Database Solutions

Andreas Feige, Managing Director, ISCC System GmbH
Regional Stakeholder Dialogue, Berlin, 21 May 2019
Overview of ISCC supply chain set-up (simplified)

* Farms/Plantations and Points of Origin can get certified on a voluntary basis. Usually they are covered under the certificate of the First Gathering Point and Collecting Point respectively. In this case they issue a self-declaration to the FGP/CP

** For biofuels the final market players are referred to as quota obligated party

© ISCC System GmbH: For personal use only. Reproduction and distribution is prohibited.
For biofuels relevant for the German markets, biofuel producers have to issue a Proof of Sustainability in Nabisy.

- Producer and supplier of final biofuels for the German market have to set up an account in the database Nabisy and need to enter sustainability data.
- They have to issue Proofs of Sustainability (PoS) for the biofuels in Nabisy.
- The Proof of Sustainability can be compared to the Sustainability Declaration and contains similar information but has a fixed layout.
- Further information on the use of Nabisy and relevant applications forms is available in the client section of the ISCC website.

© ISCC System GmbH: For personal use only. Reproduction and distribution is prohibited.
Database option 1 – central EU database connecting Member State databases

Central EU database
- Connecting the databases of individual Member States (MS)
- Would allow monitoring cross border trades within the EU
- Some databases provide APIs to connect to other MS
- No consistent concept on data exchange for the time being
- ….
Database options 2 and 3 – transaction databases for the entire supply chain

Conventional

Option 2: Database solution covering the entire supply chain

Option 3: Combination with simple mobile Apps at the upstream end
Database options 2 – Database solution covering the entire supply chain
Option 3 – Combination with simple mobile Apps at the upstream end

1. **Smallholder App**
   a) Map smallholder field outlines, collect basic smallholder data and other data if required
   b) Upload data to database
   c) Check automatically the field outlines against deforestation and protected areas

2. **Tracking App**
   a) Trace back raw materials to smallholder level
   b) Identify the amount of delivered raw material per smallholder
   c) Monitor and analyze volumes of raw materials

3. **Smallholder Dashboard**
   a) Easy-to-use user interface to manage and access data
   b) Access information on collected polygons and environmental analysis
   c) Efficient reporting and monitoring system

- Enables full traceability and no-go area checks of all smallholder deliveries; does not require certification
The Smallholder App allows several functions: Collection of smallholder data, photos and field polygons

**Smallholder App**

Add smallholder data

Take photo of the ID and/or other documents

Collect field polygons

Upload data
App based field mapping and automated sustainability assessment against deforestation and biodiversity no go areas

**Collected polygons through the Smallholder App**

**Automated check of the field polygons against deforestation and protected area within ISH Data Management System**

- **Collect GPS data**

- **Not located in protected areas**

- **Deforestation detected on farm**

- In case deforestation is identified on the farm and/or the farm is located within protected areas, the farm is not directly suitable for auditing.

- In case no deforestation is identified and the farm is located outside of protected areas, the farm is suitable for auditing.
The Tracking App supports the documentation of single deliveries from the smallholders until palm oil mill.
The Smallholder Dashboard allows the full management of smallholder data, assesses field polygons and produces different kind of reports.

Display all collected smallholder data, field polygons, pictures, single deliveries data.

Automatically assess uploaded polygons against overlapping with deforested and protected areas.

Produce reports on e.g. deliveries for single smallholder, central offices and palm oil mills.
Customized company dashboards for efficient mapping and monitoring of supply chains
A further step to reach out to a next level of traceability is a periodic monitoring of the supply base.

<table>
<thead>
<tr>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental risks</strong></td>
</tr>
<tr>
<td>Monitor smallholder polygons against:</td>
</tr>
<tr>
<td>• Deforestation</td>
</tr>
<tr>
<td>• Protected areas</td>
</tr>
<tr>
<td>• Fires</td>
</tr>
</tbody>
</table>

- Deforestation
- Protected areas
- Fires

- Yields performance
- Yield increase due to yield increase program

- Identify replanting activities within the collected smallholder polygons based on regular processed satellite imagery
- Monitor sourcing areas
Many thanks for your attention!

ISCC System GmbH
Hohenzollernring 72, 50672 Cologne, Germany
Email: info@iscc-system.org

Follow us on  

Facebook  
Twitter  
LinkedIn