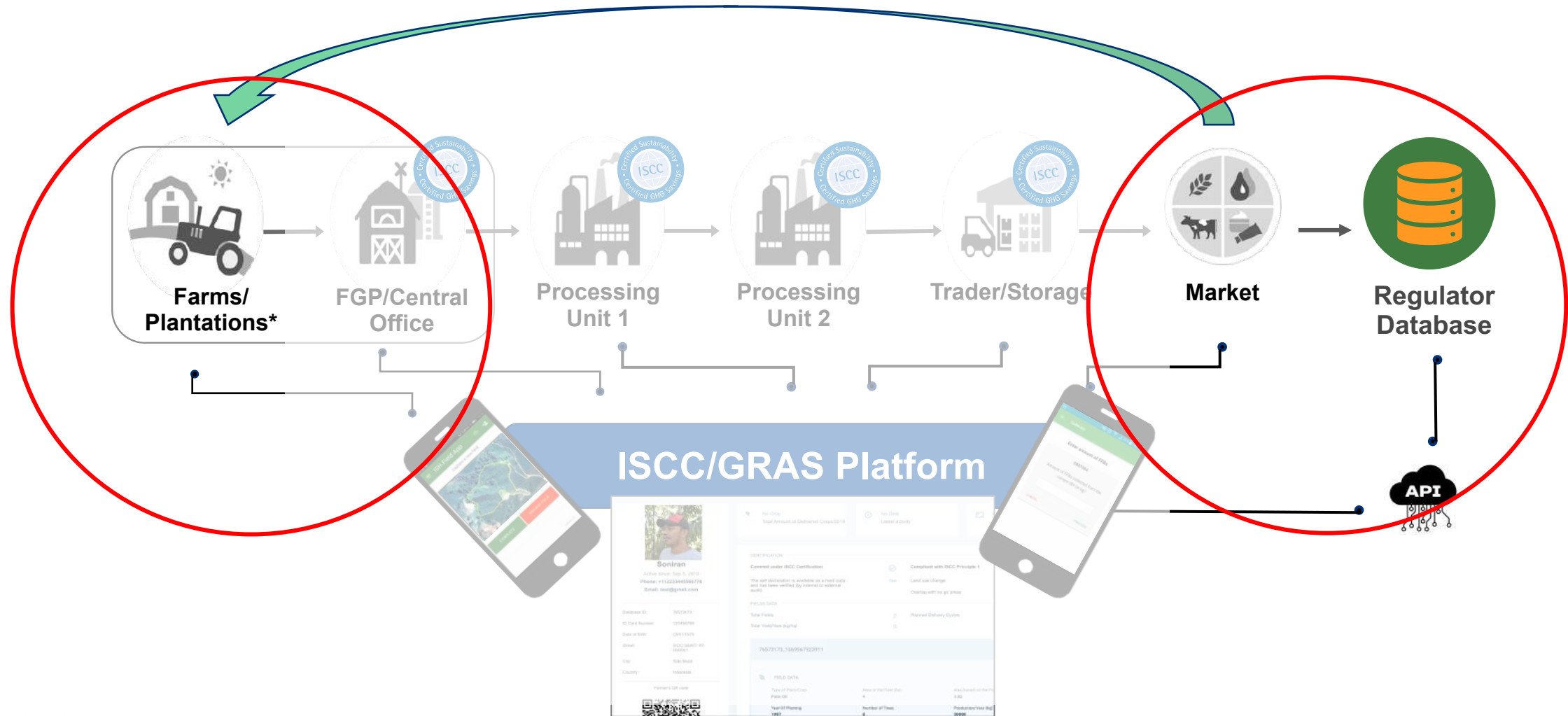
Andreas Feige, ISCC System GmbH  
11<sup>th</sup> ISCC Global Sustainability Conference

# The future of certification is digital – the ISCC Digital Platform can ensure full traceability and sustainability at every section of the supply





# Implementation challenges are mainly related to the upstream and downstream end of the supply chains



# Database implementation challenges at the downstream end are harmonization and mitigating leakage risks



National Biofuel Databases and Registries in EU		
EU MS	Database (yes/no/unclear)	Users/Process
Austria	yes (eIna, seems similar to Nabisy)	Applicable for biofuels physically coming to Austria
Belgium	yes (no name, seems similar to Nabisy)	every element starting with the biofuel producer or the importer until consumption or export
Bulgaria	unclear	
Croatia	unclear	
Cyprus	unclear	
Czech	unclear	
Denmark	No database	
Estonia	unclear	
Finland	unclear	
France	yes (CarbuRe, development until June 2021, seems similar to Nabisy)	Producers, Traders, Oil companies
Germany	yes (Nabisy)	Applicable globally, starting with the biofuel
Greece	unclear	
Hungary	unclear	
Ireland	unclear	
Italy	yes (no name, "ministerial database managed by Energetic Services Managing authority")	Quota obligated parties enter as input only their own market fuel immissions = baseline for % mandate, biofuel quota is then entered by ministerial GSE, three types of system users: obligated subjects and / or producers and / or traders
Latvia	unclear	
Lithuania	unclear	
Luxembourg	unclear	
Malta	unclear	
Netherlands	yes (Dutch registry, no track&trace system)	Quota obligated parties
Poland	unclear	
Portugal	unclear	
Romania	unclear	
Slovakia	yes (SK BIO, under development, testing phase in 2021, implementation planned for 2022, seems similar to Nabisy)	Slovak producer or first importer. Covers whole life cycle of biofuel to placing on market/export. Uploading information/ or checking, will be mandatory for every subject
Slovenia	unclear	
Spain	unclear	
Sweden	unclear	
UK	yes (RTFO Operating System - ROS)	Quota obligated parties, Traders trading with RTFCs

## Harmonization

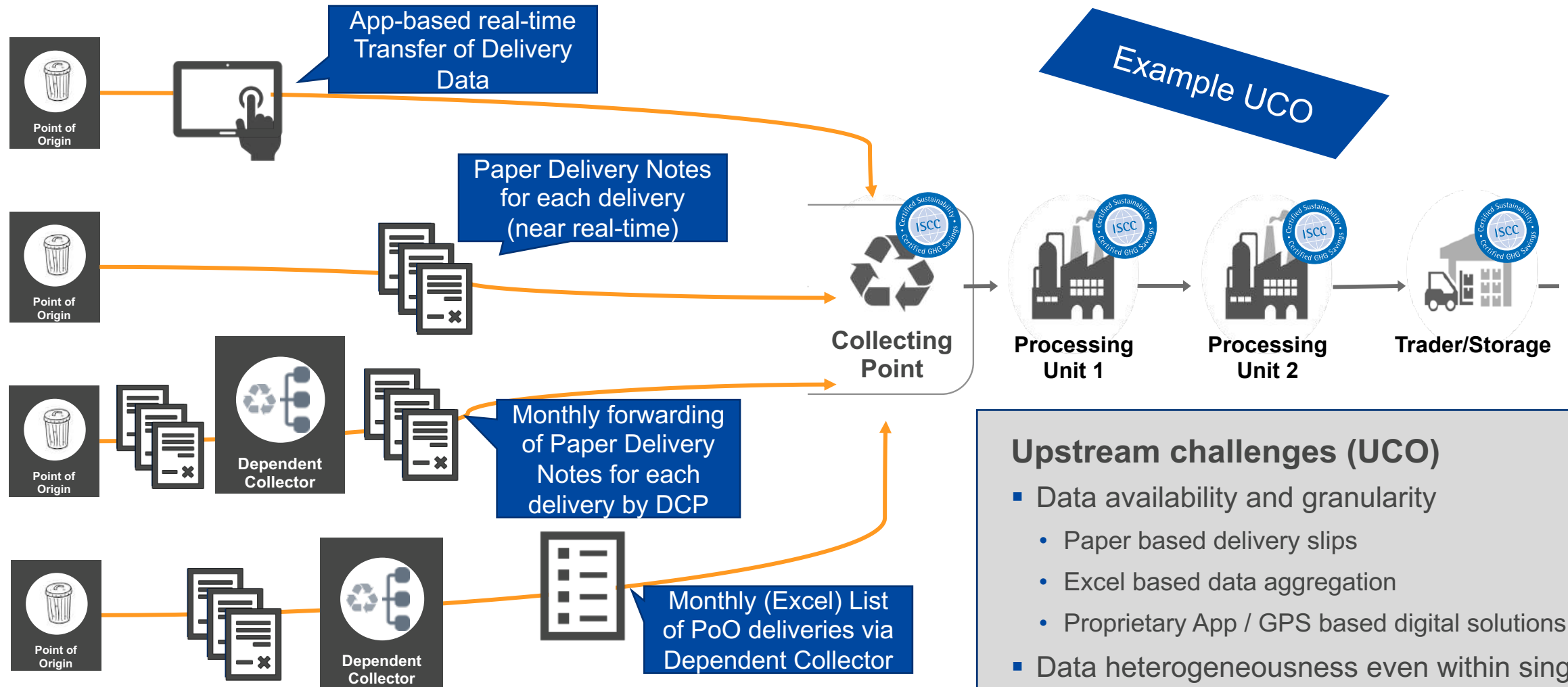
- Different data requirements, content and processes of the MS\*
- Different supply chain coverage of existing databases

## Mitigating leakage risks

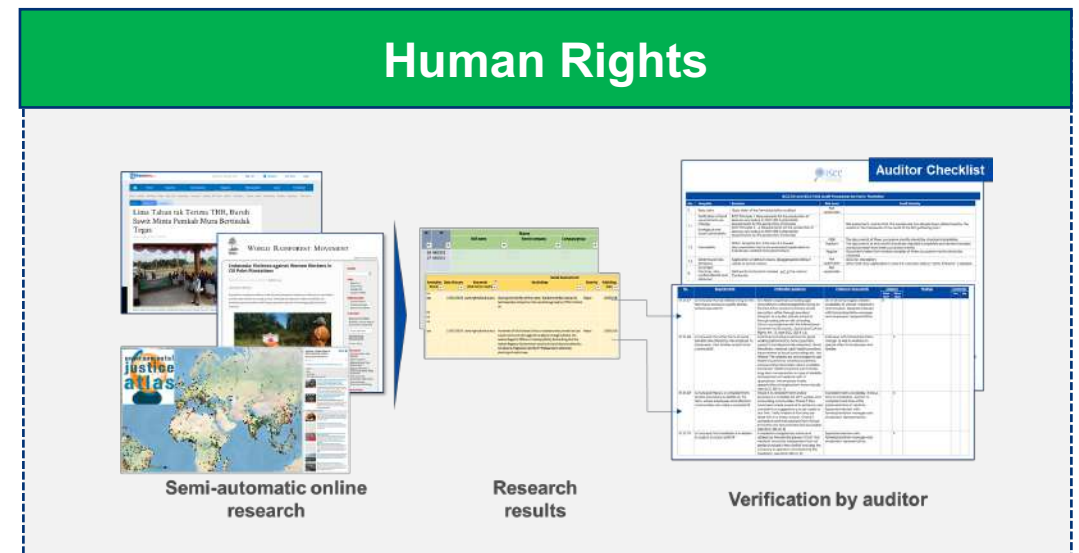
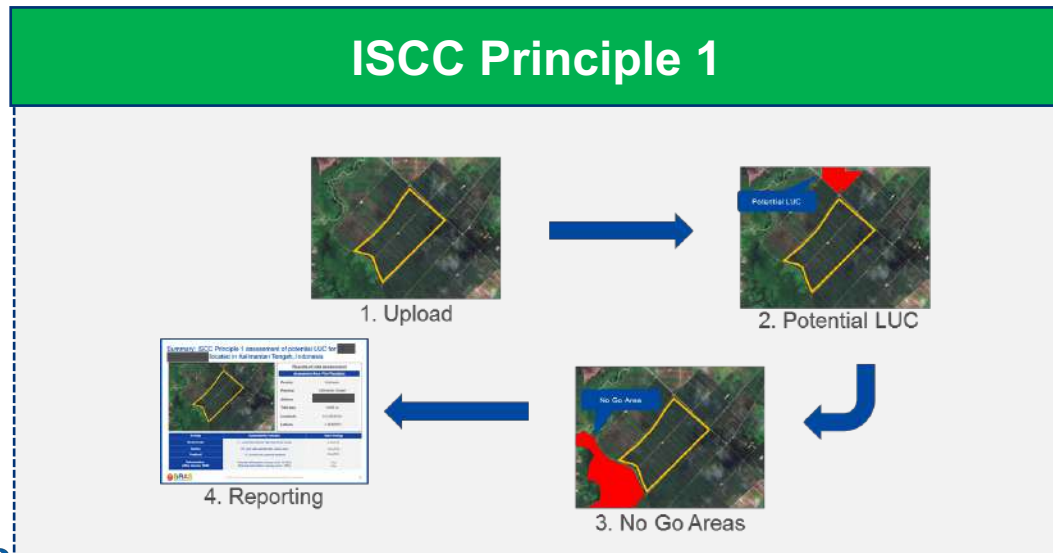
- Invalidate sustainability declarations of biofuel batches already counted to the national quota (e.g. exporting batches)
- Avoid "double" accounting (e.g. selling two batches with the same sustainability declaration into MS without databases)

\* EU Member States

# Upstream implementation challenges are related to the heterogeneous nature of the transaction processes and data



# Online tools can help to verify compliance at each stage of the supply chain and provide 'one level playing field' for auditors



# Example 1: Standardized mapping of land data for the assessment of compliance with ISCC Principle 1

## Step 1: Fully automated LUC assessment

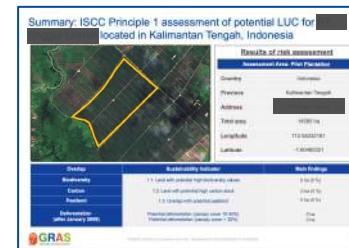
1. Upload farm/plantation polygons to a dedicated website
2. Fully automatic detection of potential LUC
3. No Go and Risk Area assessment
4. Download reports



1. Upload



2. Potential LUC



4. Reporting



3. No Go Areas



## Step 2: Detailed LUC assessment

- In case LUC was detected, a detailed assessment can be performed to verify the status of the land previous to the LUC activities to verify that no violation of ISCC Principle 1 has taken place



# Example 2: Semi-automatic online research for the detection of potential violation of human rights

The image shows three examples of online research tools used for human rights detection:

- TribunBP.com:** A news article titled "Lima Tahun tak Terima THR, Buruh Sawit Minta Pemkab Mura Bertindak Tegas" (Five years without receiving THR, Palm Oil Workers Demand Mura Regency to Take Firm Action).
- World Rainforest Movement (WRM):** A website with a news article titled "Indonesia: Violence against Women Workers in Oil Palm Plantations".
- Environmental Justice Atlas:** A global map showing locations of environmental justice struggles, with a sidebar listing various types of struggles like "Climate Change and Justice", "Deforestation", and "Water Pollution".

Semi-automatic online research

Nr.	ID	Mill name	Name	Parent company	Company group
26	MD0153	PT. HANJIN	PT. HANJIN	PT. HANJIN	PT. HANJIN
27	MD0151	PT. HANJIN	PT. HANJIN	PT. HANJIN	PT. HANJIN

Anomalies found	Date of access	Key words (that led to results)	Key findings	Social Assessment	Severity	Publishing date
no						
yes	21/01/2020	Land rights/land status	Owning the Validity of the letter, Residents of Bah Tambar Da Not Stop Back a Step from the Land Recognized by PTPN IV Dolok Ilir		Major	02/01/18
no						
no						
yes	21/01/2020	Land rights/land status	Hundreds of Teluk Dalam District residents who joined the East Coast Community Struggle Cross (Baru Lintang) led at the Auhun Regent's Office on Tuesday (20/1), demanding that the Auhun Regency Government resolve the land dispute related to the seizure of agrarian land by PT Package Eram Utama by planting oil palm trees.		Major	29/05/19

Research results

ISCC IU and ISCC PLUS Audit Procedures for Farm/ Plantation					
No.	Template	Remarks	Risk level	Audit Intensity	
0.	Basic data	Basic data of the farm/plantation audited	Not applicable		
7.1	Verification of land use and land use change	ISCC Principle 1. Requirements for the production of biomass according to ISCC 202 Sustainability requirements for the production of biomass	High	Risk assessment, and by that, the sample size has already been determined by the auditor in the framework of the audit of the first gathering point	
7.2	Ecological and social sustainability	ISCC Principle 2-4. Requirements for the production of biomass according to ISCC 202 Sustainability requirements for the production of biomass	High	The documents of three successive months should be checked completely.	
7.2	Traceability	Within Template No. 3 the risk of a flawed documentation has to be evaluated (applicable for individually certified farms/ plantations)	Medium	The documents of one month should be checked completely and random samples should be taken from three successive months.	
7.3	Greenhouse Gas (Emissions)	Application of default values, disaggregated default values or actual values.	Regular	Documents taken from random samples of three successive months should be checked	
7.3	Greenhouse Gas (Emissions)	Application of default values, disaggregated default values or actual values.	Not applicable	ISCC EIP Mandatory ISCC PLUS: Only applicable in case the voluntary add-on "GHG Emissions" is applied	
8.	List of Best Practices, Non-conformities list and Measures	Defined list of all points marked "not applicable" in the column Conformity	Not applicable		

No.	Requirements	Verification guidance	Evidence/ Documents	Category	Findings	Conformity
				Major	Minor	Yes
07.01.67	Is it ensured that all children living on the farm have access to quality primary school education?	All children of primary schooling age (according to national legislation) living on the farm have access to primary school education, either through provided transport to a public primary school or through adequate on-site schooling. This is in accordance with the International Covenant on Economic, Social and Cultural Rights, Art. 13. (see ISCC 202 4.1.4)	List of all school-aged children, availability of school, classrooms and transport. Separate interview with farmer/ plantation manager, and employees' representatives.	X		
07.01.68	Is it ensured that other forms of social benefits are offered by the employer to employees, their families and/or local community?	Incentives including incentives for good working performance, bonus payment, support of professional development, family allowances, medical care/ health provisions, improvement of social surroundings etc. are offered. The workers are encouraged to get health insurance by creating awareness and providing information about available insurance. Health insurance can include long-term compensation in case of disability and payment of medical costs, if appropriate, the employer makes opportunities of employment known locally. (see ISCC 202 4.1.7)	Interviews with farmer/ plantation manager as well as workers on special offers for employees and families.	X		
07.01.69	Is it ensured there is a complaint form and/or procedure available on the farm, where employees and affected communities can make a complaint?	Check if a complaint form and/or procedure is available for farm workers and surrounding communities. Check if they have been made aware of its existence and complaints or suggestions can be made at any time. Verify evidence that they are dealt with in a timely manner. Check if complaints and their solutions from the last 24 months are documented and accessible. (see ISCC 202 4.1.8)	Complaint form is available. It shows time of complaints, solution to complaint and time of the implementation of solutions. Separate interview with farmer/ plantation manager and employees' representatives.	X		
07.01.70	Is it ensured that mediation is available in case of a social conflict?	A mediator is assigned by name and address by the elected person of trust. The mediator should be independent from all parties involved in the conflict including the company or operator commissioning the mediation. (see ISCC 202 4.1.9)	Separate interview with farmer/ plantation manager and employees' representatives.	X		

Verification by auditor





Many thanks for your attention!

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