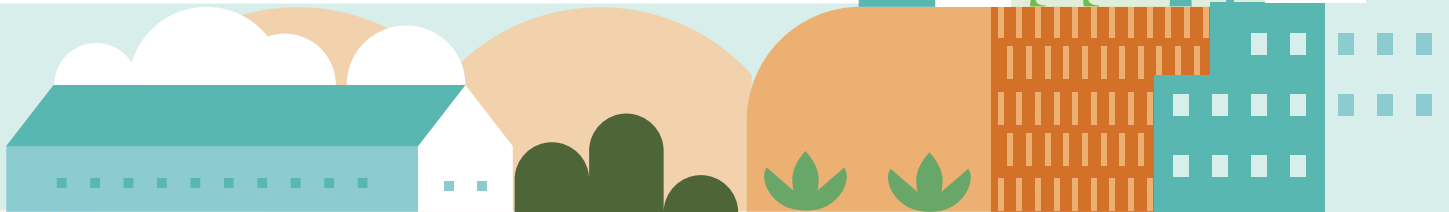




THE ROUNDTABLE ON
SUSTAINABLE BIOMATERIALS
IMPACT REPORT
2021





CONTENTS

EXECUTIVE DIRECTOR'S WELCOME	/ 2
OUR SUSTAINABILITY FOUNDATION	/ 5
12 PRINCIPLES FOR SUSTAINABLE PRODUCTION	/ 5
STRUCTURE OF RSB'S SUSTAINABILITY SCHEMES	/ 6
IMPLEMENTATION OF THE RSB STANDARD	/ 7
HIGHLIGHTS IN 2021	/ 8
CERTIFICATION	/ 14
OUTCOMES FROM THE RSB M&E SYSTEM	/ 15
PLANNING, MONITORING, AND CONTINUOUS IMPROVEMENT	/ 23
IMPLEMENTATION	/ 24
INTRODUCING RSB'S LANDSCAPE LEVEL PROGRAMME	/ 26
RSB ADVISORY SERVICES	/ 30
CONVENING OUR COMMUNITY	/ 32
PLATFORMS & INITIATIVES IN 2021	/ 34
EVOLUTION OF THE RSB STANDARD	/ 36
GOVERNANCE	/ 38
FINANCES	/ 40
ANNEX	/ 42



EXECUTIVE DIRECTOR'S WELCOME

Dear RSB members, partners and supporters,

I am so pleased to welcome you to read and explore the **RSB 2021 Impact Report**.

Witnessing the impacts of climate change and the pandemic in parallel has made it clearer than ever that we need immediate global intervention on a scale never before seen. Companies, governments, academia and civil society must align their activities to supporting a just and sustainable transition to a bio-based and circular economy.



RSB was launched at the University of Lausanne as an initiative to answer the question: *Where the heck should all this alternative feedstock come from to fuel and build a sustainable bioeconomy?* Since then, RSB has grown into a strong collaborative network of innovators, thought-leaders, industry leaders and sustainable financiers, lighting the way for a sustainable industry transformation.

In 2021, we decided it was time to revitalise the RSB strategic direction – reviewing the assets of our organisation and building a strategy that focuses on our strengths to maximise RSB's impact in the world. Today, with over a decade of experience in safeguarding a sustainable industry transformation, RSB's impact now reaches far beyond certification. Working together with our members and partners, we see RSB's sustainability framework, guiding policy and industry through their journeys from innovation to scale. Building market transformation through corporate sustainability strategies and public policies based on the RSB Principles & Criteria, ensures that both sustainability risks are mitigated and positive impacts are created – from sequestering carbon dioxide to restoring ecosystems, and improving livelihoods and food security.

It is my pleasure to share with you the result of our work in 2021, showcasing how RSB supports a sustainable market transition in our three core areas: (1) **Certification**; (2) **Collaboration**; and (3) **Convening Our Community**.

This report is a reflection of RSB's growing role and impact in the world. In previous years, we presented you with an annual activity report and a separate Monitoring & Evaluation report – but as we have increasingly seen, RSB's impact goes far beyond the outcomes of our certification system. The time has come to integrate all of our learnings, our formal monitoring, and our on-the-ground impacts into a single Integrated Impact Report that brings together all of the different realms in which RSB's sustainability framework – the RSB Principles & Criteria – are creating real and lasting change.

RSB has rebounded strongly from the impacts of the coronavirus pandemic. Although the reverberations will continue to be felt for many years, this report demonstrates a near doubling in RSB certificates issued during the reporting year and a significant increase in membership with engagement opportunities. It highlights how our shift to a virtual Annual Conference in 2021 almost tripled the reach of the event. This report also showcases the increased importance of our projects and programmes. The RSB Book & Claim Programme, and the new RSB Landscape Level Approach, represent two exciting new programmes that receive significant traction across industries. And finally, we also share a summary of RSB's finances, which show a stable financial result for 2021 and strong outlook for 2022 and beyond.

In these times, we have been impressed with the unwavering sustainability commitment of our stakeholder community. I would like to thank all of you who have contributed in bilateral conversations and strategy workshops to support RSB in its ambitions. We look forward to continuing our work with all of you to advance the transition to a global bio-based and circular economy.

Thanks for your continued support.

Elena Schmidt

Executive Director



PRINCIPLE 1

LEGALITY



PRINCIPLE 2

PLANNING, MONITORING & CONTINUOUS IMPROVEMENT



PRINCIPLE 3

GREENHOUSE GAS EMISSIONS



PRINCIPLE 4

HUMAN AND LABOUR RIGHTS



PRINCIPLE 5

RURAL AND SOCIAL DEVELOPMENT



PRINCIPLE 6

LOCAL FOOD SECURITY



PRINCIPLE 7

CONSERVATION



PRINCIPLE 8

SOIL



PRINCIPLE 9

WATER



PRINCIPLE 10

AIR QUALITY



PRINCIPLE 11

USE OF TECHNOLOGY, INPUTS & MANAGEMENT OF WASTE



PRINCIPLE 12

LAND RIGHTS

OUR SUSTAINABILITY FOUNDATION

12 PRINCIPLES FOR SUSTAINABLE PRODUCTION

The foundation of RSB’s Standard is its 12 Principles and associated Criteria, which describe how to produce biomass, and energy and material products from bio-based and recycled carbon, and renewable energy, in an environmentally, socially and economically responsible way. Because of RSB’s unique decision-making structure — based on consensus among all relevant stakeholders — the RSB Principles & Criteria are recognised as best-in-class for addressing key sustainability issues in a comprehensive way.

The RSB Principles & Criteria are applied in a risk-based approach, which reduces compliance burden whilst strengthening impact creation. Together with RSB’s online tools and related guidance documents, the RSB Principles & Criteria help users to identify and manage sustainability issues in their specific context, thereby reducing risks for operators, brand owners, and investors.



In 2021, RSB launched the revision of the sustainability Principles and Criteria. This two-phased consultation and revision process gave our diverse stakeholder network across our members, partners and beyond, the opportunity to highlight specific topics to address in the second phase consultation – which takes place in 2022. Support was shown for ensuring that the standard drives a bio- and circular economy based on *climate resilience*, particularly at the field level, with the generation and quantification of positive impacts seen as key to evidence this transition. In addition, the P&C will be updated to better reflect its coverage not only of biofuels but also circular and bio-based materials (non-energy markets). Methodologies for GHG assessment and other scientific aspects of the P&C will also be updated to ensure alignment with best-practice and the latest science.



STRUCTURE OF RSB'S SUSTAINABILITY SCHEMES

To support the applicability and uptake of RSB's approach to sustainability around the world, RSB has produced regulatory standards, adaptations, and voluntary modules to complement its main global scheme. The different schemes support operators in different contexts and markets to demonstrate compliance with a consistent best-in-class approach to sustainability, defined by RSB's 12 Principles & Criteria. This means that a common approach to robust sustainability and the creation of positive impacts is applied across aviation, shipping, consumer goods, packaging, textiles, construction, pharmaceuticals, and much more – streamlining the ability to shift away from a fossil economy to a sustainable bio-based and circular economy and helping to mitigate climate change.

Structure of RSB certification schemes



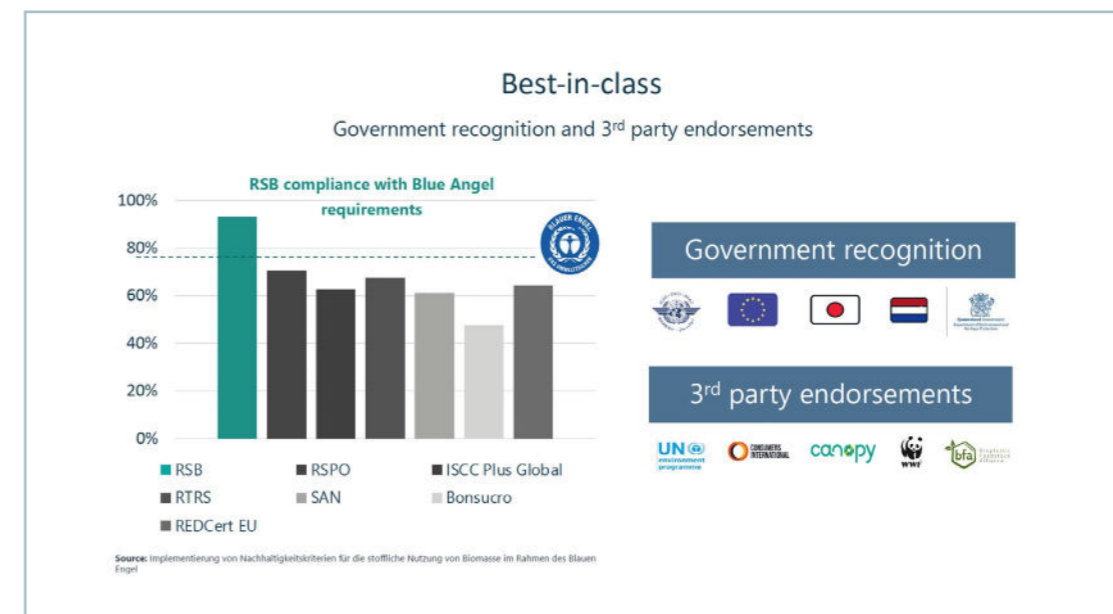
IMPLEMENTATION OF THE RSB STANDARD

RSB recognises that the impact of its Standard goes beyond the realm of certification. Ensuring that RSB's approach to sustainability — widely recognised as the most robust, transparent, and trusted — is incorporated into global and national policy, procurement programmes, impact projects, and more, to support the urgent transition and transformation towards a sustainable bio-based and circular economy.

Implementing the RSB Standard is a journey with certification as one potential end point. This is why this new **Integrated Impact Report** format looks not only at certification impacts, but also at how the Standard supports outcomes in project work, how RSB Advisory Services are supporting partners to improve and develop new systems and approaches based on RSB's approach, and how the continuous improvement of the Standard via RSB's multi-stakeholder community is building partnerships, consensus, and understanding to further its impact.

RECOGNITION

The RSB Standard is recognised by NGOs, companies and governments around the world as a uniquely robust and practical approach to sustainability in the bio-based and circular economy.





HIGHLIGHTS IN 2021



JANUARY - FEBRUARY

MARCH - APRIL



**RSB HOSTED
10 EVENTS
AND PARTICIPATED IN
26 EXTERNAL
EVENTS IN 2021**

CHEMICALS & POLYMERS WEBINAR

RSB hosted a webinar with panel of business experts in the chemicals and polymers sector, to gain insight into how they are uncovering solutions to the challenges faced in building truly sustainable solutions and a low carbon economy. The webinar was attended by 92 participants from across the world.

RSB JOINS THE SBTN

RSB joined the Science Based Targets Network (SBTN) Corporate Engagement Program to help advance corporate action on science-based targets for climate. Bringing expertise grounded in our best-in-class sustainability Standard, RSB will work with SBTN to develop and advance the uptake of science-based targets for companies to meet their climate goals.

MANILDRA RECERTIFICATION

RSB's first-ever certified operator, Manildra became re-certified for another five years. Since 2012, Manildra have been producing RSB-certified ethanol from wheat processing residues and have continued to carry RSB Participant Code 00001.



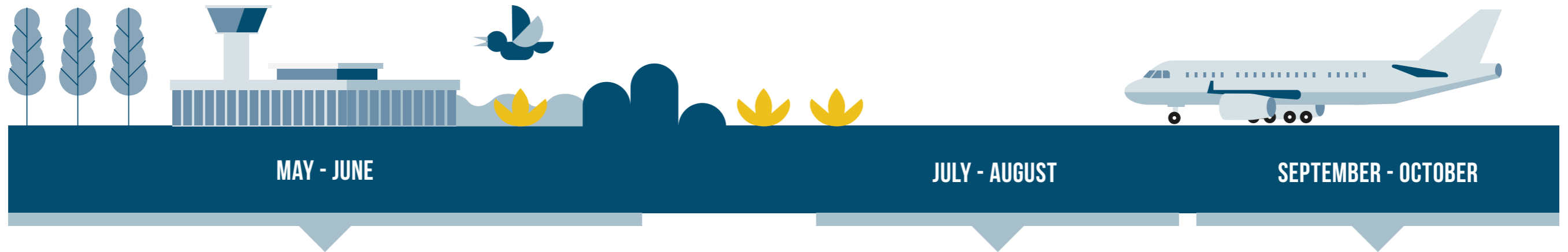
BETTER INTEREST RATES FOR RSB-CERTIFIED SMALLHOLDERS

A new programme in Brazil unlocked access to lower interest loans for smallholder farmers. Smallholder farmers certified to RSB in Guariba, Brazil can access new, lower interest credit to support their businesses thanks to an initiative from RSB certified operator Socicana — a sugarcane farmers' association in Guariba.

EARTH DAY



To mark Earth Day in 2021, RSB launched a video showing how people who grow RSB-certified Nuseed Carinata as a cover crop, benefit from improved soil health and reduced erosion – as well as it providing a new income for agricultural communities. What's more, the crop's significant biomass and deep roots efficiently remove greenhouse gases from the air, sequestering it into the soil.



NICOLA NOPONEN APPOINTED AS STANDARDS DIRECTOR

Nicola Noponen was appointed as the RSB Standards Director, taking over from Elena Schmidt. Nicola has been a key member of RSB's technical staff since November 2018, and has been closely involved in Standard Development work since then.

SKYNRG RECEIVES FIRST RSB CORSIA CERTIFICATION

SkyNRG, who became the first company in the aviation sector to achieve RSB certification in 2013, announced that they had become the first in the world to receive a RSB CORSIA certification – enabling them to supply airlines with both RSB EU RED and RSB CORSIA claims.

SAF FEEDSTOCK AVAILABILITY IN BRAZIL

RSB published the outcomes of research it conducted with Agroicone into the non-crop feedstock availability and potential in Brazil for the production of SAF. The study determined significant potential to be found in sugarcane bagasse and wood residues, particularly in the southeastern part of the country.

LAUNCH OF BLOCKCHAIN CASE STUDY

RSB and Bioledger launched a case study on the potential of a blockchain database to support traceability of biofuel and its feedstocks, and overcome the vulnerabilities identified in securing the supply of sustainable renewables.

CORSIA WEBINAR

RSB's *New Sustainable Solutions for Aviation* webinar, drew hundreds of participants, becoming our most-attended event ever. In it, we covered solutions to ensure credible sustainability for the industry – including a deep dive on RSB CORSIA and the latest updates on RSB's approach for Book & Claim.

P&C REVISION

RSB launched its consultation on the revision of the Principles & Criteria — the foundation of our best-in-class sustainability Standard. Conducted through a climate smart lens, the consultation aimed to facilitate feedstock producers and their supply chains to increase productivity, enhance resilience, and reduce GHG emissions.

PTX WORKING GROUP

RSB launched the Power-to-X (PtX) Working Group, convening stakeholders and experts to evaluate and agree on the best practices to address and reduce sustainability risks related to evolving PtX technologies.



Photo by Ricardo Gomez, Unsplash



NOVEMBER - DECEMBER

ELENA SCHMIDT APPOINTED AS EXECUTIVE DIRECTOR:

After an interim appointment, the RSB Board appointed Elena Schmidt as RSB’s Executive Director on a permanent basis. Elena will continue her leadership of RSB going forward to continue to grow and develop the organisation as it seeks to support the global transition from an extractive fossil-based economy to a bio-based and circular economy.

SAF POLICY PLATFORM

RSB officially launched the SAF Policy Platform for RSB members to discuss and provide recommendations on how to implement and ensure sustainable practices within the growing coverage of legislation to regulate sustainable aviation fuel (SAF).

SAF ROADMAP IN ETHIOPIA

Through a series of consultative workshops and stakeholder engagements, RSB shared the outcomes of a multi-stakeholder roadmap development process which examines how to advance Ethiopia’s capacity to produce biofuels for use as sustainable aviation fuel (SAF).

LEADING ON BOOK & CLAIM

RSB launched a stakeholder consultation on the RSB Book & Claim Manual. The consultation provided RSB with valuable input to ensure the development of a robust, credible procedure for the transfer of a certified product’s sustainability characteristics via book and claim. The first pilot of RSB’s Book & Claim System was launched with Air bp, United and Microsoft, with several more to be signed on in the coming year.

ANNUAL CONFERENCE 2021

RSB’s flagship annual event took place with a fully virtual, interactive platform to enable even more engagement from across our global stakeholder community. Offering more speakers, content and opportunities for interaction than ever before, the RSB Annual Conference 2021 was our best-attended event so far. High points included the development of a **woody biomass approach** – which defines assessment criteria for the sustainability of feedstocks, how to accurately calculate the greenhouse gas impact of harvesting woody biomass, and how to properly categorise materials as waste or residue – as well as guidance on harvesting invasive biomass within the new Standard Amendment for Woody Biomass. In 2022, further guidance will be developed by RSB to help to clarify requirements related to the use of forest harvest residues. Furthermore, RSB continued to work with its members and other stakeholders to develop a refreshed value proposition and strategy for roll-out in 2022 and beyond. With strong support, RSB now looks to use this refreshed strategy to increase its impact across its three key areas of convening, certification and implementation.

RSB WELCOMES NEW MEMBERS

During 2021, RSB membership community continued to grow strongly to 106 – attracting leaders from around the world, and demonstrating RSB’s continued appeal to organisations wanting to advance the bio-based and circular economy. Representing a variety of different sectors, RSB members nevertheless share ambition and look to RSB for support, knowledge-sharing and expertise as they take part in this sustainable transition.





CERTIFICATION

RSB observes the impact of its certification system via its monitoring and evaluation activities. For the first time in 2021, this information is integrated into RSB's annual activity reporting in the new integrated **Impact Report**.

RSB certification is a powerful tool for implementing the RSB Standard into agricultural and industrial production and the supply chains of bio-based and recycled fuels, energy, and materials. A successful certification to the RSB Standard enables an operator to carry an RSB label and make powerful claims around sustainability, climate impact, and fossil resource savings.



BOOK & CLAIM CERTIFICATION PILOT

Book and claim is a solution that enables airlines to purchase SAF without being geographically connected to a supply site, and to further transfer its sustainability attributes to their corporate partners. Ensuring that there is full traceability and no risk of double counting is absolutely vital to maintain credibility and trust in the process. This means that producers and customers should be using a system that is managed by an independent and trusted third party and is subject to regular independent audits.

In close collaboration with stakeholders and industry experts, RSB has developed a book and claim certification approach that we are currently piloting with SAF transactions, notably through a pilot launched at the 2021 RSB Annual Conference with Airbp, United Airlines and Microsoft.

The approach will be tested throughout 2022, and also aligned with relevant carbon disclosure protocols and ICAO CORSIA.

RSB CERTIFICATION — OUTCOMES FROM THE RSB M&E SYSTEM



*Since 2012
RSB has issued 68 certifications
in 46 different countries
for 25+ different feedstocks.*

KEY INDICATORS

Year-on-year changes

INDICATORS	2020	2021
Percentage of operators processing or trading waste and residue materials	46%	50%
Total sites included in certification scope*	281	385
Total amount of RSB-certified products (fuel and advanced products) sold by the certified operators (metric tons)	274,303	262,642
Amount of alternative fuel produced by certified operators (metric tons)	218,303	239,929
Annual savings on CO2 emissions from fuel (metric tons)	375,016	416,540
Total savings on CO2 emissions from fuel since 2012 (metric tons)	2,573,031	2,989,571
Workers protected	7052	8632
Certified cultivated area (hectares)	18,898	23,584

* includes farms, first collectors, warehouses, traders, industrial operators, mechanical operators, excludes points of origin

CUMULATIVE TOTALS

Number of certificates since 2012	68
Number of countries since 2012	46
Number of feedstocks since 2012	35



DIVERSITY



In 2021, 32 different types of feedstock were covered by current certificates — an increase from the 18 covered in 2020.

RSB is a feedstock-agnostic standard which can certify complete supply chains, as well as novel biomass and bio-based or advanced material technologies, including fossil-based waste and end-of-life materials. As such, RSB's system can include oil and sugar-based biofuels, cellulosic ethanol and chemicals, renewable diesel and alternative fuels for aviation, bio-based and advanced plastics, lubricants, and other chemicals.

Explore RSB-certified feedstocks [here](#).

CROP / PLANTATIONS-BASED FEEDSTOCK	WASTES & RESIDUES FEEDSTOCKS	INTERMEDIARY PRODUCTS USED AS RAW MATERIALS IN RSB CERTIFIED SUPPLY CHAINS
Camelina	CO flue gases	Renewable naphtha
Carinata	Crude glycerin	Bio-attributed Ethylene
Coconut	Starch from industrial wastewater	Bio-attributed Benzene
Corn	Tall oil	Bio-attributed Styrene
Hybrid Poplar	Tallow and other animal fat residues	Bio-attributed polymers
Jatropha curcas	Used cooking oil (UCO)	Polymers with recycled content
Macaúba (Acrocomia aculeata)	Grease trap oil	Bio-dichloropropanol
Sugarcane	Molasses (C-grade)	
Solaris (tobacco)	Waste plastics	
	Gliricidia tree sticks	
	Rice Husk	
	Palm Kernel Shells (PKS)	

CERTIFICATION TYPES IN 2021

61%

OF ALL RSB'S CERTIFICATIONS WERE TO THE RSB'S OWN GLOBAL STANDARD

20%

WERE TO THE EU RED STANDARD (REDI)

13%

WERE TO RSB JAPAN FIT

4%

WERE ICAO CORSIA

2%

WERE RSB SMALLHOLDERS CERTIFICATION.

WASTE AND RESIDUES

Due to the important role of wastes and residues in the circular economy, RSB began to monitor the specific volumes of these feedstocks among our operators in 2018. In 2021, 50% of certified operators were direct processing or trading end-of-life products and/or production residues. When the advanced products that use intermediary chemicals or polymers originally produced from wastes or residues are also considered, this percentage increases to 84% — a continued growth that highlights both the applicability of the RSB system to this type of feedstock and the importance of waste and residue materials in achieving sustainable growth in a multitude of markets.

RSB has defined a credible approach for using waste and residue material for fuels and products, and is supporting participating operators in entering this developing market with clear sustainability and traceability objectives.



OPERATOR COVERAGE

	CERTIFICATES	INDUSTRIAL SITES & TRADE OFFICES*	FARMS	COUNTRIES
October 2014	17	23	166	14
December 2016	20	49	472	18
December 2017	23	58	464	19
December 2018	18	44	291	20
December 2019	18	52	101	20
December 2020	24	110	171	36
December 2021	44	188	197	40

* excludes "points of origin" for wastes and residues.

UNDERSTANDING UPTAKE OF THE STANDARD

The increase in the number of sites and countries from 2020 to 2021 was driven by the high number (nine) of new Advanced Products certificates issued in 2021, along with the expansion of current certificates covering multiple industrial sites and a number of trading offices and distributors within the certification scopes.

The rapid increase in the number of certificates in 2021 can also be attributed to the uptake of the Japan FIT standard, which accounted for five new certifications and multiple sites by the end of 2021.

The certification termination rate in 2021 was 4.5%, with 2020 being the first year that RSB measured the retention of operators in the certification system.

GHG EMISSIONS

In 2021, RSB-certified operators sold **239,929 metric tons of alternative fuels**. This is a small increase of 8% from 2020 production levels and can be attributed to the lessening impact of the coronavirus pandemic and improved global trade in the year 2021.

All operators comply fully with RSB's Principle 3 on Greenhouse Gas (GHG) emissions, meaning the produced amount of RSB-certified alternative fuels corresponds to an **emissions reduction of 416,540 metric tons CO₂eq.**

AVOIDED GHG EMISSIONS IN 2021 WERE EQUIVALENT TO

1643 FLIGHTS



FROM LONDON TO TOKYO
— UP FROM 1480 IN 2020.



SINCE 2012, RSB-CERTIFIED OPERATORS HAVE PRODUCED GHG EMISSIONS SAVINGS OF 2,989,571 METRIC TONS OF CO₂EQ.

This is equivalent to:



a large container ship making 87 trips around the equator

Based on a large container ship (average cargo capacity = 68,600 tonnes) with a CO₂ efficiency of 12.5 gCO₂/tonne-km

Source: 2nd IMO GHG study: <http://www.imo.org/en/OurWork/Environment/PollutionPrevention/AirPollution/Documents/SecondIMOGHG-Study2009.pdf>



the 2020 emissions of the nation of Sierra Leone and the Bahamas combined!

<https://worldpopulationreview.com/country-rankings/carbon-footprint-by-country>



ENVIRONMENTAL AND SOCIAL ASPECTS

23,584 HECTARES OF CULTIVATED LAND IS PROTECTED BY RSB CERTIFICATION — AN INCREASE FROM 2020'S 18,989 HECTARES.¹

On this land, responsible and sustainable practices are implemented as per RSB's Principles & Criteria:

SOIL EROSION REDUCTION AND SOIL CONSERVATION PRACTICES	IMPROVEMENT OF SOIL QUALITY	WATER MANAGEMENT	PROTECTION OF CONSERVATION VALUES

RSB CERTIFICATION ENSURES THAT 8,632 WORKERS ARE PROTECTED BY OUR REQUIREMENTS FOR HUMAN AND LABOUR RIGHTS, INCLUDING:

On this land, responsible and sustainable practices are implemented as per RSB's Principles & Criteria:

FREEDOM OF ASSOCIATION	NO SLAVE LABOUR OR FORCED LABOUR	NO CHILD LABOUR	NO DISCRIMINATION
MINIMUM WAGE	SAFETY AND HEALTH	GRIEVANCE MECHANISMS FOR WORKERS	

¹ A note on calculations: in previous years the number has indicated the total area of the farmland within the operation (including non-farmed areas). Since 2018, this calculation is based only upon cultivated lands where the RSB Principles have been implemented.

NON-CONFORMITIES

A non-conformity flag can be raised during an RSB assessment when the auditors find that an operator is not conforming with an RSB requirement. Once identified, the operator is given time to correct the issue. Depending on the severity of the non-conformity, the operator will be allowed between three and 12 months in which to reach conformity.

The requirement that all non-conformities must be closed by certified operators in the defined timeframes means that RSB has a direct impact on improving the social and environmental performance of these operators and driving the implementation of good practices at farms and industrial facilities.

An analysis of valid certificates in 2021 found the following regarding non-conformities raised during RSB audits² against the RSB Principles & Criteria:

- 35%** of the non-conformities were related to **Environmental requirements** (GHG reduction, conservation, soil, and water and air).
- 27%** of the non-conformities were related to **Social requirements** (labour and human rights, rural development, food security, and land rights).
- 23%** of the non-conformities were related to RSB's requirement for **Planning, Monitoring, and Continuous Improvement** under Principle 2.
- The remaining non-conformities were related to **legal, technical, and other requirements**.

This distribution of the types of non-conformities remains much the same as in previous years and indicates the key areas where RSB continues to have a tangible impact in ensuring improvement.

In 2021, 83% of non-conformities were related to a company's management system and chain of custody as opposed to their compliance with RSB Principles and Criteria. This reflects the fact that more traders and intermediary organisations (over half) joined the RSB in 2020 and 2021 than in previous years.

² Number of non-conformities and observations raised during the main and surveillance audits, considering the certificate validity period.



SUSTAINABILITY AT INDUSTRIAL SITES

RSB **sustainability principles** are applied at industrial sites. With the growing uptake of waste-based production (where primary production may not require sustainability certification), this is particularly important as RSB ensures that working conditions, health and safety, and air quality — as well as GHG emission reductions — are assured **in the industrial setting**.

Non-conformities at industrial sites in 2021:

- 35%** of the non-conformities were related to **Environmental requirements** (GHG reduction, conservation, soil, and water and air).
- 24%** of the non-conformities were related to **Social requirements** (labour and human rights, rural development, food security, and land rights).
- 24%** of the non-conformities were related to **RSB's requirement for Planning, Monitoring, and Continuous Improvement** under Principle 2.

This indicates that RSB's system was able to contribute to improving the implementation of Human and Labour Rights and Environmental Improvements at industrial site level in 2021.

By supporting industrial sites in resolving issues related to RSB Principles and encouraging industry to improve sustainability using the RSB framework, a tangible improvement is assured.

PLANNING, MONITORING, AND CONTINUOUS IMPROVEMENT



RSB is committed to achieving positive impacts across the entire bio-based and circular supply chain. By supporting operators and auditors with tools and guidance to identify risks and non-conformities, RSB is helping to deliver measurable improvements in sustainability.

RSB's Principle 2 on Planning, Monitoring, and Continuous Improvement has been specifically developed to support operators in making ongoing improvements to their operations. Principle 2 requires that: "Sustainable operations are planned, implemented, and continuously improved through an open, transparent, and consultative impact assessment and management process and an economic viability analysis."

RSB observed that 23% of total non-conformities in the RSB system were related to Principle 2 in 2021.

By supporting operators in continuously measuring and improving their sustainability performance, through our unique sustainability management system that helps operators to achieve and maintain their certifications, RSB is able to ensure a measurably positive impact for our operators — and to reduce risks for brands, investors, and the rest of the value chain.

This management system ensures that operators:

- undertake an impact assessment process regarding their social and environmental impacts and risks, and ensure sustainability through the development of effective and efficient implementation, mitigation, monitoring, and evaluation plans;
- implement good practices for stakeholder engagement and consultation;
- implement and maintain a transparent and easily accessible grievance mechanism for directly affected local communities; and
- make adequate resources available to ensure compliance with the RSB Standard.





IMPLEMENTATION

RSB supports the implementation of the RSB Standard through programme and project work. This work advances the impact of RSB’s sustainability framework in three key areas:



ADVANCING NATIONAL AND REGIONAL POLICY INITIATIVES



PROMOTING SUSTAINABLE REGIONAL POTENTIAL

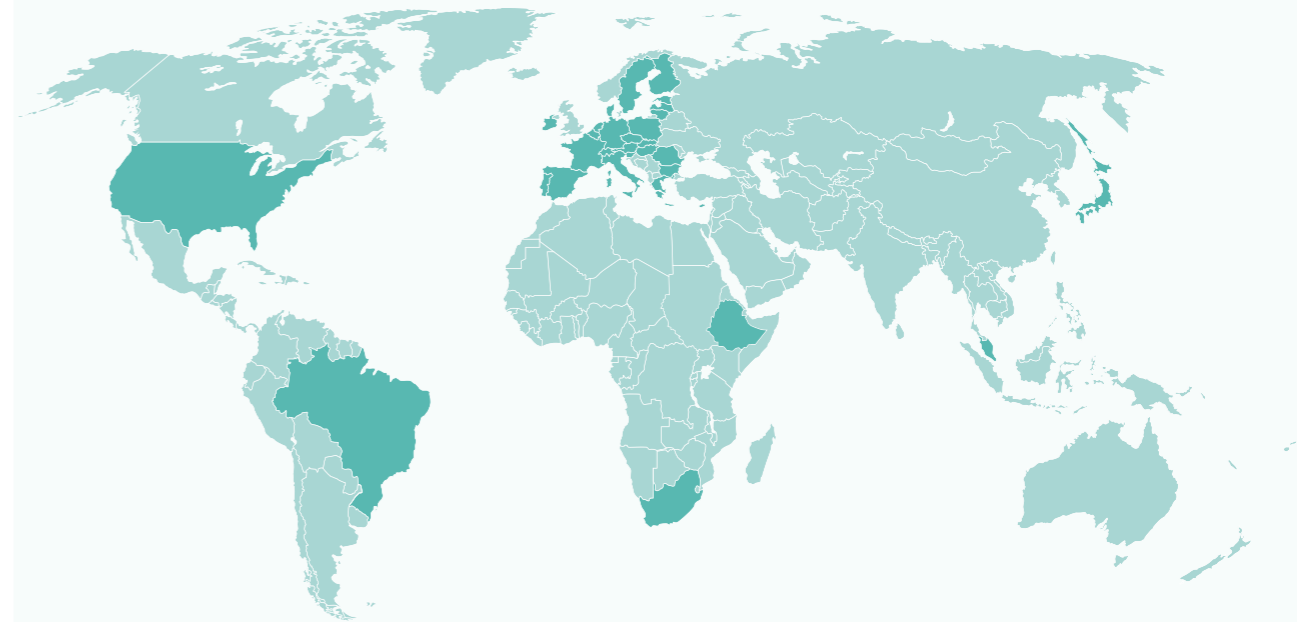


SUPPORTING SUSTAINABLE FEEDSTOCK PRODUCTION, PROCESSING, AND TRADE

RSB collaborates with institutional, industry, and civil society partners to implement projects and programmes globally to drive the sustainable bio-based and circular economy.

In 2021, RSB continued to work in a range of partnerships to further advance the impact of the Standard — far beyond certification. During the year, RSB conducted project work on four continents (Africa, Asia, Europe, and South America) and worked on 18 Advisory Services projects to support individual organisations develop and improve their practices in the bio-based and circular economy.

RSB Projects and Programmes in 2021



LANDSCAPE-LEVEL PROGRAMMES

Fuelling the Sustainable Bioeconomy with the Boeing Company – South Africa, Ethiopia, Brazil

ADVISORY SERVICES PROJECTS

18 projects across USA, France, Hong Kong, Singapore, Brazil, South Africa, Indonesia, Netherlands, Japan, Malaysia

OTHER PROJECTS & PROGRAMMES

ClimateWorks – global, aviation sector focused
FLITE – European Union
ALIGHT – European Union





INTRODUCING RSB'S LANDSCAPE-LEVEL PROGRAMME

RSB recognises that the development of the bio-based and circular economy in a region touches several key areas such as agriculture, waste management, industrial development, technology, policy and the investment environment of that region. An integrated approach is needed in order to ensure that the sector can shift away from fossil resources and transform in a sustainable way, making sure that this development adequately covers the social and environmental risks that come with using renewable resources.

RSB's methodology is based on a three-step approach:

1. An **Orientation phase** where we identify data requirements and develop studies and partnerships to gather and analyse data needs. For the SAF economy, for example, we have been working on several feedstock assessments that focus not only on what feedstock is available for SAF production in a determined region, but also the impact - positive or negative - that this utilization can have on the regional economy
2. An **Engagement phase**, where we bring together stakeholders to validate data and processes and decide on the best strategies to achieve our goals. Here it's important to note that it is crucial for us that stakeholder engagement actively includes all landscape players, including industry, government, technical experts and relevant local and regional NGOs.
3. Finally, we move to the **Implementation phase**, where we promote interventions to develop the sustainability SAF economy. We also provide tools and guidance that support implementing sustainable supply chains.

LANDSCAPE PROGRAMMES IN 2021

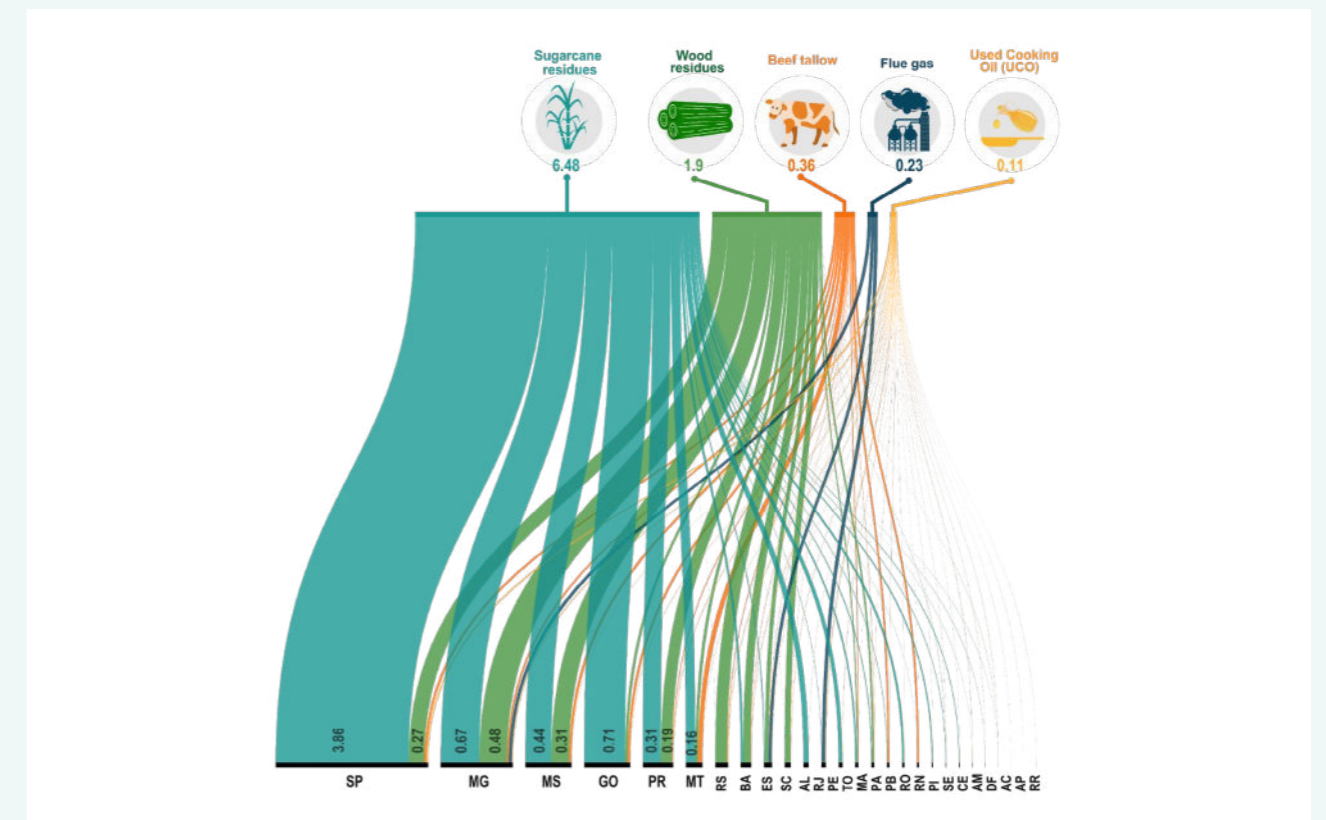
Fuelling the Sustainable Bioeconomy: a project powered by the Boeing Company

Launched in 2019, *Fuelling the Sustainable Bioeconomy* supports the development of Sustainable Aviation Fuel (SAF) — and the broader bioeconomy — based on the RSB Principles & Criteria. The project aims to help the aviation industry play a leading role in tackling the threat of climate change, creating jobs, stimulating economic growth, developing rural livelihoods, and protecting the environment. The year 2021 saw enormous progress in each country where the project is in operation. Below are some of the highlights achieved in this programme.

ORIENTATION

a) Alternative feedstock assessment for SAF production

This study focused on the availability of residues and strategic locations for SAF production and consumption in Brazil. Five categories were included, namely sugarcane bagasse, wood residues, flue gases, beef tallow and UCO. It is understood that these feedstocks are currently not utilised in the established Brazilian biofuel sector and could be exploited sustainably for SAF production, leading to a SAF production of up to 9 billion litres of SAF annually.





ENGAGEMENT

b) Launch of the SAF roadmap in Ethiopia

Roadmap developed in collaboration with key stakeholders, including government ministries, regional experts and environmental organisations, and the national carrier Ethiopian Airlines. The Roadmap identified the key prerequisites for the development of a sustainable SAF economy in Ethiopia that also supports socio-economic development.

IMPLEMENTATION

c) SAF calculator in Brazil

Brazil has already proven to have great potential to produce sustainable biomass for bioenergy at large scale; however investors and industry players have still limited flexibility to test their business models adapted to the Brazilian circumstances and evaluate profits and risks of an eventual venture in SAF production. General mass balance and energy flows are available in international scientific literature, yet real current and future costs (as well as other important marketing information) are still unknown and subject to variations.

RSB and partners developed a SAF calculator to support industry in identifying key investment parameters for the Alcohol to Jet and HEFA (Hydroprocessed Esters and Fatty Acids) pathways, considering breakeven point, cost of feedstock, and Capital Expenditure and Operating Expenses.

d) Sustainability certification approach for the eradication of invasive alien plants (IAP)

The removal of IAPs has substantial positive impacts on biodiversity, water security and livelihoods. Proper removal of invasive alien plants is the first step in restoring native biodiversity and providing additional ecosystem services, such as improved soil quality and reduced severity of wildfires. Research shows how IAP removal delivers a larger water yield than many alternative water supply options such as groundwater exploration, water reuse and desalination – at a fraction of the cost^[5]. Labour intensive land clearing and transport is also estimated to create approximately 1 job per 7 hectares, an especially potent opportunity for social development in rural and disadvantaged segments of society with low employment rates.

To unlock the significant potential of invasive alien biomass to feed the biofuel and bioenergy markets, RSB has included guidance on its harvest within its new **Standard Amendment for Woody Biomass**. RSB requires that eradication of invasive alien plants is driven by government law or environmental mandate. By providing guidelines on identifying invasive alien plants, requirements for its harvest, and the necessary plans that must be in place to ensure land is rehabilitated and environmental gains maintained, RSB's approach is designed to build market confidence in these plants as a feedstock source and support local and national eradication programmes.







RSB ADVISORY SERVICES

Since 2016, through its advisory services, RSB has assisted dozens of organisations — in multiple sectors and on each continent (excluding Antarctica) — to improve their practices on the ground. Some of these projects will lead to RSB certification, while others, like the development of RSB indicators in various regions, remove barriers for other operators.


Through training for implementation of RSB standards, review and development of business-wide sustainable sourcing policies, Greenhouse Gas assessment — and more — we assist the organisations and companies we work with to navigate the new challenges and opportunities presented by the development of a sustainable circular and bio-based economy.

There were 18 advisory services projects active in 2021, covering ten countries and five sectors: aviation, ground transport, energy, chemicals & polymers, and retail.

Through these 18 projects, our experts were able to provide hands-on sustainability expertise on the ground on five continents, with income from advisory services increasing by 6.5% from 2020.

 <p>COUNTRIES THAT WE WORKED IN</p>	 <p>TYPE OF SERVICES WE OFFERED</p>
<p>USA, Brazil, France, Japan, Malaysia, Indonesia, Singapore, Hong Kong, the Netherlands, and South Africa.</p>	<p>Certification preparation and training, sustainability protocols, GHG emission calculation, gap analysis, and supply chain mapping</p>

RSB Projects and Programmes in 2021

COMPANIES	GOVERNMENTS	PARTNERS
<p>Growing and embedding real sustainability in operations by:</p> <ul style="list-style-type: none"> • assessing sustainability risks in operations and investment decisions; • assessing availability of sustainable feedstock and alternative fuels as a basis for alternative fuel strategies; • providing input on sustainability strategies; • assisting with preparations for RSB certification and wider due diligence efforts; • assessing the climate impacts & trade-offs of sourcing decisions • advising on the regulatory landscape for sustainable energy production. 	<p>Integrating sustainability into legislative approaches</p>	<p>Developing platforms for stakeholders from across industry, civil society, and government to work together</p> 



CONVENING OUR COMMUNITY



RSB membership offers a platform for leaders from across business, government and civil society to activate their sustainability ambition and play a key role in transition to a bio-based and circular economy.

RSB's multi-stakeholder community regularly comes together to discuss and advance systemic change of the global economy via the uptake of bio-based and circular solutions, with RSB members governing the organisation. Through consensus-building and the construction of new knowledge on cutting edge innovations, they participate in our ongoing Standard development and support RSB in exploring and understanding new markets.

RSB's members are producers of the next generation of fuels and materials; the brands and end users of these products from sectors as diverse as aviation, shipping, fast moving consumer goods, cosmetics, and more; and the social and environmental NGOs, research institutions and others that are lighting the way for a global sustainability movement.

By the end of 2021, RSB had 106 members.

NEW MEMBERS JOINING RSB IN 2021 WERE:

BENVIC	HEINEKEN	LanzaJet
Braskem	INEOS Manufacturing	Nordic Initiative for Sustainable Aviation (NISA)
CLEARAS	International Flavors & Fragrances (IFF)	Ørsted Bioenergy and Thermal Power
ECB Group Omega Green	KLK Kolb Specialties	S.Oleum
Giloil		Target
Greatview		

ANNUAL CONFERENCE 2021

Facing ongoing restrictions as a result of the global pandemic, RSB hosted its first-ever fully virtual Annual Conference from 15-18 November.

Thanks to its virtual platform, 2021's Annual Conference offered more speakers, content and opportunities for interaction than ever before. Taking advantage of the virtual format, the 2021 RSB Annual Conference was, by far, our most well-attended annual event yet. We hosted 73 speakers and 375 participants attended from 188 organisations around the world, representing 6 continents.

Highlights from the 2021 RSB Annual Conference include:

- Keynote addresses from Sheila Remes (Vice President of Environmental Strategy, The Boeing Company), Elizabeth Willmott (Carbon Program Director, Microsoft), and Ashleigh Morris (CEO, Coreo)
- *The Next Frontier for RSB's Sustainability Framework* – a session on the revision of RSB's Principles & Criteria.
- *Bioeconomy: From Regional Initiatives to Global Impact* – a review of how global goals, such as the Science Based Targets are being shaped and implemented, before diving into a roundtable of regional bioeconomy initiatives and exploring how they can grow sustainably to meet global demand.
- *Unlocking RSB Tools* – an opportunity for participants to learn how RSB's tools can help companies to understand and manage their impacts during a brand-new e-learning demonstration.
- *Scaling the Sustainable Bioeconomy* – an exploration into the methodology, outcomes and impacts of RSB's project with The Boeing Company and get to know how it can be applied in other sectors and regions, with a keynote welcome from Sean Newsum (Director, Environmental Strategy at Boeing Commercial Airplanes).
- *Book & Claim: Rapid Decarbonisation Within Reach* – a dive into the world of Book & Claim with an overview of RSB's pilot with Air bp, and an exploration of key challenges to be overcome and a discussion with some of the leading global initiatives.



RSB members are involved in many aspects of RSB's work and participate in opportunities throughout the year to:



develop capacity, knowledge and skills in the sustainable bio-based and circular economy.



demonstrate commitment to sustainability and enhance engagement in the bio-based and circular economy transition.



take part in cutting edge discussions via RSB's member-exclusive platforms and initiatives.

PLATFORMS & INITIATIVES IN 2021

RSB's platforms and initiatives bring members of RSB's community together to discuss, explore and provide solutions to the most pressing issues impacting the transition to global bio-based and circular economy. In 2021, the work of RSB's General Standards Working Group was complemented by the launch of two new groups: the Sustainable Aviation Fuel (SAF) Policy Platform and the Power-to-X (PtX) Working Group.

SAF POLICY PLATFORM

Launched in 2021, the RSB SAF Policy Platform is a network for structured dialogue on SAF policies and sustainability questions, which unlocks the substantial knowledge and expertise of its members.

The Platform equips RSB members with high-quality materials and knowledge, grounded in the framework of the RSB Standard, to support work with global policymakers to embed stronger sustainability criteria into SAF policies at national, regional and global level.

Activities of the platform include:

1. Assessment of global SAF policy and legislation;
2. Assessment of sustainability criteria for SAF legislation at national level; and
3. Development of a communication strategy for policymakers.

PTX WORKING GROUP

In response to increasing demand and market interest in Power-to-X (PtX) technologies, RSB has hosted a working group since 2021 to convene stakeholders and experts to evaluate and agree on best practices to address and reduce sustainability risks related to PtX technologies, particularly for the aviation and shipping industries. The RSB PtX Working Group is conducting the following activities:

1. Organising learning sessions on PtX technologies and sustainability best practices;
2. Advising on and discussing key sustainability areas; and
3. Developing a commonly accepted proposal on best practices to reduce sustainability risks for PtX technologies implementation.

RSB STANDARDS WORKING GROUP

Work to update the Standard is led by the RSB Secretariat, with the direct involvement of RSB's multi-stakeholder community of members through the General Standards Working Group, as well as public consultations. Ensuring that the voices of civil society and business are given an equal footing is vital for ensuring the credibility and practicality of the RSB Standard. This continuous improvement of the Standard continues to build partnerships, consensus, and understanding to further the impact of this uniquely robust approach.





EVOLUTION OF THE RSB STANDARD



RSB is committed to maintaining its position as the most innovative standard for operators looking to demonstrate their commitment to credible sustainability. This commitment is supported by RSB members who are involved in the process of continuous development, and improvement.

EU RED II RECOGNITION

Formal recognition by the EU Commission as a voluntary scheme under the recast-European Union Renewable Energy Directive, meaning that RSB continues to offer certification within this regulated market.

BOOK & CLAIM

Development of a new manual for Book and Claim – a process for trading feedstocks, intermediates and fuels in a robust manner that allows the decoupling of the physical material from its sustainability characteristics, which can be transferred separately via a dedicated Book & Claim Registry, whilst ensuring against double-counting. A stakeholder consultation opened in late 2021, ensuring that a robust and workable solution will be developed and piloted in 2022.

WOODY BIOMASS

RSB's Standard Amendment on Woody Biomass was approved at the end of 2021. The new amendment recognises the importance of conserving forest ecosystems whilst unlocking certain limited types of woody biomass for use in fuels, energy and materials. With its approval, the Standard Amendment on Woody Biomass can now be used to certify sustainable use of woody biomass including alien invasive species, end-of-life woody materials (e.g. from parks and gardens, orchards, construction sites), forest harvesting residues and forestry industry processing residues, and short rotation woody crops. In 2022, further guidance will be developed by RSB to help to clarify requirements related to the use of forest harvest residues.

WHY RSB'S NEW APPROACH FOR WOODY BIOMASS?

RSB aims to ensure that forests are maintained and that carbon emissions are correctly accounted for. RSB's uniquely robust approach for woody biomass defines assessment criteria for the sustainability of feedstocks including: no-go sources of forest biomass, how to accurately calculate the greenhouse gas impact of harvesting woody biomass, and how to properly categorise materials as waste or residue.

THE RESULT IS A HOLISTIC APPROACH, BACKED BY SCIENCE, THAT ENSURES:



THE EFFECTIVE MANAGEMENT OF FORESTS TO CONSERVE BIODIVERSITY, AS WELL AS ECOSYSTEM SERVICES LIKE THOSE THAT PROTECT WATERSHEDS AND MAINTAIN CARBON SINKS;



THAT CARBON EXTRACTED FROM FORESTS IS EFFECTIVELY ACCOUNTED FOR; AND



THAT HARVESTING AND PROCESSING RESIDUES ARE TRUE RESIDUES.



CONTINUOUS IMPROVEMENTS TO THE RSB SYSTEM:

- Launch of the RSB Principles and Criteria revision process;
- Update of the RSB Risk Management procedure, including RSB's Risk Assessment tool;
- Development of RSB's Risk Screening tool into a user-friendly Excel tool;
- Approval of the RSB Standard Amendment for Woody Biomass, reflecting the demand for a robust approach to sourcing woody material for use in energy and non-energy markets;
- Revision of all Standards, Procedures and associated documents that comprise the RSB EU RED scheme; and
- Development of RSB's draft Book & Claim Manual.



GOVERNANCE

RSB'S BOARD OF DIRECTORS

The Board of Directors is responsible for the management of the RSB. Directors also represent RSB at various functions and conferences, and reflect its commitment to the ethics and principles it stands for.

Regular meetings are held where board members collaborate and decide on changes to policy, as well as the effective management of the RSB's activities.

RSB BOARD DIRECTORS AS OF 31 DECEMBER 2021



Chamber 1
Maiju Helin
Neste Oil (Chair)



Chamber 1
Laurel Harmon
Lanzatech (Vice Chair)



Chamber 2
Valentina Vecchio
The Boeing Company



Chamber 3
Fongoh Eric
ICENECDEV



Chamber 4
Jayant Sarnaik
*Applied Environmental
Research Foundation
(AERF)*



Chamber 5
Andrew Pozniak
Green Aviation

RSB ASSEMBLY OF DELEGATES

The Assembly of Delegates is the highest decision-making body of RSB. Chamber Delegates represent their chamber at assembly meetings and they engage there with the Delegates of other chambers to deliberate on issues of governance and standard development — and in some cases to vote. The Assembly approves modifications to the RSB Standard and appoints the Board of Directors to run the affairs of RSB.

LIST OF RSB DELEGATES AS OF 31 DECEMBER 2021



Chamber 1
Romain Lebas
SAIPOL



Chamber 1
Liisa Ranta
*UPM-Kymmene
Corporation*



Chamber 1
Julie Aguilhon
*Total Energies
Raffinage Chimie*



Chamber 2
Steven Le Moing
Airbus



Chamber 2
Jacob Sterling
A.P. Moller – Maersk



Chamber 2
Graham Cox
Tensei



Chamber 3
Jesus Deberson
Ethical Sugar



Chamber 3
Humphrey
Nxumalo
*Solidaridad
Southern Africa*



Chamber 3
Harry Stokes
Gaia Foundation



Chamber 4
Tjaša Bole-Rentel
WWF South Africa



Chamber 4
David DeGennaro
*National Wildlife
Federation (NWF)*



Chamber 4
Neva Murtha
Canopy



Chamber 5
Joseph Githiomi
*Kenya Forestry Research
Institute*



Chamber 5
Patrick Lynch
Bioledger



Chamber 5
Richard Olliver
Aplethora Energy Services



FINANCES

In 2021, RSB operated with a surplus of 120,267 CHF, marking the fourth consecutive year of positive financial results. The ongoing COVID-19 pandemic did not negatively impact RSB's financial result due to careful management of revenue trends.

With the exception of Licensing Fees, revenues met or exceeded expectations despite the less certain global operating environment. Most notably, revenues from Membership and Sponsorships grew from previous years and surpassed RSB's expected performance for 2021.

The largest revenue contributions came from projects and programmes. RSB continues to provide positive outputs and create positive impacts as the result of these grant programmes.

RSB ended 2021 in strong financial health with a debt free balance sheet and a healthy cash position, leaving RSB well positioned to seek opportunities to build upon progress from recent years and to expand our influence further.

Financial Results

CATEGORY	AMOUNT (CHF)
Total Revenues	1,300,570.69
Total Expenditures & Diminution	(1,180,304.13)
2021 Financial Results	120,266.56

Revenues

CATEGORY	AMOUNT (CHF)	PERCENT
Membership Fees	182,603.24	14%
Licensing	92,670.69	7%
Grants	836,588.21	64%
Sponsorship	57,241.46	5%
Other Services	131,467.09	10%
Total Revenues	1,300,570.69	
<i>Diminution of Revenues</i>	<i>(5,466.95)</i>	

Expenditures

CATEGORY	AMOUNT (CHF)	PERCENT
Project & Professional Fees	(213,507.98)	18%
Salaries & Social Charges	(703,457.00)	60%
Meetings	(67,899.48)	6%
Marketing	(10,061.17)	1%
Travel	(7,619.97)	1%
Administrative & Office	(111,434.04)	10%
Taxes	(621.23)	0%
Amortisation & Depreciation	(5,512.02)	1%
Other	(54,724.29)	5%
Total Expenditures	(1,174,837.18)	



ABOUT RSB'S M&E SYSTEM

RSB's M&E System not only collects actual data on volumes produced, hectares covered, and workers protected in the scope of certification, but also data about where non-conformities have been issued during the certification process. This information helps RSB to draw conclusions about the areas of change and the impacts of the RSB certification system. The results of this M&E reporting period feed into the organisational learning process and help RSB to analyse its evolving footprint in greater depth.

The impacts achieved by RSB-certified operators and other stakeholders implementing the RSB Standard are expected to bring social, environmental, and economic improvements with the certification cycle.

Starting in 2021, RSB has been designing and developing an expanded M&E System that includes information and data on impacts of the RSB Standard – outside the traditional certification role. This is presented in our new Integrated Impact Report which combines data from RSB's traditional M&E system which looks at certification with new impact data from RSB's other areas of work: namely implementation (projects, programmes and advisory services) and convening our community.

Results from the M&E System feed into the continuous improvement of the RSB Standard, including the policies, guidance, and tools of the certification system, as well as RSB's strategies and activities. Committed to transparency, RSB prepares M&E outcome reports annually and circulates these among RSB stakeholders for commentary and further improvements to the system.

AUTHORS' QUALIFICATION

A multi-disciplinary team from the RSB Secretariat is involved in data collection, data analysis, and M&E reporting:

- George Deslandes, RSB Certification Manager (Master's degree in Corporate Responsibility and Sustainability from the University of London): data collection.
- Nicola Noponen, RSB Technical Director (Master's degree in Environmental Technology from Imperial College, London)

- Elena Schmidt, RSB Executive Director (Master's degrees in Environmental and Political Sciences): data analysis and report review.
- Hannah Walker, RSB Outreach & Engagement Director (Bachelor's Degree in International Development and Geography): report content, narrative, design, and publication.

INTERNAL AND EXTERNAL INFLUENCING FACTORS

Influencing factors are factors that influence the effectiveness of RSB activities, but that are out of the direct control of the organisation.

During 2021, the major influencing factor on RSB's activities and outcomes was the continued coronavirus pandemic, however with growth in certified fuel volumes from 2020 this impact seems to be lessened.

Demand for RSB membership, advisory services and project work continued to be strong — suggesting that these areas of impact were less affected than in the first year of the pandemic.

Potential Limitations Due to Data Uncertainty

Data used in the M&E for evaluating the areas of non-conformities are from the audit reports. Potential limitations are those inherent to any audit process and may be influenced by the sampling selected during the audit, the audit team experience, and specific operations under development during the audit, among other factors. Data used in the M&E report are extracted from 100% of audit reports, covering all types of operators participating in the RSB system, as well as all CBs and auditors active in the period — reducing the risk of the sampling only covering a limited number of audit documents.

It is important to highlight that RSB's audit procedure requires a reasonable assurance level, meaning that the degree of confidence in the audit findings and certification statement provides a high but not absolute level of assurance regarding historical data and information.



METHODOLOGY

DATA COLLECTED

RSB monitors its performance by processing data collected among its certified operators and RSB records through a set of outcome indicators that cover environmental, social, and economic issues.

METHODS TO COLLECT

The data points required for the RSB M&E System are collected through ongoing certification processes. This data collection method allows the RSB Secretariat to continuously collect actual and third party verified data. RSB maintains up-to-date records of past, present, and planned projects and Advisory Services in Salesforce, tracking information to apprise operations.

INTERPRETATION AND EVALUATION

The results obtained through the aggregation of data from certified operators and RSB activities are interpreted and evaluated considering the expected outcomes. RSB created Salesforce reports to summarise and analyse project timelines, sector and regional engagement, and operational capabilities.

OBJECTIVES

This report aims to evaluate the results obtained by RSB and evaluate them against the outcome indicators, as defined in RSB's Monitoring & Evaluation System.

Specific objectives of this report are to:

- aggregate data from certified operators and RSB records in order to analyse it and draw conclusions;
- evaluate RSB's achieved outcomes;
- feed findings into RSB's general strategic discussions; and
- comply with the ISEAL Impact Code.

SCOPE

This evaluation includes all operators certified by RSB, as well as all RSB activities during 2021. It was conducted internally by the RSB Secretariat staff, and is based on data collected by independent third party auditors. Production volumes were calculated for the period of 1 January 2021 to 31 December 2021.

OUTCOME INDICATORS

The outcome indicators that guide this report are made up of different data points, which guide our data collection and analysis. These indicators cover each of our Principles and help RSB to ensure that every aspect of the Standard is continuously measured and evaluated.

View the outcome indicators [here](#).

COMPLYING WITH THE ISEAL ALLIANCE IMPACT CODE

The International Social and Environmental Accreditation and Labelling (ISEAL) Alliance lays out an Impact Code which all members of the alliance must comply with. This code specifies the requirements for the development and implementation of a Monitoring and Evaluation system by member Standards.

The Impact Code is underpinned by five Credibility Principles, which are the foundation of our Monitoring & Evaluation System:

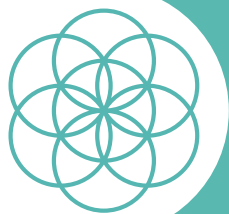
1. Sustainability
2. Improvement
3. Rigour
4. Transparency
5. Truthfulness



The Roundtable on Sustainable Biomaterials (RSB) is a global membership organisation that drives the sustainable transition to a bio-based and circular economy. RSB's sustainability framework has been developed by its multi-stakeholder membership, and is a uniquely robust and credible foundation for supporting innovative solutions to the climate crisis. RSB uses this foundation to develop projects, new knowledge and solutions that equip key decision-makers to deliver positive impacts for people and the planet.

RSB

Roundtable on
Sustainable Biomaterials
www.rsb.org



RSB – Roundtable on Sustainable Biomaterials Association
International Environment House 2
Chemin de Balexert 7-9, 1219 Châtelaine
Switzerland
+41 22 534 90 50
info@rsb.org
[@RSB_org](https://www.instagram.com/RSB_org)