

ISCC Conference, São Paulo, October 27, 2016

## Sustainability Certification for All Markets

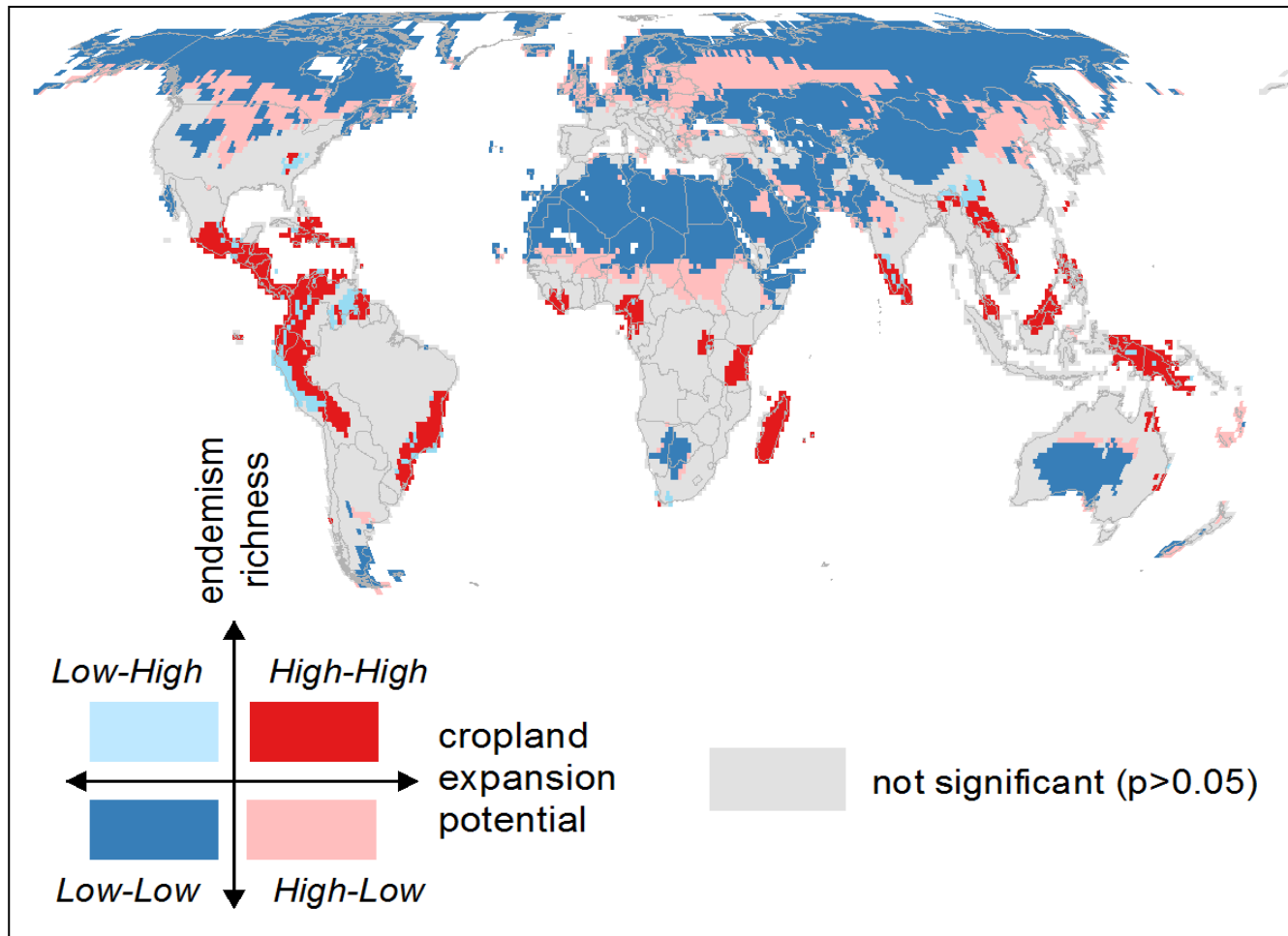
Prof. Gernot Klepper, Chairman, ISCC Association



# What will I cover in my presentation

- The sustainable biomass challenge
- Market requirements
- ISCC solutions for the different markets
- Certification requirements and innovative tools
- Conclusions

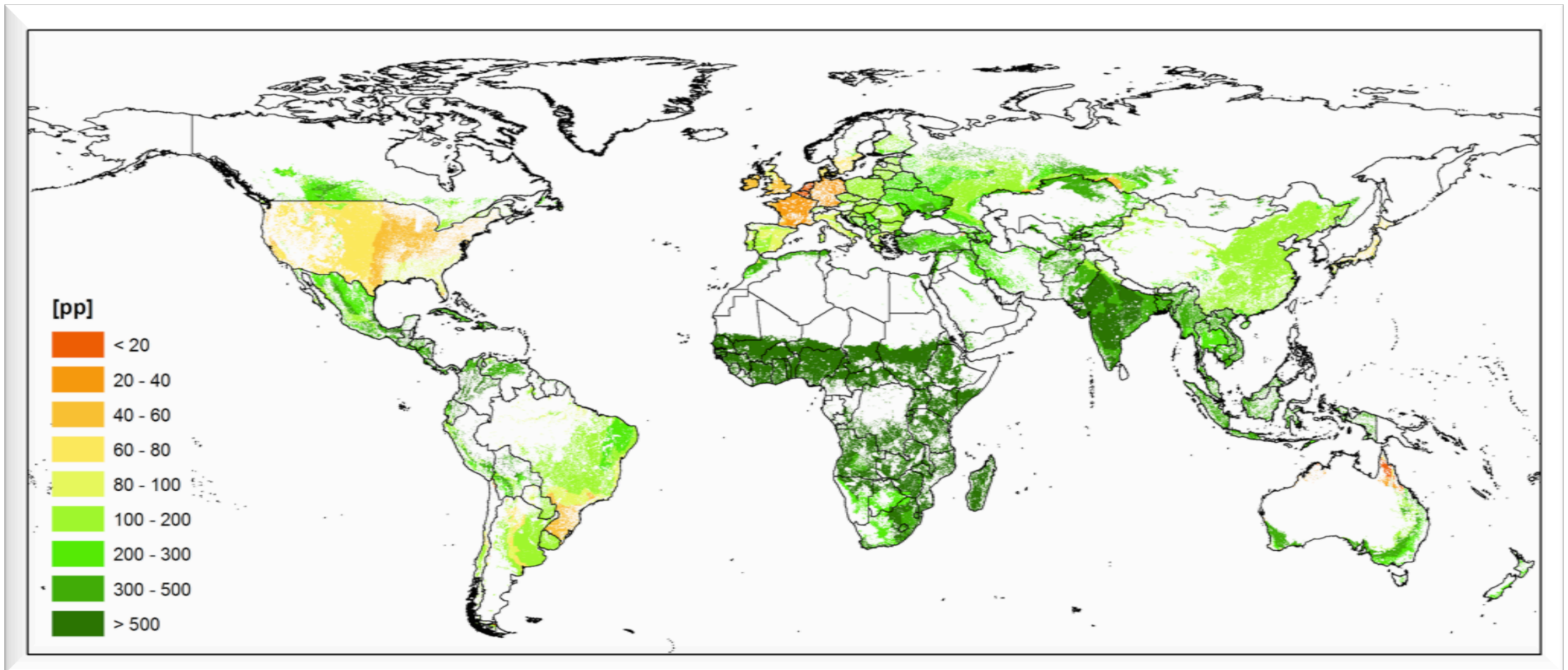
# Land expansion is one option for increasing biomass supply, but it faces potential conflicts with sustainability goals (SDGs)



Source: Delzeit, Zabel et al. (2015) in „Regional Environmental Change“



Potential yields are much higher than expected  
But unevenly distributed across the earth  
Challenge is to deliver the potential in a sustainable way



Mauser, Klepper et al. 2015



# Voluntary and mandatory sustainability requirements in different markets



# Food market requirements: An increasing number of companies commit to social sustainability and zero-deforestation targets

## Examples



Unilever

Working with governments and other partners to embed no-deforestation objectives into national and international policies. Unilever considers the advancement of women's rights and women's economic inclusion as priority.



McDonald's is committed to eliminating deforestation from its global supply chains and to ensure fair and ethical workplace standards in every corner of the supply chain. It promotes responsible production that benefits people, communities and the planet.

**MARS**

Deforestation policy targets four raw materials with the greatest impacts on forests: beef, palm oil, pulp and paper and soy. By 2020, these supply chains will be deforestation free



Coca Cola introduced principles to establish human and workplace rights, environmental stewardship and farm management criteria – including asking suppliers to protect the rights of communities to maintain access to land and natural resources



Starbucks supports a zero-tolerance approach to deforestation. Committed to improve ethical sourcing in coffee and throughout the supply chain, to serve their communities and engage young people

**Walmart** ✨

By participating in the Consumer Goods Forum Walmart is resolved to achieve zero net deforestation by 2020. Focusing on safety, health and environmental compliance in their operations



# Violations of sustainability requirements have resulted in suspension of certifications and lost of investments

Example

## Unilever cancels contracts

The consumer goods giant will stop buying palm oil from [redacted] while Greenpeace slams [redacted] for refusing to reform even though its actions were contributing to the fire and haze crisis in the region.

## Malaysian palm oil giant loses 7 more customers over RSPO suspension

Hershey's, Colgate-Palmolive, Johnson & Johnson, Procter & Gamble, SC Johnson, Yum! Brands and Reckitt Benckiser are all disengaging with [redacted]



Malaysian customers

Hershey's, Colgate-Palmolive, Johnson & Johnson, Procter & Gamble, SC Johnson, Yum! Brands and Reckitt Benckiser are all disengaging with [redacted] after its suspension and alleged violation of sustainable palm oil regulations. Image: Shutterstock

## World's largest sovereign wealth fund just dropped 11 companies over deforestation

Six palm oil companies, four pulp and paper companies, and one coal company were dropped from its investment portfolio.



Norway's Government Pension Fund Global has divested its shares in more than 100 companies between 2012 and 2015 over concerns around global warming, deforestation, and sustainability. Image: Rich Carey / Shutterstock.com

Norway's Government Pension Fund Global (GPF), the world's largest sovereign wealth fund, dropped 11 companies in 2015 over their connections to forest destruction.

Source: [www.eco-business.com](http://www.eco-business.com)



# Chemical market requirements: More and more companies commit to zero-deforestation and social sustainability

## Examples



We are committed to zero net deforestation by 2020. This means that palm and palm kernel oil that we use should not contribute to deforestation of primary or secondary forests with significant ecological value. This includes “High Carbon Stock” forests and peat lands



No-Deforestation and Responsible Sourcing Policy in place in 2013. Committed to respect human rights and workers' rights, and commanding the same from all suppliers



Setting up of a zero-deforestation policy with focus on traceability across the value chain. Assessment of suppliers based on sustainability factors such as employment conditions, respect of human rights, complaint management etc.

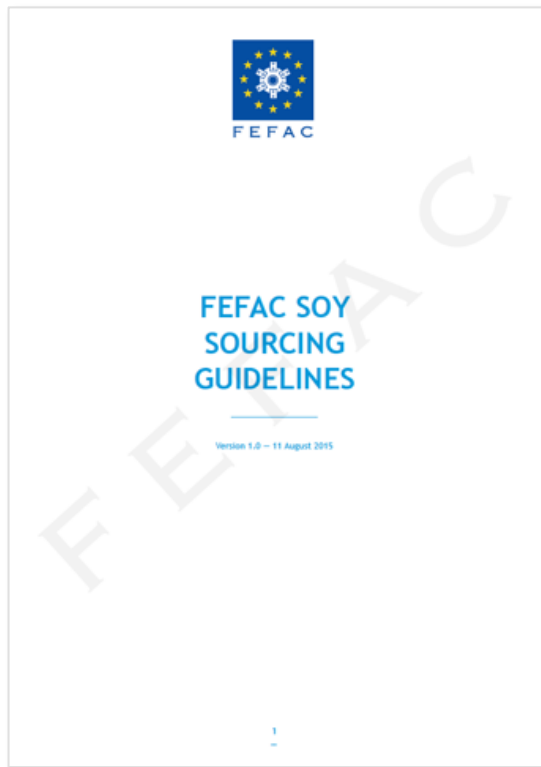


DuPont Nutrition & Health (N&H) supports the conservation of natural resources such as the Amazon Rainforest. [...] we only buy from vendors that have signed a contractual agreement prohibiting the purchase of soy beans grown on lands deforested after July 2006 in the Amazon biome



Ensure traceability of palm oil and palm kernel oil to our supplier mills by December 31, 2015 and to plantations by 2020 to ensure zero deforestation in our palm oil supply chain. Supplier sustainability guidelines to ensure high ethical standards

# Feed market requirements: European Feed Association (FEFAC) committed to responsibly produced soy



ITC STANDARDS MAP YOUR ROADMAP TO SUSTAINABLE TRADE

FEFAC

### Welcome to the FEFAC Sourcing Guidelines Tool

The European Feed Manufacturers' Federation (FEFAC) wants to help its members to support the transition towards responsibly produced soy. Therefore, FEFAC has developed Soy Sourcing Guidelines defining a baseline level for imported soy to the European market. Via this online tool, owners of standards or programmes for responsible soy can self-assess whether their schemes are compliant with the FEFAC Guidelines and apply for the formal benchmark. The logos of recognized compliant standards or programmes will appear on the homepage of this site. Under the 'detailed results' button you will find in-depth information about soy standards and programmes that are already in the ITC Standards Map.

[Download the Guidance document](#)



Access Your Standard  
Apply for Benchmark  
Detailed Results

Standards or programmes compliant with FEFAC Guidelines:


# Market requirements bioenergy: Mandatory sustainability requirements for biofuels in the European Union



## Biofuels in the European Union

- Since 2011, mandatory sustainability requirements for biofuels have been in place in the European Union
- Renewable Energy Directive (RED) and Fuel Quality Directive (FQD) build legal framework for the implementation of renewable energy targets for the transport sector in the European Union
- Certification requirements based on legal requirements cover:
  - Sustainability requirements for biomass production and cultivation
  - Requirements for traceability and chain of custody
  - Requirements for greenhouse gas emission savings calculation methodology

## Solid biomass in the European Union

- Sustainability criteria for solid biomass, such as wood pellets, are under discussion



# With the signature of SB 32 in September 2016, California has now a very ambitious legislation to reduce GHG emissions



## Gov. Brown signs sweeping legislation to combat climate change

**C**alifornia will become a petri dish for international efforts to slow global warming under legislation signed by Gov. Jerry Brown on Thursday, forcing one of the world's largest economies to squeeze into a dramatically smaller carbon footprint.

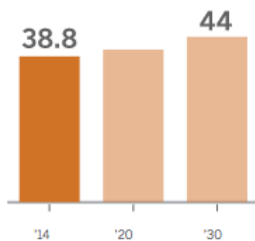
"What we're doing here is farsighted, as well as far-reaching," Brown said at a signing ceremony at Vista Hermosa Natural Park in downtown Los Angeles. "California is doing something that no other state has done."

The legislation, SB 32, requires the state to slash greenhouse gas emissions to 40% below 1990 levels by 2030, a much more ambitious target than the previous goal of hitting 1990 levels by 2020.



**California's population may grow more than 13% by 2030...**

In millions



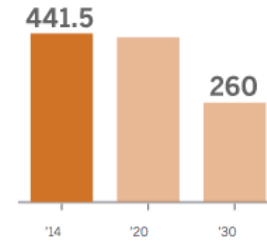
**...and economic output could rise more than 50%...**

In trillions



**...while climate goals require a smaller carbon footprint.**

In metric tons



Source: Los Angeles Times, 8 September 2016

# ISCC offers solutions to address sustainability requirements in different markets. Examples of typical users of ISCC certification

**Energy**

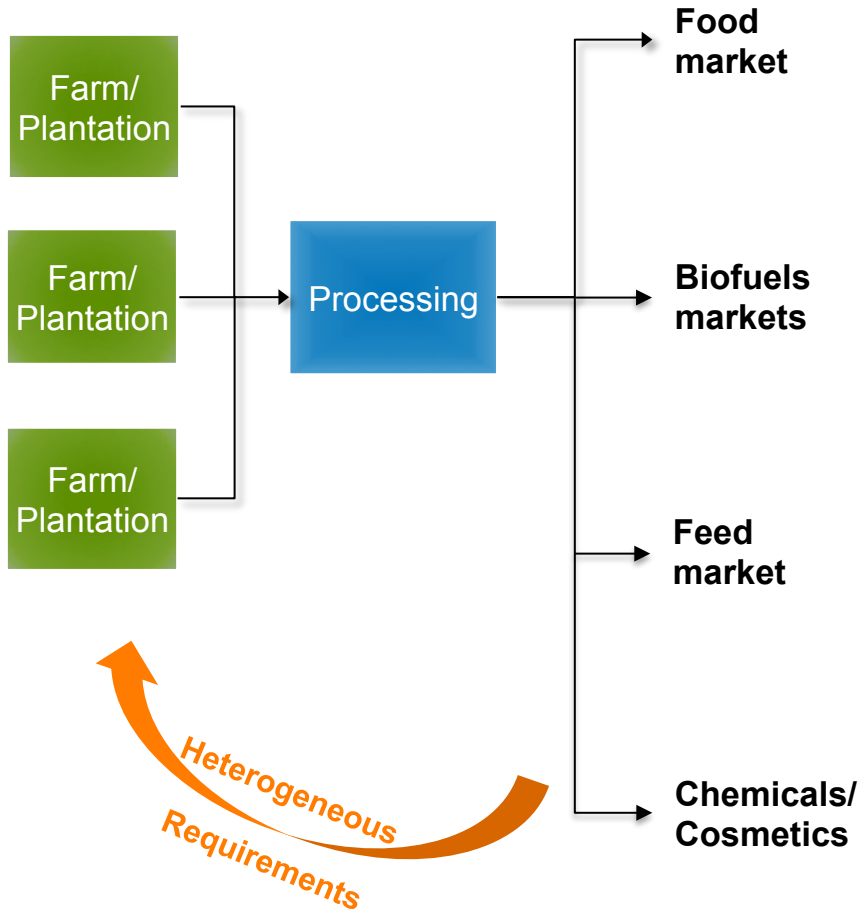
**Feed**

**Food**

**Chemistry**

Number of certificates	certificate holder	certified as	scope	product cat.	valid from	valid until	issued by	flag	certificates	audit reports
ISCC-PLUS Cen 101837801	ADM Paraguay S.R.L. - Villa Central, Paraguay	OM	Soybean	-	PERD	19.08.2015	18.08.2016	PCU		
ISCC-PLUS Cen 1011934	ADM Europe B.V. - Eindhoven, Netherlands	OM, RE	Rapeseed, Sunflower	GHS	PERD, FOOD	29.06.2015	28.06.2016	BSG		
ISCC-PLUS Cen 1011933	ADM Propan A.S. - Pragat, Olomouc, Czech Republic	OM, RE	Rapeseed, Sunflower	GHS	PERD, FOOD	05.06.2015	04.06.2016	BSG		
ISCC-PLUS Cen 1011095	ADM Germany Sp. z o.o. - Brandenburg, Poland	OM, RE	Rapeseed, Sunflower	GHS	PERD, FOOD	05.06.2015	04.06.2016	BSG		
ISCC-PLUS Cen 1011092	ADM Hamburg Adalgenwerk, Hamburg, Germany	OM, RE	Rapeseed, Sunflower, Palm	GHS	PERD, FOOD	25.03.2015	24.03.2016	BSG		
ISCC-PLUS Cen 1011098	ADM Bank GmbH, Aachen, Germany	OM, RE	Rapeseed, Sunflower	GHS	PERD, FOOD	19.02.2015	18.02.2016	BSG		
ISCC-PLUS Cen 1011099	ADM Bank GmbH, Braunschweig, Germany	OM, RE	Rapeseed	-	PERD, FOOD	19.02.2015	18.02.2016	BSG		
ISCC-PLUS Cen 1011087	ADM Mainz GmbH, Mainz, Germany	OM, RE	Soybean	GHS	PERD, FOOD	12.02.2015	11.02.2016	BSG		

# Companies looking for sustainability standards encounter a fragmented landscape



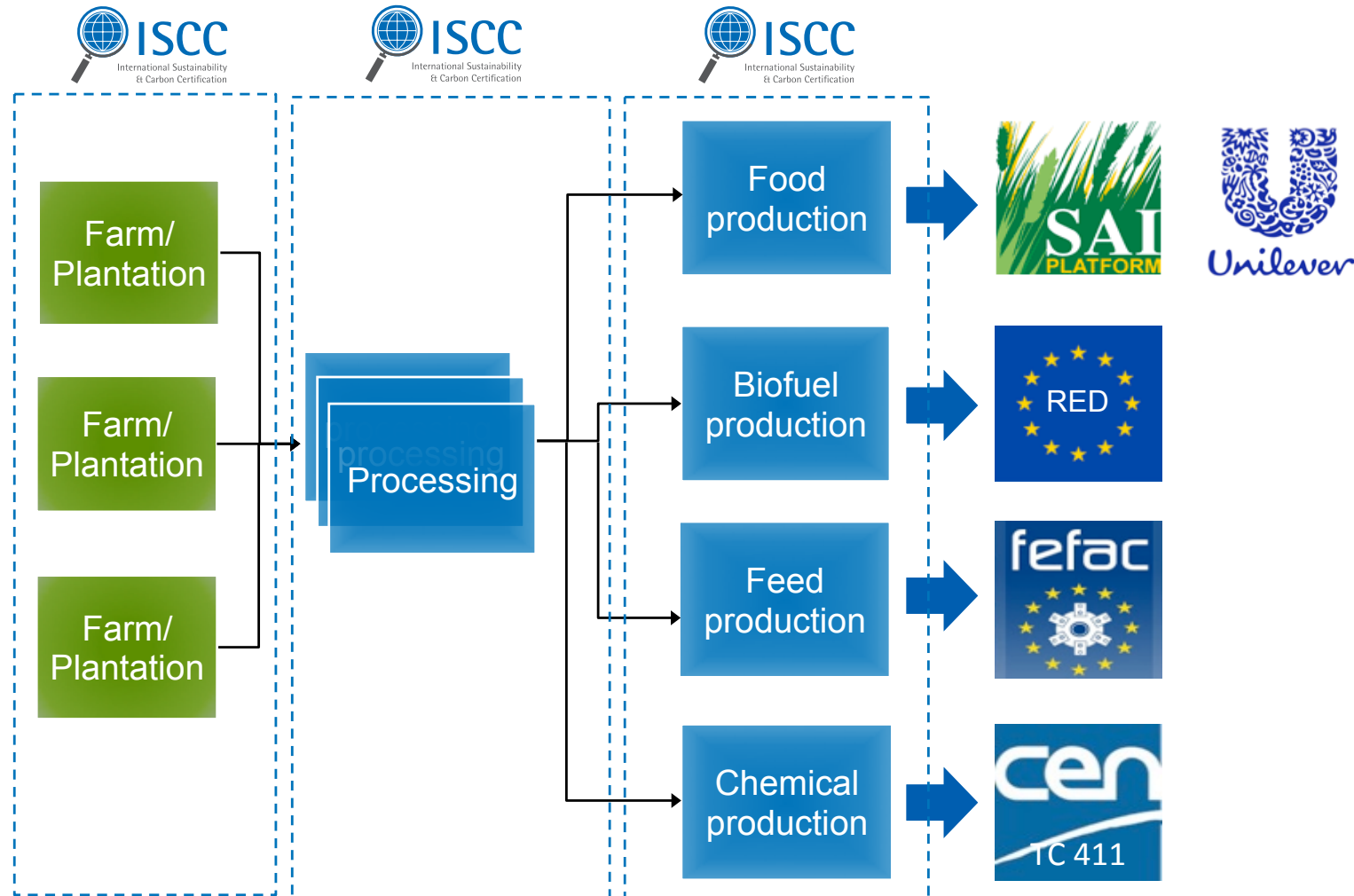
## Selection of sustainability standards\*



\*Including sustainability requirements requested by NGOs/institutions



# ISCC is a One Stop Shop for all crops and markets in an otherwise fragmented landscape of sustainability standards



# ISCC is working to harmonise new or emerging sustainability requirements – modular Add-ons allow perfect fit



Platform of the global food & drink industry. ISCC fulfils SAI Silver level. With the Add-on SAI Gold, compliance with the SAI Gold level is fulfilled



Organisation to promote sustainable and Non-GMO soybean cultivation in Europe. ISCC certification has been accepted as compliant



The European Feed Manufacturers' Federation (FEFAC) has benchmarked ISCC. ISCC products can be sold as “in line with FEFAC Soy Sourcing Guidelines”



Compliance with the Unilever Sustainable Agricultural code is achieved with Add-ons „Environmental Management and Biodiversity“ and „Classified chemicals“



ISCC has adapted the Add-on „Non GMO“ in order to comply with supply chain requirements of „Ohne Gentechnik“



# Examples of ISCC certifications in the food and packaging industries



ISCC certified vegetable oil\*

ISCC certified sugar



Packaging solution contributing to responsible sourcing

\* Market entry to come shortly

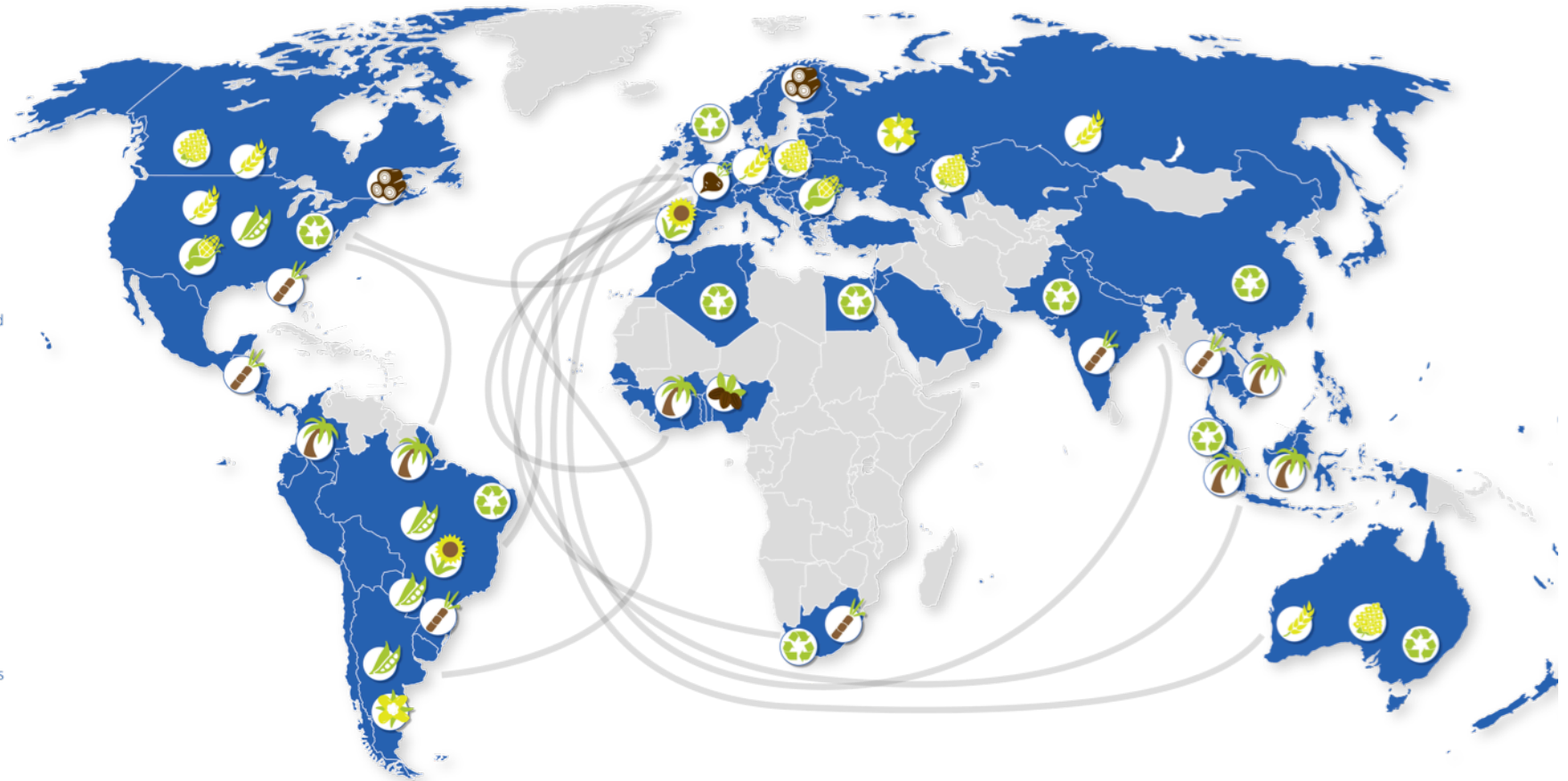




# ISCC is a leading certification system for all types of agricultural, forestry and alternative raw materials and products

## All Feedstocks, including:

- Camelina
- Canola / Rapeseed
- Cereal
- Corn
- Palm
- Shea
- Soy
- Sugarbeet
- Sugarcane
- Sunflower
- Waste & Residues
- Wood



# ISCC is being used by companies in more than 100 countries

System users in **100+**  
countries

**12,700+**  
certificates  
**3,000+**  
system users

**33**  
certification bodies  
**660+**  
ISCC trained auditors

**52 Trainings**  
(Basic, GHG, LUC,  
Waste)

Stakeholder dialogue:  
**84** ISCC Association  
members



Strong regional  
stakeholder dialogue:  
**5** TCs

**Integrity  
Program**  
3 auditors

**Innovative fuels**  
(low iLUC, non-bio  
renewable, etc.)

**New procedures**  
(e.g. due to GHG  
quota)

**300+**  
ISCC PLUS certificates

ISCC is a multistakeholder initiative. It is governed by an association with 80+ members. New members are welcome

Members (Selection)





# The entire ISCC system is designed to ensure sustainability, traceability and GHG emission reduction along supply chains



\*For ISCC PLUS GHG emissions requirements are voluntary



# ISCC defines six principles for the sustainable cultivation of biomass

## PRINCIPLE 1

### **Zero deforestation**

Protection of primary forests, high carbon stock areas, peat- and wetlands, protected areas and highly biodiverse areas

## PRINCIPLE 2

### **Good agricultural practice**

Agricultural and forestry production shall protect soil, water and air and ensure a sustainable use of land

## PRINCIPLE 3

### **Safe working conditions**

Ensure workers health and safety during work. Improve competence and knowledge via training

## PRINCIPLE 4

### **Social conditions**

Ensure good labor conditions and limit impacts to surrounding communities

## PRINCIPLE 5

### **Compliance with laws**

Comply with all regional and national laws and international treaties

## PRINCIPLE 6

### **Good management practices**

Recording system and compliance of subcontractors

# Voluntary add-ons provide to further customise certification solutions

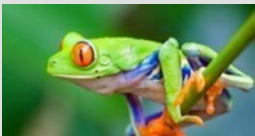
## Farms and plantations

### Mandatory sustainability requirements



Zero deforestation, Good agricultural practice,  
Human and social rights

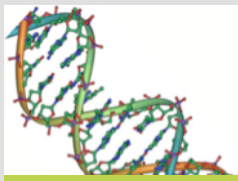
### Voluntary Add-ons



Environmental  
Management &  
Biodiversity



Classified  
Chemicals



Non GMO



GHG Emissions



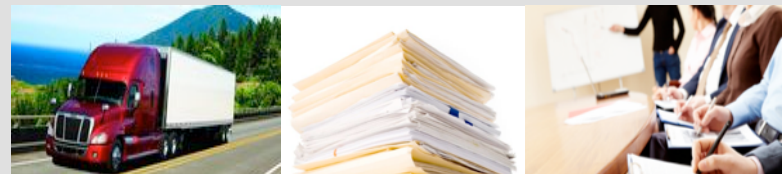
Consumables



SAI GOLD

## In the supply chain

### Mandatory requirements



Management system,  
Traceability, Chain of custody

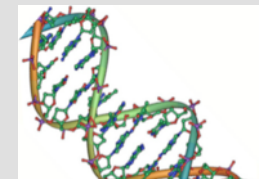
### Voluntary Add-ons



GHG Emissions



Consumables



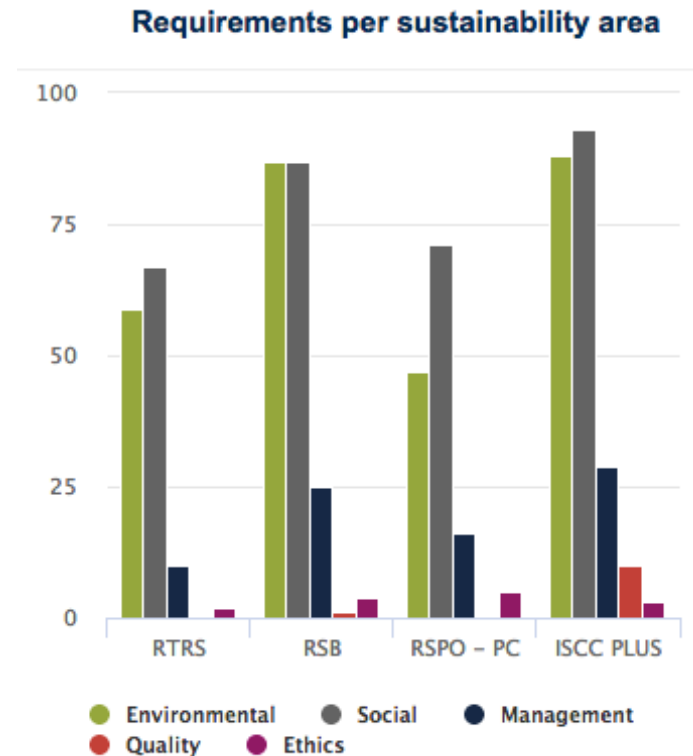
Non GMO

# ISCC requirements comply with high sustainability demands – Impartial assessment available at WWF and the ITC Standards Map



The WWF Benchmarking Study November 2013 evaluates ISCC as one of the best sustainability certification systems.

„According to the WWF analysis the best performing certification system was RSB (Round Table on Sustainable Biomaterials), closely followed by ISCC and the Round Tables on Sustainable Palm (RSPO) and Soy (RTRS)“



The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations.

Standards Map provides comprehensive, verified and transparent information on voluntary sustainability standards

# ISCC supports the Sustainable Development Goals and Paris Cop21



United nations conference  
on climate change  
COP21/CMP11



**ISCC PRINCIPLE 1 & 2: Protection of land with high biodiversity value or high carbon stock. Production in an environmentally responsible way including the protection of soil, water and air:**



**ISCC PRINCIPLE 3: Safe working conditions:**



**ISCC PRINCIPLE 4: Human rights, labour rights and land rights:**



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 uses GRAS: Remote sensing tool to implement site- and region-specific sustainability risk analysis & land use verification



With GRAS sustainability can be checked from your desktop



**Biodiversity**



**Land Use Change**



**Carbon Stock**



**Social Indices**

The development of GRAS has been supported by:



Bundesministerium für Ernährung und Landwirtschaft



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# GRAS helps to verify that supply chains of agricultural products are not linked to deforestation



And many more...

Linked to deforestation?



Land Use Change  
verification with



# Summary

- The world-wide increase in the demand for biomass needs certification that ensures a sustainable production and sourcing
- Voluntary and mandatory sustainability requirements for food, feed, chemical and bioenergy markets exist in parallel
- Deforestation and social sustainability is increasingly important for companies, investors and NGOs
- ISCC is a One-Stop-Shop to address sustainability requirements in the various markets
- ISCC is a comprehensive and high quality system. ISCC is recognized by major market standards, sustainability initiatives and individual companies
- ISCC is a multi-stakeholder scheme with strong global and regional dialogue
- ISCC performs well in benchmarking studies
- ISCC supports GRAS as an innovative tool to identify deforestation and other land use change



Many thanks for your attention!



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