

Sustainability Standards, Certification and Net Environmental Benefit

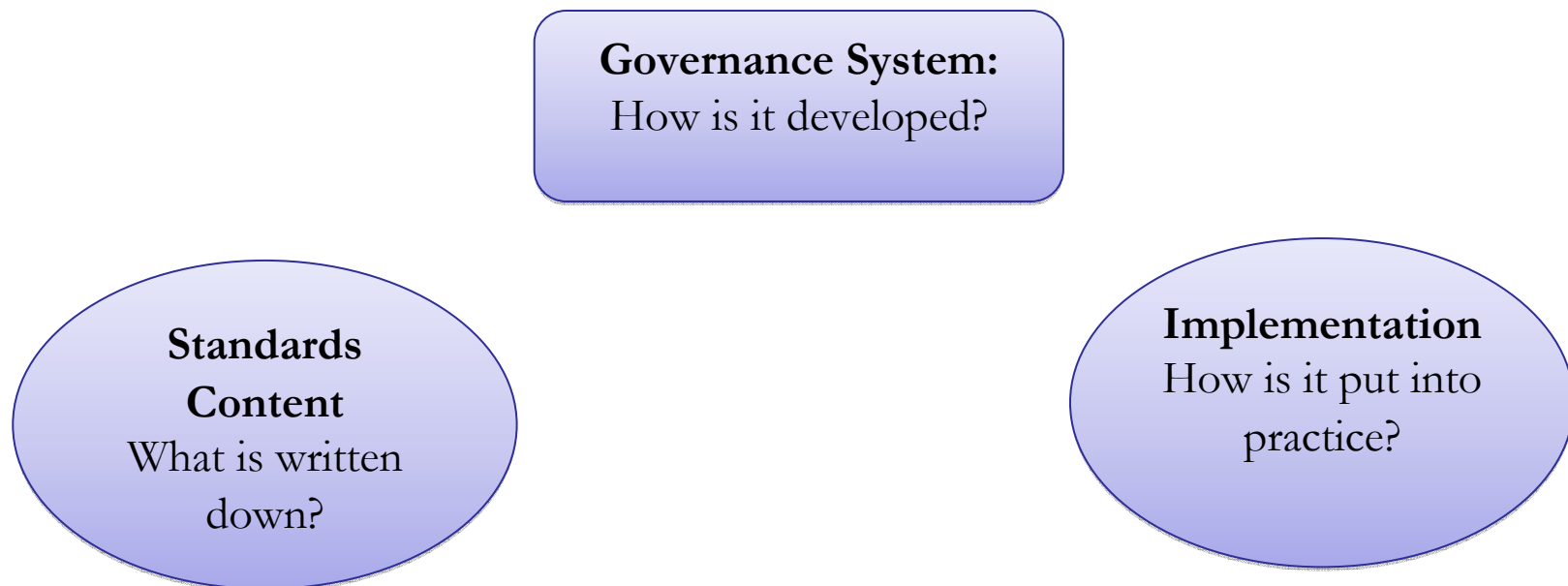
The Roundtable on Sustainable Biofuels

Ensuring that biofuels deliver on their promise of sustainability



Voluntary Sustainability Certification - Overview

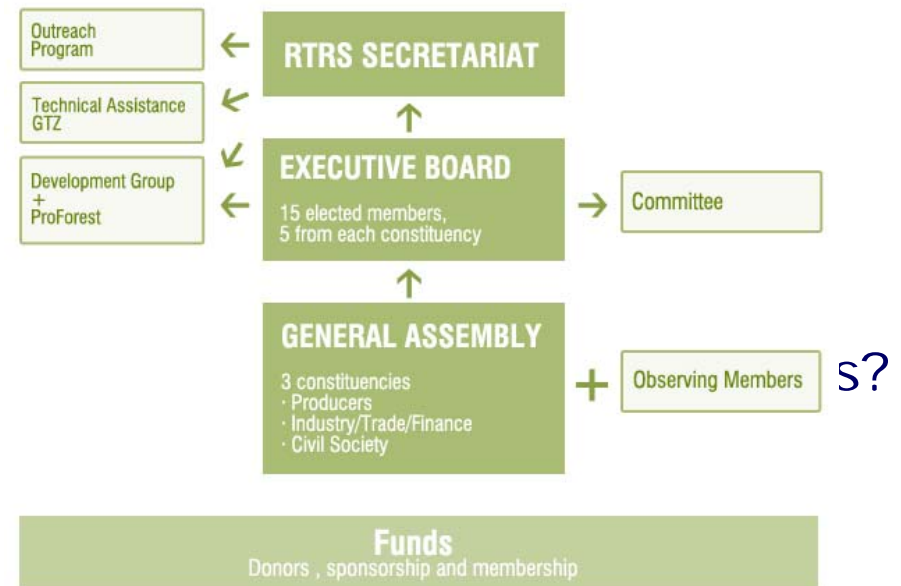
- **What is sustainability certification?**
An approach to addressing concerns about negative impacts by creating market incentives above the minimum level required by law.
- **Dimensions of a certification system**
(Thanks to Heiko Liedeker for content on the following slides)



Voluntary Sustainability Certification – Governance System

How was the standard developed?

- Industry initiative?
- Public process?
- Intergovernmental process?
- Multi-stakeholder



- Participatory involvement on the part of all stakeholders is critically important to gain acceptance of a voluntary standard.
- Standards development should follow internationally accepted guidelines (e.g. ISEAL Code, ISO Guide 59, etc.)

Voluntary Sustainability Certification – Standards Content

The content of most standards is divided into three levels:

1. Core social and environmental **principles** that they aspire to achieve.
 - “Biofuel production shall avoid negative impacts on biodiversity, ecosystems, and areas of High Conservation Value” (Principle 7 of RSB Version 0)
2. Within each principle are a set of **criteria** that give greater detail on how the principle will be carried out
 - “Ecosystem functions and services shall be preserved.” (Criterion 7.b of RSB Version 0)
3. **Indicators** – What are the metrics?
 - e.g Performance-based or Practice-based, Threshold minimums versus incentives, etc...

Voluntary Sustainability Certification – Standards Content

The **Chain of Custody** describes how the product will be tracked through the value chain. One of three systems is typically used:

- “Track and trace” – The certified product is completely segregated and the product sold to the end user sold is the same product that was originally certified
- Mass balance – The certified product may be mixed with uncertified products and a percentage of certified product is maintained.
- Book-and-claim – The production of a certified product generates a certificate that may be bought and sold. The product delivered to the end user may not have any certified product, but the product is somewhere in the market

Voluntary Sustainability Certification – Implementation

- **How is the standard's content put into practice?**
- **Auditing**
 - Qualification of auditor, stakeholder consultation, reporting
- **Certification**
 - Peer review, decision making, appeals, complaints
- **Accreditation**
 - Controls, consistency, independence





Better Sugar Cane Initiative

➤ **General Description**

- “A global multi-stakeholder non-profit initiative dedicated to reducing the environmental and social impacts of sugar cane production.”

➤ **Governance**

- Steering Committee recently replaced by an elected Transitional Management Committee
- Technical working groups used to assess BMPs
- Secretariat/Coordinator based in London

➤ **Standard**

- 5 Principles: (1) Legality, (2) Human and labor rights, (3) Production and input efficiency, (4) Biodiversity and ecosystem services, (5) Commitment to continuous improvement

➤ **Current status**

- Recently incorporated as a UK non-profit, public consultation period on P&C



Roundtable on Responsible Soy

➤ **General Description**

- An international multi-stakeholder initiative established in 2004 to bring together those concerned with the impacts of the soy economy. Its main goal is to reach a consensus on what constitutes responsibly-grown and processed soy, and promote the best available practices to mitigate negative impacts throughout the value chain

➤ **Governance**

- Secretariat based in Buenos Aires, Argentina
- Membership: Civil society organizations; Industry, Finance and Trade; Soy Producers; observing members
- Ultimate governing authority is the General Assembly which meets once per year

➤ **Standard**

- 5 Principles: (1) Legality, (2) Human and labor rights, (3) Community Relations, (4) Environmental Responsibility, (5) Good Agricultural Practices

➤ **Update**

- Has met considerable opposition. Hoping to approve P&C at upcoming GA

 meeting in Brazil May 26-27

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Roundtable on Sustainable Biofuels

Energy Center 



Roundtable on Sustainable Palm Oil

Roundtable on Sustainable Palm Oil

➤ **General Description**

- Established in 2003 with the objective of promoting sustainable oil palm products through credible global standards and engagement of stakeholders.
- Functioning standard – first certificate issued in August 2008, National Interpretations in 4 countries (Malaysia, Papua New Guinea, Indonesia, Colombia), currently 30% of palm oil producers and 15% of buyers worldwide are members of the RSPO

➤ **Governance**

- Secretariat based in Kuala Lumpur
- Membership: oil palm producers, palm oil processors or traders, consumer goods manufacturers, retailers, banks and investors, environmental or nature conservation NGOs and social or developmental NGOs

➤ **Standard**

- 5 Principles: (1) Legality, (2) Human and labor rights, (3) Community Relations, (4) Environmental Responsibility, (5) Good Agricultural Practices

US EPA – Renewable Fuels Standard 2 proposed rulemaking

- Goes into effect January 1, 2010 and mandates an incremental increase of biofuels use to 36 billion gallons by 2022
- Creates a market for four categories of biofuels – petroleum refiners and importers will be required to purchase a certain number of certificates for each category of renewable fuels
- Base category of renewable fuel requires at least a 20% GHG reduction, except for corn ethanol facilities built prior to a Dec 19, 2007 cut off. The advanced biofuels category (which is divided into two) requires at least a 50% reduction, and cellulosic requires a 60% reduction.
- Both direct and indirect impacts have been considered in the methodology for GHG reductions.
- The EPA has made two suggestions: (1) - 30 year time horizon, (2) - 100 year time horizon with 2% discount. The 2% discount is intended to discount the effectiveness of the emission benefit of biofuels over time, and is considered relevant for longer time horizons to account for increased uncertainty and effectiveness.
- Feedstock must meet the definition of "renewable biomass". Renewable biomass is it must come from existing agricultural land. CRP land may be used.

The Renewable Energy Directive (RED)

Sets mandatory targets for 2020:

- National targets for the overall share of renewable energy (adding up to 20%)
- 10% target for renewable energy in transport
- Commission to report in 2010 on how to address indirect land use change

EU RED Sustainability criteria

1. Greenhouse gas impact

- Minimum requirement for GHG saving, relative to fossil fuel, of at least 35% beginning this year, 50% in 2017 (60% for new installations)

2. Land with high carbon stock

- No conversion of: Wetland, Continuously forested area, Undrained peatland

3. Land with high biodiversity value

- No raw material from : 1) Forest undisturbed by significant human activity, 2) Highly biodiverse grassland, Nature protection areas

4. Social Sustainability (Reporting only)

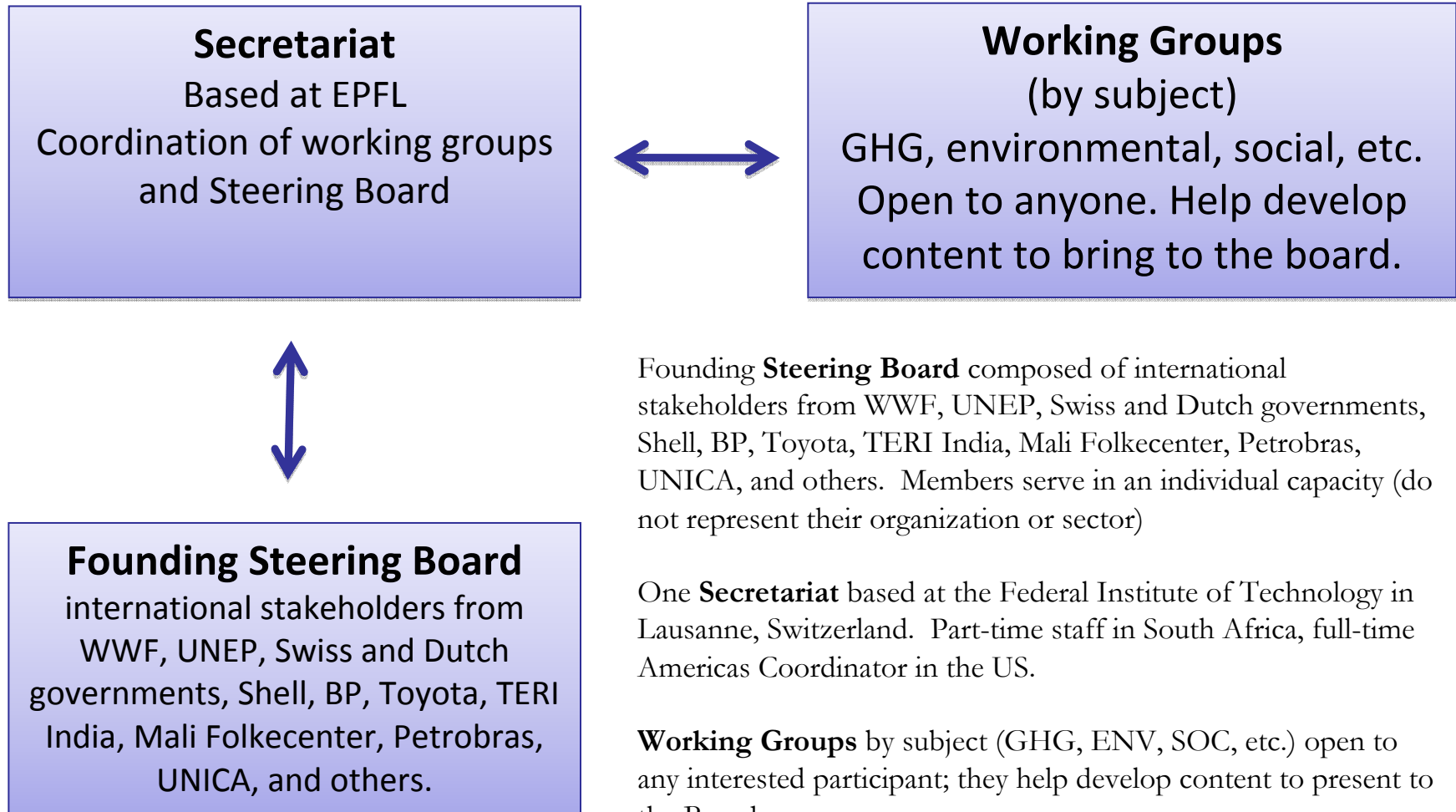
What is the Roundtable on Sustainable Biofuels?

The RSB is an international multi-stakeholder initiative developing a sustainability certification program for biofuels production. Characteristics of the RSB standard:

- **Environmental Criteria** (Soil, water, air, GHG, biodiversity)
- **Social Criteria** (Food security, Human and labor rights, Social development, Land rights)
- **Generic** to all crops
- **Adaptable** to new information
- **Truly multi-stakeholder**



RSB Governance – Prior to 2009



RSB Governance – From June 2009 forward

Secretariat
Based at EPFL
Coordination of Expert Groups,
Chambers, and Standards Board



Expert Groups
(for specific topics)
Definitions, best practices, etc.
Nominated by Standards Board
to help develop content &
strategy



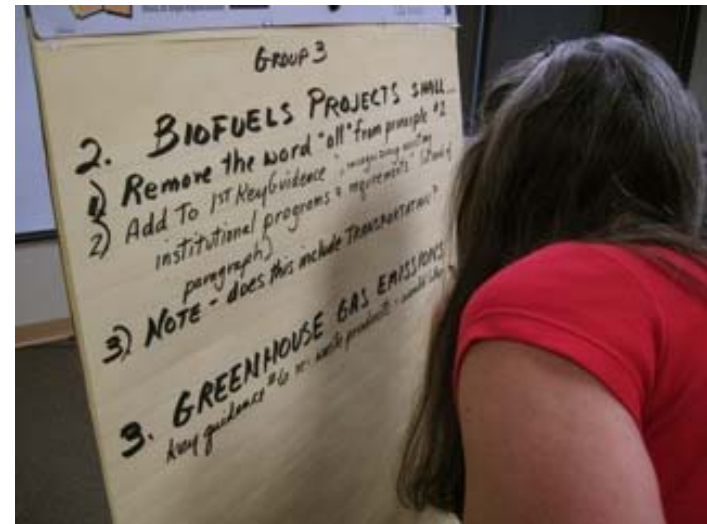
Standards Board
Comprised of one representative
from each of 11 chambers
representing different types of
biofuels stakeholders

Chambers

1. Farmers and growers of biofuel feedstocks
2. Industrial biofuel producers
3. Retailers/blenders & the transportation industry
4. Banks/investors
5. Rights-based NGOs (land, water, human, and labor rights
6. Rural development and food security organizations
7. Environment and conservation organizations
8. Climate change and policy organizations
9. Trade unions
10. Smallholder farmer organizations and indigenous peoples' organizations/ community-based civil society organizations
11. Intergovernmental organizations (IGOs), governments, standard-setters, specialist advisory agencies, certification agencies, and consultant experts.

Multi-stakeholder in nature

- Working group tele-conference calls to develop **Version Zero** of the standard (published August 2008).
- Over 15 in-person stakeholder meetings held between Sept 2008 and March 2009 throughout the world to discuss **Version Zero**: Brazil (2), South Africa, China, India, Mali, Mozambique, Brussels, Kenya, Caribbean, United States (4), Colombia, Argentina, Malaysia
- Approx 900 participants discussed **Version Zero**. Reports from all meetings and all comments received are available on our website.



Version Zero - RSB Standard

	Direct	Indirect
National Law (1) (especially land, labor, water rights)	✓	
Community Consultation (2)(especially to determine land rights, social & environmental impact, idle land, resolve grievances)	✓	
Social —should benefit workers (4) and rural communities (5)	✓	
(6) should not contribute to food insecurity	✓	✓
GHG (3) - significantly better over lifecycle than fossil fuel	✓	✓
Environmental – conserve and protect soil (8), water (9), air (10)	✓	
conserve and protect high conservation values (7)	✓	✓
Technology (11) – (esp. biotech) should be used responsibly and transparently, contribute to income or sustainability	✓	
Land Rights (12) –Projects must ensure that customary and formal land rights are observed	✓	

Stakeholder Comments: Consultation (2)

- **Principle 2: Biofuels projects shall be designed and operated under appropriate, comprehensive, transparent, consultative, and participatory processes that involve all relevant stakeholders.**

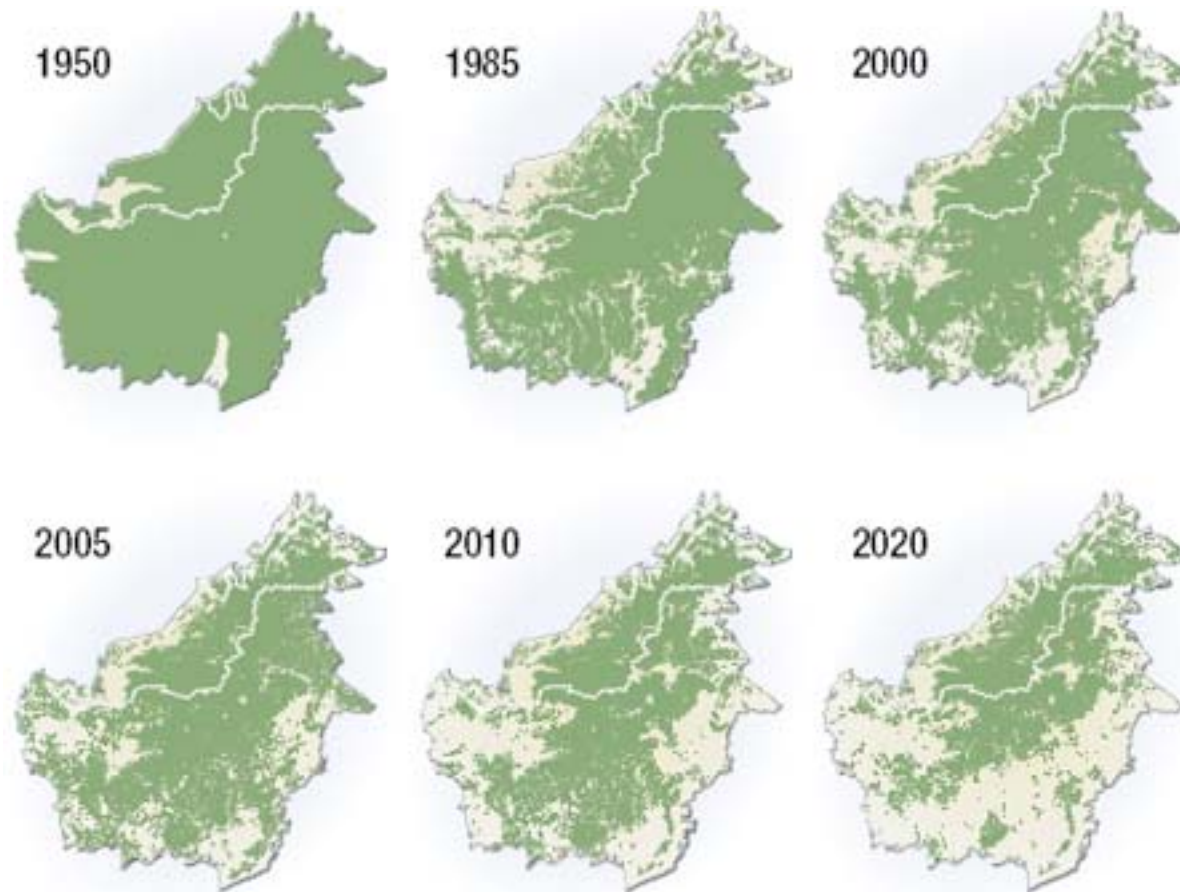
Example of feedback received :

- Economic/Social Impact Assessments should be required of new and existing projects.
- Requirement details are needed of the ESIA
- Need for independent ESIA auditors
- Need to address outgrower schemes
- Current language may not catch certain vulnerable groups
- How will the RSB define consensus?



Stakeholder Comments: Conservation (7)

- **Principle 7: Biofuel production shall avoid negative impacts on biodiversity, and areas of High Conservation Value**



Source: UNEP, 2007. Rapid Response Assessment: The Last Stand of the Orangutan

Stakeholder Comments: Conservation (7)

- **Principle 7: Biofuel production shall avoid negative impacts on biodiversity, and areas of High Conservation Value**

Examples of feedback received :

- Many questions about the definition of HCV
 - Some participants suggested we point to international definitions, others that we develop our own
- Comments that ecosystems can be indirectly affected through connections they might have with each other (ecosystem connectivity)
- Leaving conservation values intact is unrealistic, better to say “undamaged”
- Need to develop a cut-off date
- Stronger language prohibiting the use of invasive species
- How to address native ecosystems such as forests and the concerns of Global South stakeholders to allow economic development

Stakeholder Comments: GHG Emissions (3)

- **Principle 3: Biofuels shall contribute to climate change mitigation by significantly reducing GHG emissions as compared to fossil fuels.**

Example of feedback received :

- Life cycle analysis of GHGs conducted on different products (biofuels and fossil fuels) must use the same methodology
- Important to quantify “significantly” or remove this word.
- Stakeholders tended to identify mandates as potential goals (e.g. 20% (US EPA), 35% (EU), etc...)
- Many stakeholders felt there is not sufficient scientific consensus to support the inclusion of indirect land use change (iLUC) in GHG calculations. Some stakeholders suggested de-emphasizing the importance of iLUC impacts until better modeling exists to measure them, and/or use a conservative number higher than zero. Nearly everyone agreed on the need for an agreed upon methodology for measuring iLUC impacts.

Stakeholder Comments: Food Security (6)

- **Principle 6: Biofuel production shall not impair food security.**

Example of feedback received :

- Most comments emphasized the importance of avoiding the worst impacts of biofuels
- Some stakeholders expressed that biofuel production can enhance food security
- Need for definition: Many stakeholders felt we should adopt the FAO definition of Food Security (including 4 pillars)
- Need to clarify if we are addressing the local, regional or national level impact – clear that indirect impacts are the most important, and difficult to address.



Version Zero: Indirect Impacts (GHGs, Conservation and Food Security)

- **Version Zero identified two major indirect impacts of biofuel production that affect three core Version Zero principles:**
 - a) **Indirect land use change (iLUC):** Can lead to impacts on principle 3 on Greenhouse gas emissions if iLUC occurs on land with high carbon stocks, and principle 7 on Conservation if iLUC occurs on land with High Conservation Values
 - b) **Changes in commodity prices:** can lead to impacts on principle 6 on food security if grain price increases due to biofuels make it more difficult for vulnerable populations to afford food.

Stakeholder Comments: Indirect Impact (GHGs, Conservation and Food Security)

Stakeholder feedback on Version Zero:

- Most stakeholders believe that both of these points are valid and that indirect impacts do occur, however the following major concerns were raised:
- **Responsibility:** Many stakeholders felt that for the purposes of certification, sustainability criteria should only include practices under the control of that producer.
- **Degree of certainty of impacts:** There is no consensus on the degree, or even the direction in some cases, of the indirect impacts of using biofuels.

Towards Version One

- Three rounds of chamber calls held in April & May to review stakeholder comments and proposed changes
- In early May, Chambers will elect a Chair and Vice-chair to represent the chamber on the Standards Board
- First Standards Board meeting will be held jointly with the outgoing Steering Board May 26th and 27th in Lausanne.
- Version One to be approved shortly thereafter
- Next steps are: Beginning benchmarking discussions, chain of custody options, pilot testing framework

Meta-standard concept



- Many certifications already exist or are under development for biofuel crops (palm, sugar, soy).
 - Most standards were created for the food industry, so they focus on on-farm sustainable agriculture, and not climate change or ‘macro’ effects (e.g. land use change and food security).
- To minimize verification burden, aim is to recognize other certifications as covering most elements of the RSB meta-standard, then add on information about GHG emissions and macro effects.

UK Meta-standard Concept

Environmental/ social principle	SAN/ RA	RSPO	LEAF	EUREP -GAP	SAI	FSC
Conservation of Carbon	Yellow	Yellow	Yellow	Red	Red	Yellow
Conservation of Biodiversity	Qualifying standard				Red	Blue
Soil conservation					Red	
Sustainable water use					Red	
Workers rights					Green	
Land rights					Red	

Future Timeline

- Create a proposal system for Chain of Custody by May 2009
- Transition to new governance structures and approve Version One by June 2009
- Draft and approve definitions for Version One by November 2009
- Draft and approve generic indicators by November 2009
- Jatropha Working Group launched to develop specific indicators for jatropha
- Coordinate pilot testing of draft standards in real supply chains in 2009



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