RSB
ROUNDTABLE ON SUSTAINABLE BIOFUELS

RSB: a global water management tool

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14 March 2013

World Biofuels Market : the Water Debate

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Summary

Credible certification can guarantee responsible water management throughout the supply chain.

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1. What is the RSB?

2. How can certification promote good water management?

3. Examples of good practice

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RSB Mission

- To provide and promote the **global standard** for socially, environmentally and economically sustainable production and conversion of biomass.
- To provide a global platform for **multi-stakeholder dialogue** and consensus building.
- To ensure that users and producers have access to credible, practical and affordable **certification**.
- To support **continuous improvement** through application of the standard.

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The RSB Standard

Global, voluntary, standard on sustainability for biofuels – Certification System

- **Enables producers and purchasers to differentiate** sustainable biofuels
- **Covers entire supply chain, all feedstocks and all types of fuels**
- **Uses Independent 3rd party audits and risk management approach**
- **"Benchmarking":** working with other standards & regulations
- **Fulfills "market access standards"** for specific regulated markets, i.e. EU

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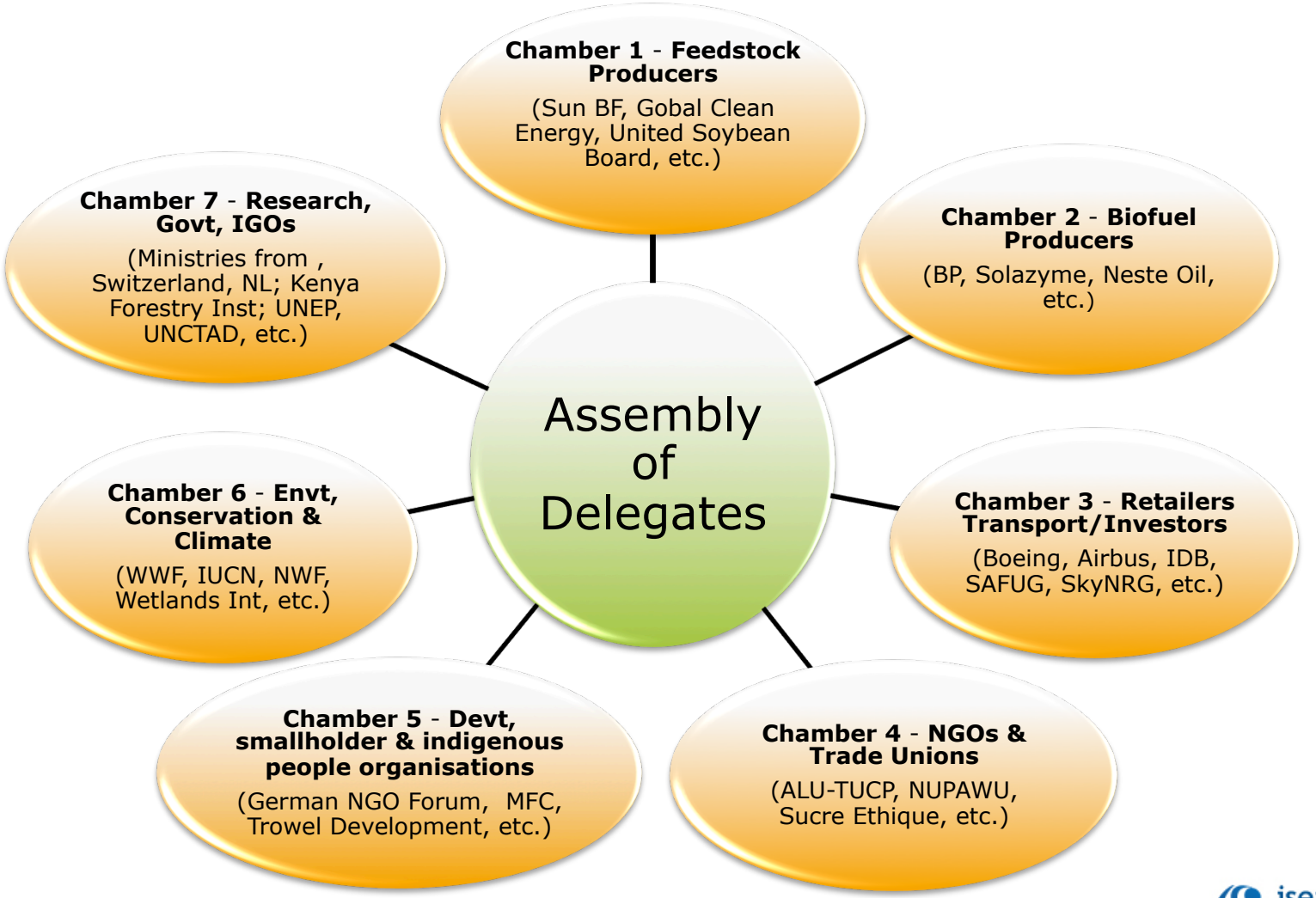
RSB Governance



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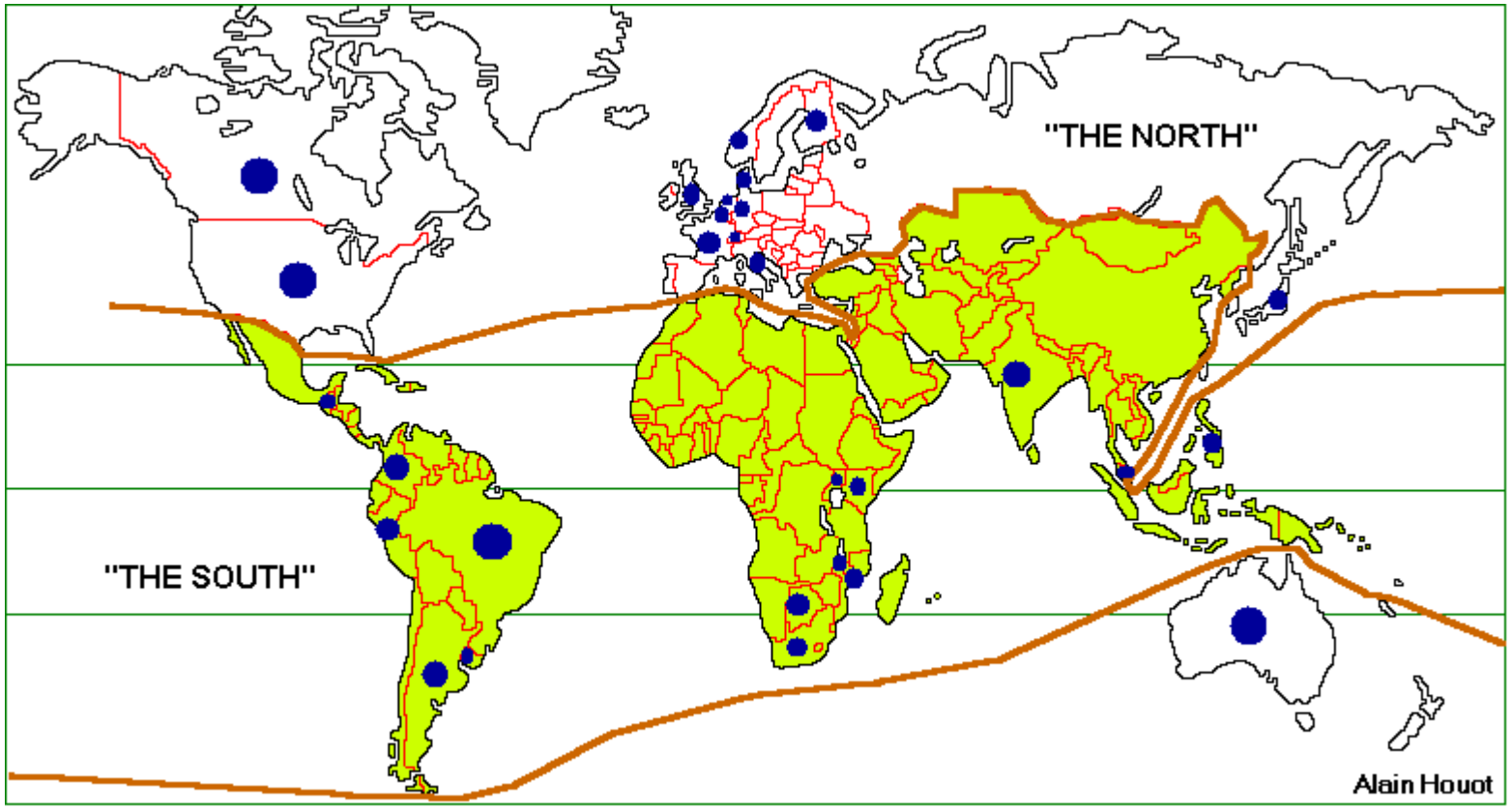
A global discussion: RSB members



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RSB Principles (& Criteria)

Principle 1: **Legality**	Principle 2: **Planning, Monitoring & Continuous Improvement**	Principle 3: **Greenhouse Gas Emissions**
Principle 4: **Human & Labor Rights**	Principle 5: **Rural & Social Development**	Principle 6: **Local Food Security**
Principle 7: **Conservation**	Principle 8: **Soil**	Principle 9: **Water**
Principle 10: **Air**		
Principle 11: **Use of Technology, Inputs, & Management of Waste**	Principle 12: **Land Rights**	

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RSB Principle 9: Water

"Biofuel operations shall maintain or enhance the quality and quantity of surface and ground water resources, and respect prior formal or customary water rights."

4 Criteria:

1. Water rights
2. Management Plan
3. Availability
4. Quality



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RSB Criterion 9a: Water Rights

- **Identify** and **respect** existing water rights (formal & customary)
- **Assess** and **minimize** potential impacts of operations on water availability for local communities
- **Settle disputes** over water resources before certification begins

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Criterion 9b: Water Management Plan

- **Identification** of water consumption points
- **Understanding** of issues and good practices
- **Develop and implement** plan to minimise impacts on water availability and quality

The water management plan should be **adapted** to the context and **available** to the public

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Criterion 9c: Water availability

- **Goal:** Ensure that the water resources used for biofuel operations are sustained over time

  - **Understanding** of the dynamics of the water resources being used (level of stress, replenishment capacity).
  - **Demonstration** that the water replenishment capacity is not reached or exceeded (data, records, testimonies)
  - No irrigation in water-stressed areas (i.e. drought prone)
  - No diversion of water courses or significant reduction of flow

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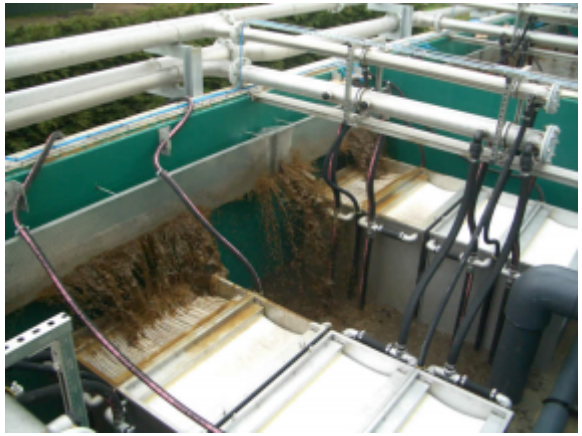
Examples of good practice

Drip irrigation

Rainfed agriculture

Water reuse



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Criterion 9d: Water quality

- **Goal:** Ensure that the quality of water resources used for biofuel operations is maintained/enhanced over time

  - No operation on **critical aquifer recharge area** without authorisation
  - Practices that maintain/enhance **water quality**
  - Contain **effluents** and avoid pollution through **runoffs**
  - **Buffer zones** between operation site and water resources

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Signs/Risks of water pollution

Oil/Fat spills

Intensive use of inputs

Absence of water treatment/sewage

Eutrophication of water

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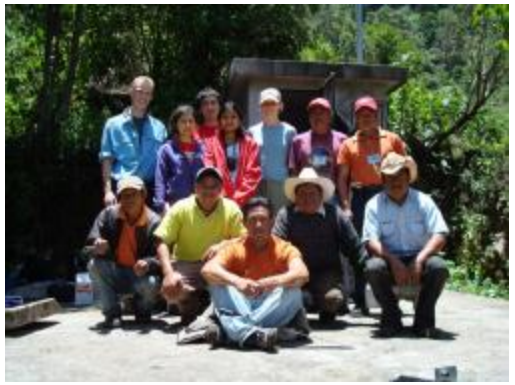
Water quality: what to observe/measure?

Water effluents

Water table

Water courses



Local water committees & communities

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Examples of good practice

Integrated Pest Management

Runoffs collection

Wastewater collection

Buffer zones

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How innovation saves water: Piedmont Biofuels (US)

- Biodiesel cooperative based in Pittsboro, NC
- Feedstocks: UCO, waste fats oils and grease.
- **RSB Certified since February 2013!**

- Innovative ***enzymatic esterification process*** replacing standard acid esterification process.
- Water use down to 0.078 gal/gal Biodiesel!

www.biofuels.coop

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Wastewater as a feedstock for biofuels: Manildra (Australia)

- Largest industrial user of wheat in Australia processing (1 million tonnes p.a.)
- Main products: flour, food additives and ethanol.
- Ethanol produced from starchy wastewater from wheat processing (Nowra Distillery, NSW)
- **RSB Certified since February 2012!**

http://www.manildra.com.au

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Conclusion

Credible certification can guarantee responsible water management throughout the supply chain.

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Thank you!

For More Information

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RSB Secretariat
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RSB Services
http://www.rsbservices.org

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