A GUIDE TO THE RSB STANDARD

Driving the development of the bio economy for a better world through certification, sustainability solutions, innovation and partnerships.

Trusted Solutions for a New World



WHAT IS THE RSB?

The Roundtable on Sustainable Biomaterials (RSB) is a global, multi stakeholder independent organisation that drives the **development** of a new world bioeconomy through sustainability solutions, **certification**, **innovation**, **and collaborative partnerships**.

It provides tools and solutions that mitigates business risk, contributes to achieving the UN's Sustainable Development Goals and has the world's most trusted, peer reviewed, global certification standard for sustainable biomaterials, biofuels and biomass production.

RSB's standard contributes to food security, rural development and restoration of ecosystems. Its unique membership base of sector pioneers, business leaders, NGO and UN agencies have approved the 12 principles of the standard and are actively driving the bio economy through innovation, business partnerships and solving social and environmental issues. By applying the RSB standard a company is able to participate in helping to achieve the UN Sustainable Development goals.

The RSB Standard:

- Is best in class, comprehensively addressing key sustainability issues,
- Is a management approach, with a tool-kit and guidance for operators to identify and manage the sustainability issues that matter most, and therefore,
- Reduces risk for operators, brand owners and investors. The RSB Standard is actually comprised of many component standards covering different issues and circumstances, together referred to as 'The RSB Standard'.

If you produce biomass or are involved with biofuels or biomaterials, then you can be certified to the RSB standard.

Certification will:

- Give your operation international credibility
- Increase your opportunities and access to discerning global markets
- Place you in the forefront of sustainability
- · Help identify and reduce your risks

As markets grow for bioproducts, the RSB is perfectly positioned to build further trust and credibility in the sector and promote the sustainability of your products. Any bio-based feedstock, biofuels, biomass derived products or by-products can be certifified to the RSB Standard.

The RSB Standard also covers complete supply chains, as well as novel biomass and biomaterial technologies.

KEY FEATURES OF THE RSB APPROACH

The RSB Standard helps companies ensure sustainable production through a unique combination of characteristics, setting it apart from other schemes.

Global

- 1. The RSB Standard is global, and applicable to all biobased feedstocks.
- 2. The RSB Standard doesn't just cover biofuels. Indeed, rather than being for specific commodities or markets, the RSB Standard can also be applied to all biomaterials and therefore supports the global bioeconomy.

Accessible

- 3. The RSB Standard is designed with industry stakeholders, with a clear appreciation of realworld production, processing and marketing challenges. It is updated regularly with members taking an active role.
- 4. The RSB Standard is backed up by a userfriendly certification scheme that is risk-based and focuses on the issues that matter most.
- 5. The RSB Standard is accompanied by comprehensive guidance documents, developed by technical experts to help achieve sustainability in an efficient way.

Best in Class

- 6. The RSB Standard is based on a full set of principles and criteria covering all crucial sustainability issues. Selecting certification to the RSB Standard demonstrates genuine commitment to the future of ethical, sustainable and credibly-sourced biomaterials, and ensures your sustainability scheme meets global challenges including climate, biodiversity, hunger and poverty.
- 7. The RSB Standard is the strongest and most trusted of its kind, recognised as such by World Wildlife Fund (WWF), International Union for Conservation of Nature (IUCN) and Natural Resources Defense Council (NRDC), and widely recognised by regulatory authorities in Europe, the U.S. and elsewhere, allowing RSB-certified products swift approval and preferential market access.
- 8. RSB is a full International Social and Environmental Accreditation and Labelling (ISEAL) member. ISEAL membership confers the highest credibility on sustainability standards, and RSB complies with all of ISEAL's rigorous and internationally recognised codes.



RSB'S PRINCIPLES AND CRITERIA

The RSB standard is based on four major elements:

LEGAL:	The RSB Standard ensures legal compliance, including traditional land and water rights.
SOCIAL:	The RSB Standard ensures human and labour rights, rural and social development in regions of poverty, and local food security.
ENVIRONMENTAL:	The RSB Standard ensures the preservation of conservation values, soil health, water quality and availability, mitigation of climate change, as well as control of air pollution.
MANAGEMENT:	The RSB Standard ensures the reduction of risks and continuous improvement through an effective management approach.

There are 12 RSB principles – the full text is on the RSB website. Together they provide a foundation for sustainable production.

1. Legality

All applicable laws and regulations followed.

2. Planning, Monitoring and Continuous Improvement

Planning, implementation, and continuous improvement through identifification, mitigation and ongoing monitoring of key environmental and social risks

3. Greenhouse Gas Emissions

Climate change mitigation through signifificant reduction in greenhouse gas emissions compared with fossil fuels.

4. Human and Labour Rights

No violation of human or labour rights and promotion of decent work and workers' wellbeing.

5. Rural and Social Development

Contribution to social and economic development of local, rural and indigenous people, and communities in regions of poverty.

6. Local Food Security

Ensured human right to adequate food, and improved food security.

7. Conservation

Avoidance of negative impacts on biodiversity, ecosystems, and conservation values.

8. Soil

Maintenance of soil health and/or practices to reverse soil degradation.

9. Water

Maintenance, or enhancement, of quality and quantity of surface and ground water, and respect for water-use rights of local people.

10. Air

Minimised air pollution along the supply chain.

11. Use of Technology, Inputs and Management of Waste

Maximised effificiency and social and environmental performance, and minimised risk of damage to the environment and people.

12. Land Rights

Respect for traditional land rights of indigenous and local communities.

HOW DO RSB'S PRINCIPLES WORK IN PRACTICE?

Each of the 12 principles is backed up by criteria, requirements and indicators. Criteria list the necessary conditions to meet each principle, and who must comply with them, requirements and indicators give the details.

The full text of **Principle 7** is 'Biofuel Operations shall avoid negative impacts on biodiversity, ecosystems, and conservation values'.

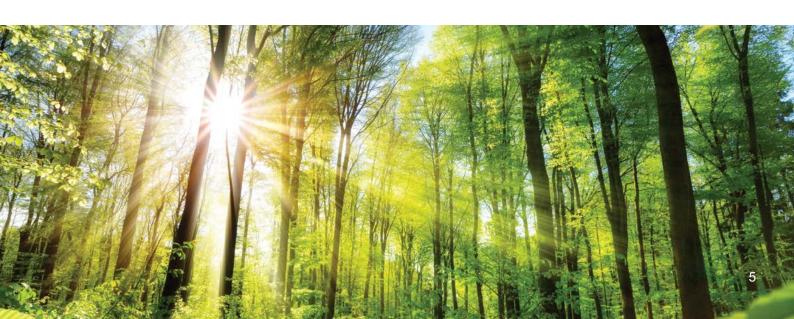
Supporting this principle are five **criteria**, including: 'Ecological corridors shall be protected, restored or created to minimise fragmentation of habitats'.

Requirements are more specific: 'Existing ecological corridors within the operational site shall be set-aside and protected with appropriate surrounding buffer zones'.

Indicators help auditors assess compliance: 'The participating operator provides objective evidence demonstrating that ecological corridors within the production site(s) of her/his/its biomass/biofuels operation(s) have been identified'.

As a double-lock on credibility and quality, RSB certification bodies are monitored by Accreditation Services International (ASI, itself a full member of ISEAL), which ensures that certification bodies are implementing the RSB scheme effectively.

Altogether, this makes RSB's scheme very robust and credible, and the most widely endorsed and trusted of its kind. Being certified to the RSB Standard means much more than having a recognised, NGO-backed logo. It is a way to help safeguard the long-term success of any biomaterial business.



WHAT MAKES THE RSB STANDARD DIFFERENT?

What distinguishes the RSB Standard is the way that key sustainability issues are managed comprehensively in order to reduce risks for operators, brand owners and investors. Here are some examples of important sustainability issues that RSB deals with in a very comprehensive way.

Greenhouse Gas (GHG) Emissions

RSB requires that biofuels achieve 50% lower lifecycle GHG emissions compared with a fossil fuel baseline. RSB has a GHG Tool that helps operators calculate emissions easily.

Fostering Support From Local Communities

Effective stakeholder engagement is one of the key principles of sustainable development for RSB. Inclusion of stakeholders at all stages from planning to auditing helps companies strengthen support from local communities. Stakeholder engagement has benefits to both operators and stakeholders:

- Facilitating understanding
- Building legitimacy and support for decisions
- Reducing the potential for conflict

The principle of 'Free Prior and Informed Consent' and RSB's Impact Assessment Guidelines help operators through a meaningful stakeholder engagement process.

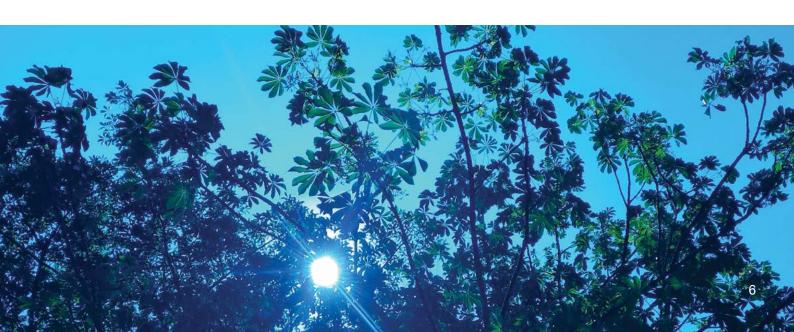
Inclusivity requires that all stakeholders are considered equal; with no one group dominating the process. This is especially important for marginalised groups, such as indigenous peoples.

Ensuring Local Food Security

This is a critical issue and a principle which must be complied with in regions prone to food shortages. RSB provides a framework and guidelines that support operators to assess the impact of their operation on local food security and how to implement mitigation and enhancement measures.

Rural and Social Development

Operators in regions of poverty are required to contribute to the social and economic development of local and indigenous communities. The RSB provides guidelines on how to improve the socioeconomic status of local stakeholders and how to encourage the participation of vulnerable groups in the operation.



FOCUSING ON WHAT MATTERS MOST

A comprehensive standard could result in expensive and time-consuming certification. RSB solves this problem with its risk-based system, which identifies relevant sustainability issues, based on the context of production, that need to be addressed.

The system also adjusts audit frequency and intensity based on risk ratings. This can significantly reduce the costs of certification for some operators.

THE OPERATOR:

- Carries out a risk-based screening to identify any necessary specialist assessments (perhaps a food impact assessment if operating in a region of food insecurity)
- Carries out any necessary specialist impacts assessment, identifies mitigation measures, and collates these into an Environmental and Social Management Plan

THE AUDITOR:

- Checks to see whether standards are being upheld
- Carries out a process of risk identification to guide the auditing processes, ensuring focus on the issues that matter most



THE MANY COMPONENTS OF THE RSB STANDARD

The RSB Standard has components designed to ensure the whole system works smoothly and effectively. All are available from RSB's website. The main components are shown below.

Component	Covers
Principles and Criteria	The 12 principles with the criteria and requirements.
Compliance Indicators	The checklist auditors use to assess compliance.
Waste and Residues	How biofuel and biomaterial supply chains may use waste and residues, and the sustainability issues that apply.
GHG Calculation Methodology	How to calculate lifecycle greenhouse gas emissions.
Participating Operators	How to design the scope of certification, and manage compliance.
Risk Management	Identification of risk levels, resulting in adaptation of audit intensity and frequency
Chain of Custody	Ensuring sustainability claims can be traced back throughout the supply chain, using various models (including 'mass balance').
Communication and Claims	Requirements for using RSB trademarks (e.g. RSB name, RSB logo) and for compliance claims.



BIOPRODUCTS AND BIOMATERIALS

The RSB Standard is not restricted to biofuels. It covers other forms of bioenergy, as well bio-based products and biomaterials. All are derived from material of biological origin (biomass) produced by agricultural processes and forestry, as well as by-products and residues from the food, feed, timber, paper and other industries.

Bio-based products include plastics, textiles, pharmaceuticals, packaging, cosmetics, nutritional supplements, food, feed and many others.

Biomass	Bio-products
Perennial Grasses	Traditional Biofuels: Biodiesel and Ethanol
Annual Crops	Cellulosic Ethanol
Algae	Drop-In Biofuels
Oilseeds	Bioplastics
Short Rotation Coppice Woody Biomass	Biolubricants
Crop Residues	Renewable Base Oils
Municipal Solid Waste	Plant Oils and Animal Fats
Industrial Wastes and Residues	Starches and Sugars
	Feed and Nutritionals
	Energy Pellets and Chips

The RSB Standard enables producers and users of such products to demonstrate responsible practices throughout their supply chain. The RSB Standard also brings clarity to the sustainability claims operators can make for their bio-products.

Bio-Chemicals

Pharmaceuticals

Cosmetics

In addition to sustainability requirements, the RSB Standard sets out requirements for bio-products related to chain of custody, and bio-based carbon content. RSB requires a minimum biocarbon content in the product of 25% on average, allowing operators to differentiate real bio-products from those that actually contain mainly fossil carbon.

Trading Biofuels with the European Union

You need to be compliant with the Renewable Energy Directive (EU RED) if you trade biofuels with or within the European Union.

There is an 'EU RED' version of the RSB Standard which is recognised by the EU as guaranteeing compliance with the sustainability criteria set out by the EU. This is a precondition for being accounted towards the EU biofuels quota. The two versions of RSB's Standards are

very similar. The main differences are to do with GHG calculations and chains of custody.

The Global Standard applies to any type of feedstock worldwide. RSB can help you choose which version is best for you.

LOW INDIRECT LAND USE CHANGE

During development of the RSB Standard it became clear that many larger scale impacts are not easy to address at an individual operator's level. Large and potentially negative impacts – such as indirect land use change (with biodiversity, socioeconomic and greenhouse gas implications) – can result from offfarm macroeconomic interactions in food, fodder, fuel, and fiber markets, and could be an unintended consequence of expansion of biomaterial production. Voluntary certification alone may not be able to tackle these indirect impacts, but stakeholders increasingly recognise that such impacts should be addressed.

Direct land use change is covered by RSB's general Principles and Criteria, so RSB worked with members and partners to look at how best to address the challenge of indirect impacts, and the result is the 'Low Indirect Land Use Change (iLUC) Risk Biomass Criteria and Compliance Indicators'. Compliance is voluntary but when combined with the general Principles and Criteria it enables operators to make a 'low iLUC risk' claim.

There are three categories of biomaterial production that are eligible for compliance with the Low iLUC Indicators.

Low iLUC Category	Summary of Requirements
Yield increase	Operators must demonstrate that additional biomass has been produced through an increase in yield. Only the additional biomass (i.e. over and above what would otherwise have been produced) is eligible.
Unused or degraded land	Operators must demonstrate that biomaterial was produced on land that was not previously cultivated, or was of very little agricultural value, and that value is not negatively impacted.
Waste and residues	Operators must demonstrate that biomass used complies with RSB's standard for waste and residues and does not result in greenhouse gas emissions.

THE RSB APPROACH FOR SMALLHOLDERS

RSB recognises challenges smallholders may face in achieving certification. For individual smallholders, third-party certification can be prohibitively expensive, but certification can open up markets to smallholders providing additional sources of income. So RSB has a particular approach called 'group certification' to enable small-scale farmers ('smallholders') to access certification.

In addition to an adapted version of RSB's Principles and Criteria, RSB provides a refined, streamlined Standard for Certification of Smallholder Groups. This aims to reduce barriers for smallholders to participate in global markets by:

- Providing a single, simplified document describing compliance requirements for smallholders, with guidelines
- Allowing step by step implementation over three years
- · Allowing 'group certification', which reduces the cost for individual smallholders

Group certification works by groups of farmers joining together to generate the necessary economies of scale to reduce costs for individual farmers. An appointed 'management unit' takes responsibility for managing the certification process and putting the necessary systems in place to ensure compliance of individual group members.

The management unit carries out internal inspections of certified members to monitor compliance with the requirements. An external certification body assesses the functioning of the group management system on a regular basis as well as compliance of individual group members on a sample basis.



DEVELOPMENT OF THE RSB STANDARD

The RSB Standard is regularly reviewed, and RSB continues to work on streamlining all the components.

RSB has a formal process for how the RSB Standard is developed, adapted and reviewed by its members. All major modifications require a formal consultation, in line with the ISEAL Codes of Good Practice, and approval by RSB's members.



HOW TO GET INVOLVED?

MEMBERSHIP

Become a member and have a voice in supporting, updating and improving the RSB Standard, as technology and policies change.

Visit our membership page

PARTNERSHIPS

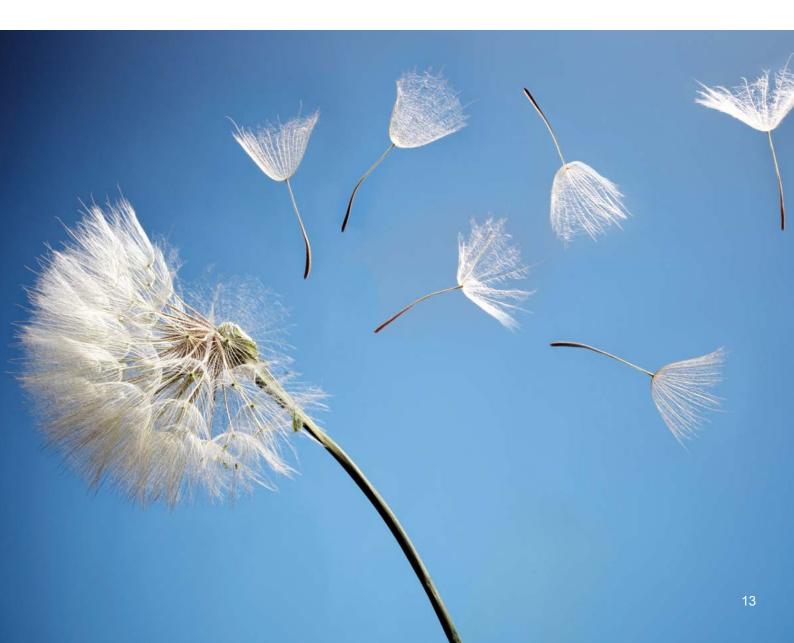
There are many ways to partner with RSB, such as colzation on research and policy projects and initiatives, as well as working together (including with other standards) to promote best practice.

Contact us at info@rsb.org

Certification. RSB certification for a farm, production facility, distribution center or other operators in the biomaterial sector is a way to:

- Demonstrate sustainability commitment to employees, shareholders, community members, buyers, suppliers, investors and others
- Reduce risk by integrating sustainability in operations
- Improve sustainability management
- Ensure access to regulated and voluntary markets

Visit our certification page





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Contact Us

If you have comments or questions regarding membership or this membership kit, please feel free to contact us. We appreciate your feedback as well as suggestions for improvement.

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