



## **RSB – ROUNDTABLE ON SUSTAINABLE BIOMATERIALS**

### **RSB Principles and Criteria**

#### **2022 Revisions**

Version 3.1

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## Revisions to the RSB STD-01-001 Standard of Principles and Criteria (P&C)

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## 1. Introduction

More than ninety diverse organisations have united to create the RSB and what was once a vision to ensure biofuel sustainability has grown into a sustainability standard for all bio-based and circular materials and fuels that is used globally for certification, risk mitigation in project development, sustainable feedstock assessments and bioeconomy roadmaps. All these aspects are covered in the RSB-STD-01-001 RSB Standard of Principles & Criteria (P&C), operated through a set of requirements developed by hundreds of organisations from across business, civil society, and academia, which enables to define a material or fuel as sustainable. This process has led to the creation of a robust and credible sustainability framework which is acknowledged as best-in-class by organisations including WWF, Blue Angel, IUCN, and many more.

The implementation of the RSB Standard contributes to food security, rural development, and the protection of ecosystems. The RSB's unique membership body is made up of sector pioneers, business leaders, academics, government, NGOs, and UN agencies that have approved the 12 sustainability Principles & Criteria of the standard and are actively driving the sustainable circular- and bio-based economy through innovation, business partnerships and solving social and environmental issues. By applying the RSB standard a company is actively helping to achieve the UN Sustainable Development goals.

## 2. Revisions to the RSB Principles & Criteria

This document lists all revisions to the RSB Principles & Criteria (RSB-STD-01-001), approved during the 2022 RSB Assembly of Delegates. The revisions will be piloted during 2023, with feedback gathered during the pilot process to enable further clarifications. The final version of the revised RSB Principles and Criteria shall be voted on at the 2023 RSB Assembly of Delegates. During the pilot period (December 2022 – December 2023), operators may choose to use either version 3.0 or 3.1 of the RSB-STD-01-001.

<b>CURRENT (v3.0) VERSION OF THE RSB-STD-01-001 PRINCIPLES AND CRITERIA</b>	<b>REVISED (v3.1) VERSION OF THE RSB-STD-01-001 PRINCIPLES AND CRITERIA</b>  <i>(red = eliminated or modified text of the current version; blue = new added text and edits.)</i>	<b>ADDITIONAL ACTION</b>  <i>Clarifying comments related to additional tasks or actions to support the context of the proposed change. This might include new tools, guidelines, or other references.</i>
	Reorder Principles, per the 4 general themes: a) Legal; b) Management; c) Social; d) Environmental	Group the Principles (P) according to 4 general themes: Legal: P 1 => P 1 / P 12 => P 2   Management: P 2 => P 3 / P 11 => P 4   Social: P 4 => P 5 / P 5 => P 6 / P 6 => P 7   Environmental: P 3 => P 8 / P 7 => P 9 / P 8 => P 10 / P 9 => P 11 / P 10 => P 12

CURRENT (v3.0) VERSION OF THE RSB-STD-01-001 PRINCIPLES AND CRITERIA	REVISED (v3.1) VERSION OF THE RSB-STD-01-001 PRINCIPLES AND CRITERIA	ADDITIONAL ACTION
<p><b>Principle 1: Legality   Operations follow all applicable laws and regulations.</b></p>	<p><b>Principle 1: Legality   Operations follow all applicable laws and regulations.</b></p>	
<p>1. Operations shall comply with all applicable laws and regulations of the country in which the operation occurs and with relevant international laws and agreements.</p>	<p>1. Operations shall comply with all applicable laws and regulations of the country in which the operation occurs and with relevant international laws and agreements, <b>including social and environmental aspects (e.g., GHG emissions, labour laws, etc).</b></p>	
<p>1. The operator shall implement and maintain a system for ensuring that all relevant laws and regulations are complied with, which includes:</p> <ul style="list-style-type: none"> <li>-A legal register or equivalent system with all relevant applicable international, national and regional laws and regulations.</li> <li>-A training system ensuring that personnel are aware of the laws and regulations and have access to the legal register.</li> <li>-A register containing all evidence of legal compliance (e.g. permits, licenses, evidence of lease, concessions, etc.) and a system ensuring that auxiliary conditions are met.</li> <li>-A system that ensures that all forms of bribery, conflicts of business interest and fraudulent practices are prohibited, including a written policy by the management and appropriate staff training.</li> </ul>	<p>1. The operator shall implement and maintain a system for ensuring that all relevant laws and regulations are complied with, which includes:</p> <ul style="list-style-type: none"> <li>a) A legal register or equivalent system with all relevant applicable international, national and regional laws and regulations.</li> <li>b) A training system ensuring that personnel are aware of the laws and regulations and have access to the legal register.</li> <li>c) A register containing all evidence of legal compliance (e.g. permits, licenses, evidence of lease, concessions, etc.) and a system ensuring that auxiliary conditions are met.</li> <li>d) A system that ensures that all forms of bribery, conflicts of business interest and fraudulent practices are prohibited, including a written policy by the management and appropriate staff training.</li> <li>e) <b>If there is a difference between applicable law and the RSB requirements, RSB expects a PO to conform to whichever is more stringent.</b></li> </ul>	<p><b>Create a guideline for Operators on how to structure the legal information.</b></p>
	<p>2. The operators shall verify the RSB checklist tool to identify country-specific indicators and guidance for country-specific implementation.</p> <ul style="list-style-type: none"> <li>a) Operators operating in countries not included in the checklist tool are not exempt from complying with local laws and regulations.</li> <li>b) The use of the country-specific indicators and guidance indicated in the checklist does not exempt operators from checking additional laws and regulations and keeping up to date.</li> <li>c) The RSB checklist tool is available to Operators upon request.</li> </ul>	

Principle 2: Planning, Monitoring, and Continuous Improvement   Sustainable Operations are planned, implemented, and continuously improved through an open, transparent, and consultative impact assessment and management process and an economic viability analysis.
2a. Operations shall undertake an impact assessment process to assess impacts and risks and ensure sustainability through the development of effective and efficient implementation, mitigation, monitoring and evaluation plans.
1. Where an impact assessment is required by national, regional, or local laws, the process shall be integrated with the RSB impact assessment process to avoid duplication of efforts, but the higher and more comprehensive standard shall be applied.
2. A screening exercise shall be required for all new and existing operations and extensions to operations of all sizes to determine if specialist social or environmental impact assessments are required (e.g., Food Security Assessment, Conservation Impact Assessment, Soil Impact Assessment, etc.). The screening exercise shall be done in accordance with the Screening Guidelines (RSB-GUI-01-002-02).
3. Participating operators shall conduct the specialist environmental or social impact assessments, if required, in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01), respectively, as determined by the scale and intensity of the operations.
4. The specialist environmental or social impact assessments, if required as determined through the screening exercise, shall be carried out using qualified professionals.
5. Where operations will have significant social impacts, as measured during the screening exercise, a social impact assessment process shall be carried out using local

Principle 2: Planning, Monitoring, and Continuous Improvement   Sustainable Operations are planned, implemented, and continuously improved through an open, transparent, and consultative impact assessment and management process and an economic viability analysis.
2a. Operations shall undertake an impact assessment process to assess impacts and risks <del>and ensure sustainability through the development of effective and efficient implementation, mitigation, monitoring and evaluation plans.</del>
1. Where an impact assessment is required by national, regional, or local laws, the process <del>shall</del> <b>may</b> be integrated with the RSB impact assessment process to avoid duplication of efforts, but the higher and more comprehensive standard shall be applied.
2. A screening exercise shall be required for all new and existing operations and extensions to operations of all sizes to determine if specialist social or environmental impact assessments are required (e.g., Food Security Assessment, Conservation Impact Assessment, Soil Impact Assessment, etc.). The screening exercise shall be done in accordance with the Screening Guidelines (RSB-GUI-01-002-02).
2b. Operations shall ensure sustainability of their operations through the development of effective and efficient implementation, mitigation, monitoring and continuous improvement and evaluation plans.
1. Participating operators shall conduct the specialist environmental or social impact assessments, if required, in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01), respectively, as determined by the scale and intensity of the operations.
2. The specialist environmental or social impact assessments, if required as determined through the screening exercise, shall be carried out using qualified professionals.
3. Where operations will have significant social impacts, as measured during the screening exercise, a social impact assessment process shall be carried out using local experts

Split 2a into two separate criteria
Include the “Rural and Social Development Guideline” in the list of the Impact Assessment Guideline (page 3, RSB-GUI-01-002-01). Remove the RSB Guidelines on Water Rights and Social Impacts, as it no longer exists yet is still mentioned in the Impact Assessment Guidelines (RSB-GUI-01-002-01”.

<p>experts to ensure that local customs, languages, practices and indigenous knowledge are respected and utilized.</p>	<p>to ensure that local customs, languages, practices, and indigenous knowledge are respected and utilized.</p>	
<p>6. The Environmental and Social Management Plan (ESMP), in accordance with the RSB ESMP Guidelines (RSB-GUI-01-002-05), shall be developed by all operations and shall ensure compliance with all RSB Principles &amp; Criteria. Where there are progress requirements, they shall be detailed.</p>	<p>4. The Environmental and Social Management Plan (ESMP), in accordance with the RSB <a href="#">Impact Assessment Guidelines (RSB-GUI-01-002-02)</a> <del>ESMP Guidelines (RSB-GUI-01-002-05)</del>, shall be developed by all operations and shall ensure compliance with all RSB Principles &amp; Criteria. <del>Where there are</del> All progress requirements, <del>they</del> shall be detailed and documented in a continuous improvement action plan, with targets and indicators.</p>	<p>new Minimum Requirement</p>
<p>7. Where specifically stated in a criterion the impact assessment process shall extend beyond the scope of the immediate operational area, for instance for food security, water management and use, ecosystem impacts, biodiversity and conservation in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	<p>5. Where specifically stated in a criterion the impact assessment process shall extend beyond the scope of the immediate operational area, for instance for food security, water management and use, ecosystem impacts, biodiversity, and conservation in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	
<p>8. Multiple operators applying for certification, as defined in the Standard for Participating Operators (RSB-STD-30-001), shall conduct the RSB impact assessment and management processes jointly.</p>	<p>6. Multiple operators applying for certification, as defined in the Standard for Participating Operators (RSB-STD-30-001), shall conduct the RSB impact assessment and management processes jointly.</p>	
<p>2b. Free, Prior &amp; Informed Consent (FPIC) shall form the basis for the process to be followed during all stakeholder consultation, which shall be gender sensitive and result in consensus-driven negotiated agreements.</p>	<p>7. Operators shall ensure the continuous improvement plan is implemented by providing evidence during the surveillance audits.</p> <p>2c. Free, Prior &amp; Informed Consent (FPIC) shall form the basis for the process to be followed during all stakeholder consultation, which shall be gender sensitive and result in consensus-driven negotiated agreements.</p>	<p>new Minimum Requirement</p> <ol style="list-style-type: none"> <li>1. Include the definition as a foot note. Suggest using the FAO definition. Include definition for FPIC to identify when FPIC should form part of the stakeholder consultation process. The scope of the consultation should be relevant for the scope of the operation. However, the definition needs to consider that the minimum requirement will need to include “WHERE APPLICABLE FPIC should be applied” — because in many cases (e.g., certifying an industrial operator in Germany) FPIC is irrelevant.</li> <li>2. Include key questions in the RSB Screening Tool to address aspects related to FPIC.</li> <li>3. Create a specific RSB FPIC Guidance to better explain how to address this criterion.</li> </ol>

<p>1. While FPIC provides the process conditions for stakeholder engagement and negotiated agreements, consensus shall be the decision-making tool applied in all cases and carried out in accordance with the RSB consensus-building toolkit in the Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	<p>1. While FPIC provides the process conditions for stakeholder engagement and negotiated agreements, consensus shall be the decision-making tool applied in all cases and conducted in accordance with the RSB consensus-building toolkit in the Impact Assessment Guidelines (RSB-GUI-01-002-01). <a href="#">Disregarding FPIC based consultation on the grounds of not being relevant, must be demonstrated.</a></p>	<p><a href="#">Add to Guidelines</a></p>
<p>2. The impact assessment facilitator shall invite all locally-affected stakeholders, local leaders, representatives of community and indigenous people groups and all relevant stakeholders to participate in the consultative process.</p>	<p>2. The impact assessment facilitator shall invite all locally-affected stakeholders, local leaders, representatives of community and Indigenous people groups and all relevant stakeholders to participate in the consultative process.</p>	
<p>3. The scope of engagement shall be determined by the scale of the operations as set out in the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	<p>3. The scope of engagement shall be determined by the scale of the operations as set out in the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	
<p>4. Relevant government authorities shall be included in the stakeholder process to ensure efficient streamlining of the process with legal requirements.</p>	<p>4. Relevant government authorities shall be included in the stakeholder process to ensure efficient streamlining of the process with legal requirements.</p>	
<p>5. Those responsible for undertaking the impact assessment shall undertake and document a stakeholder analysis in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	<p>5. Those responsible for undertaking the impact assessment shall undertake and document a stakeholder analysis in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	
<p>6. Participatory methodologies described in the RS Impact Assessment Guidelines (RSB-GUI-01-002-01) shall be used to ensure meaningful stakeholder engagement. Special attention shall be made to ensure that women, youth, elders, Indigenous and vulnerable people can participate meaningfully in meetings and negotiations. Where the need is identified by the impact assessment facilitator, there shall be informal workshops to build local understanding in the community of the processes that may impact them directly to aid meaningful engagement.</p>	<p>6. Participatory methodologies described in the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01) shall be used to ensure meaningful stakeholder engagement. Special attention shall be made to ensure that women, youth, elders, Indigenous and vulnerable people can participate meaningfully in meetings and negotiations. Where the need is identified by the impact assessment facilitator, there shall be informal workshops to build local understanding in the community of the processes that may impact them directly to aid meaningful engagement.</p>	
<p>7. Documentation necessary to inform stakeholder positions shall be made freely available to stakeholders in a timely, open, transparent and accessible manner through distribution channels appropriate to the local conditions in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	<p>7. Documentation necessary to inform stakeholder positions shall be made freely available to stakeholders in a timely, open, transparent, and accessible manner through distribution channels appropriate to the local conditions in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	
<p>8. Management documents shall be publicly available, except where this is prevented by commercial confidentiality, of a proprietary nature or where disclosure of information would result in negative environmental or social outcomes.</p>	<p>8. Management documents shall be publicly available, except where this is prevented by commercial confidentiality, of a proprietary nature or where disclosure of information would result in negative environmental or social outcomes.</p>	

<p>9. Participating Operators shall seek consensus, in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01), such that individuals or single-issue groups cannot block consensus. Deadlocks shall be broken in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	<p>9. Participating Operators shall seek consensus, in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01), such that individuals or single-issue groups cannot block consensus. Deadlocks shall be broken in accordance with the RSB Impact Assessment Guidelines (RSB-GUI-01-002-01).</p>	
<p>2c. Operators shall implement and maintain a transparent and easily accessible grievance mechanism for directly affected local communities.</p>	<p>(Note Box) Definition from FAO: Free, Prior and Informed Consent (FPIC) is a specific right that pertains to Indigenous peoples and is recognised in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). It allows them to give or withhold consent to a project that may affect them or their territories. Furthermore, FPIC enables them to negotiate the conditions under which the project will be designed, implemented, monitored, and evaluated. This is also embedded within the universal right to self-determination.</p>	
<p>1. The grievance mechanism shall be a documented system for dealing with complaints and grievances, and which has the following characteristics:          -The mechanism is communicated and made easily accessible to directly affected local communities.          -Any grievances shall be acknowledged and dealt with in a timely manner.          -The dispute-resolution mechanism shall be based on negotiation between affected parties and decisions shall be made on consensus.          -Records of all grievances are kept, including how they were dealt with and the outcome of the process.</p>	<p>2d. Operators shall implement and maintain a transparent and easily accessible grievance mechanism for directly affected local communities.</p>	
<p>2d. Biofuel operators shall make adequate resources available to ensure compliance with the RSB Standard.</p>	<p>1. The grievance mechanism shall be a documented system for dealing with complaints and grievances, and which has the following characteristics:          -The mechanism is communicated and made easily accessible to directly affected local communities.          -Any grievances shall be acknowledged and dealt with in a timely manner.          -The dispute-resolution mechanism shall be based on negotiation between affected parties and decisions shall be made on consensus.          -Records of all grievances are kept, including how they were dealt with and the outcome of the process.</p>	
<p>1. Operators shall allocate adequate personnel and budget to implement and continuously monitor compliance with the RSB Standard.</p>	<p>2e. Biofuel Operators shall make adequate resources available to ensure compliance with the RSB Standard.</p>	
<p><b>Principle 3: Greenhouse Gas Emissions   Biofuels contribute to climate change mitigation by significantly reducing lifecycle GHG emissions as compared to those of fossil fuels.</b></p>	<p>1. Operators shall allocate adequate personnel and budget to implement and continuously monitor compliance with the RSB Standard.</p>	
	<p><b>Principle 3: Greenhouse Gas Emissions   Alternative fuels and materials produced within the circular bioeconomy contribute to climate change mitigation by significantly reducing lifecycle GHG emissions as compared to those of fossil-based alternatives.</b></p>	

<p>3a. Biofuels shall meet all applicable GHG reduction requirements set by national and/or regional and/or local regulations.</p>	<p><del>3a. Biofuels shall meet all applicable GHG reduction requirements set by national and/or regional and/or local regulations.</del></p>	
<p>1. The Participating Operator shall report the lifecycle GHG emissions of the biomass, intermediary or final product by using the methodology as required by the applicable regulation(s).</p>	<p><del>1. The Participating Operator shall report the lifecycle GHG emissions of the biomass, intermediary or final product by using the methodology as required by the applicable regulation(s).</del></p>	
<p>2. The Participating Operator shall ensure that GHG emission reduction thresholds as set by the applicable regulation(s) are met.</p>	<p><del>2. The Participating Operator shall ensure that GHG emission reduction thresholds as set by the applicable regulation(s) are met.</del></p>	
<p>3b. Lifecycle GHG emissions of biofuel shall be calculated by using system boundaries from Well to Wheel, including GHG emissions from land-use change, including, but not limited to above and below-ground carbon stock changes and incentivising the use of co-products, residues and waste in such a way that the lifecycle GHG emissions of the biofuel are reduced.</p>	<p>3b. Lifecycle GHG emissions of <b>alternative fuels and materials biofuel</b> shall be calculated by using system boundaries from <b>well-to-wheel for fuels, and cradle-to-grave for materials</b>, including GHG emissions from land-use change, including, but not limited to above and below-ground carbon stock changes and incentivising the use of co-products, residues and waste in such a way that the lifecycle GHG emissions of the <b>alternative fuel or material</b> are reduced.</p>	
<p>1. The Participating Operator shall report the lifecycle GHG emissions of the bio-mass, intermediary or final product by using one of the following options:          - RSB GHG Calculation Methodology (RSB-STD-01-003-01) or EU Renewable Energy Directive Methodology by using the RSB Calculation Tool or by carrying out an individual calculation.          -Biograce GHG calculation tool- Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) Model, developed and maintained by the Argonne National Laboratory.          -GHGenius Model for sugarcane ethanol and UCO biodiesel traded into Canada.          -Default Values set by the EU Renewable Energy Directive, Annex V (2009/28/EC) if the specifications as defined by the Directive are met (e.g. feedstock, process, process energy, country of origin).          -Further methodologies following an approval by the RSB Board of Directors under the following conditions:            • the decision is based on a sensitivity analysis carried out by an independent and competent organization.            • the RSB membership has been consulted and comments have been considered.          In the case that the Secretariat believes a sensitivity</p>	<p>1. The Participating Operator shall report the lifecycle GHG emissions of the <b>feedstock</b>, intermediary or final product by using one of the following options:  <b>a) RSB GHG Calculation Methodology (RSB-STD-01-003-01)</b>  <b>b) EU Renewable Energy Directive Methodology</b>, by using the RSB Calculation Tool or by conducting an individual calculation. <del>-Biograce GHG calculation tool- Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) Model, developed and maintained by the Argonne National Laboratory- GHGenius Model for sugarcane ethanol and UCO biodiesel traded into Canada.</del>  <b>c) Participating Operators applying for RSB Global or RSB EU RED certification may use disaggregated Default Values set by the EU Renewable Energy Directive, Annex V (2009/28/EC), Section D, if the specifications as defined by the Directive are met (e.g. feedstock, process, process energy, country of origin).</b>  <b>d) Participating Operators applying for RSB ICAO CORSIA certification may use default values set by ICAO CORSIA published in the ICAO document entitled “CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels” which is available on the ICAO CORSIA website.</b>  <b>e) Further methodologies following an approval by the RSB</b></p>	<p>Insert footnote, with link: <a href="https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:en:PDF">https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:en:PDF</a></p>

<p>analysis is not necessary (e.g. if a calculator is similar to another calculator that is already approved), the Board of Directors may approve the calculator without conducting a sensitivity analysis if the membership does not raise any objections to this approach.</p>
<p>2. Operators shall use the current RSB GHG Methodology or the UK's Ofgem Solid and Gaseous Biomass Calculator Tool for supply chains using the following:</p> <ul style="list-style-type: none"> <li>-Forestry harvesting residues: tops, limbs (branches) and saplings (trees with a diameter at a breast height below 5 inches/12.7 cm<sup>8</sup>).</li> <li>-Forestry processing by-products and residues: sawdust, shavings, bark, tall oil / tall oil pitch and brown liquor.</li> <li>-Short rotation coppices (e.g. poplar, willow).</li> </ul>

<p>Board of Directors under the following conditions:</p> <ul style="list-style-type: none"> <li>• the decision is based on a sensitivity analysis carried out by an independent and competent organisation;</li> <li>• the RSB membership Secretariat has been consulted and comments have been considered.</li> </ul> <p>In the case that the Secretariat believes a sensitivity analysis is not necessary (e.g. if a calculator is similar to another calculator that is already approved), the Board of Directors may approve the calculator without conducting a sensitivity analysis <del>if the membership does not raise any objections to this approach.</del></p>
<p>2. Operators shall use the current RSB GHG Methodology <del>or the UK's Ofgem Solid and Gaseous Biomass Calculator Tool</del> and comply with the RSB requirements in the Standard for Woody Biomass (RSB-SA-01) for supply chains using the following:</p> <ul style="list-style-type: none"> <li>a) Forestry harvesting residues: <del>treetops; branches; barks; damaged, dying, or dead trees; early/non-commercial thinning. tops, limbs (branches) and saplings (trees with a diameter at a breast height below 5 inches/12.7 cm<sup>8</sup>).</del></li> <li>b) Forestry processing by-products and residues: sawmill residues (slabs and chunks of wood, sawdust, shavings, bark); tall oil, brown and black liquor. <del>sawdust, shavings, bark, tall oil / tall oil pitch and brown liquor.</del></li> <li>c) End-of-life forestry materials: woody material from park and garden maintenance; orchards; construction and demolition waste wood; tree hedges.</li> <li>d) Alien invasive plants: generated as a waste by an operation cleaning an invaded area.</li> <li>e) Short rotation wood crops: perennial cropping systems planted to produce biomass or fibres with a system overall</li> </ul>

<p>Add footnote and reference to RSB Standard for Woody Biomass requirements, indicating: Any woody biomass material shall meet the requirements of the RSB Standard for Woody Biomass (RSB-SA-01).</p>

	<p>lifetime (i.e. from planting to final harvest) of less than 20 years and harvest taking place every 1-5 years.          f) Roundwood (only eligible for the use in non-energy markets): stemwood, branches, roots, stumps and burls.          g) Short rotation coppices (e.g. poplar, willow).</p>	
<p>3. In the case of energy products derived from other forestry products, the operator shall use a GHG accounting methodology that:          -takes into account counterfactual scenarios, i.e.; compares emissions from bioenergy production to scenarios absent bioenergy demand, (including forest baseline scenario and traditional wood products baseline), and;          -uses a timeframe not longer than 20 years for modelling carbon sequestration, and;          -has been approved by the RSB Board of Directors for this purpose. Prior to the decision the RSB membership shall be consulted, and comments shall be considered.          The RSB Board of Directors may also approve regional feedstock specific default values.</p>	<p><b>DELETE POINT 3 ALL TOGETHER - RATIONALE IS THAT RSB HAS NOW SET OUT REQUIREMENTS FOR ALL TYPES OF WOODY BIOMASS IN THE STANDARD AMENDMENT.</b></p>	
	<p>(Note Box) For some specific RSB scopes of certification, other GHG calculation methodologies are allowed. For example, under RSB Corsia, the PO shall follow the methodology set out in the RSB-STD-12-001.</p>	
<p>3c. Biofuels shall have on average 50% lower lifecycle greenhouse gas emissions relative to the fossil-fuel baseline (60% for new installations).</p>	<p>3c. Alternative fuels and materials shall mitigate climate change by creating an emission reduction compared with the fossil alternative.</p>	

<p>1. Lifecycle greenhouse gas emissions of a biofuel, calculated following the methodology in Criterion 3b, shall be on average 50% lower than the applicable fossil-fuel baseline.</p>	<p>1. Lifecycle greenhouse gas emissions of <b>alternative</b> fuels, calculated following the methodology in Criterion 3b, shall create at minimum the following emission saving compared with the fossil baseline:</p> <ul style="list-style-type: none"> <li>a) 50%, for biofuels, bioliquids and biogas consumed in the transport sector, produced in installations which started operation on or before 5 October 2015.</li> <li>b) 60%, for biofuels, bioliquids and biogas consumed in the transport sector, produced in installations which started operation from 6 October 2015 until 31 December 2020.</li> <li>c) 65%, for biofuels, bioliquids and biogas consumed in the transport sector, produced in installations which started operation from 1 January 2021.</li> <li>d) 70%, for renewable liquid and gaseous transport fuels of non-biological origin produced in installations from 1 January 2021.8</li> <li>e) 70%, for electricity, heating and cooling production from biomass fuels used in installations from 1 January 2021 until 31 December 2025.</li> <li>f) 80%, for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2026.</li> </ul> <p>Note: For RSB ICAO CORSIA certification, in addition Participating Operators shall demonstrate that the sustainable aviation fuel achieves, on a life cycle basis including the default value for induced land use change set by ICAO CORSIA, net GHG emissions reductions of at least 10% compared to the baseline life cycle emissions values for aviation fuel.</p>	
<p>2. Lifecycle greenhouse gas emissions of a biofuel produced in a new installation (i.e., an installation that started operation after 5 October 2015) shall be 60% lower than the applicable fossil-fuel baseline.</p>	<p><del>2. Lifecycle greenhouse gas emissions of a biofuel produced in a new installation (i.e., an installation that started operation after 5 October 2015) shall be 60% lower than the applicable fossil-fuel baseline.</del> 2. Lifecycle greenhouse gas emissions of advanced materials (non-energy use) shall create an emission reduction compared with the fossil alternative in-line with requirements of the RSB Standard for Advanced Products (RSB-STD-02-001).</p>	

Ensuring sustainability for the use of forestry residues Deforestation and unsustainably managed forests are serious environmental risks. The RSB addresses these risks by requiring operators to source forestry residues only from sustainably managed forests. Operators are therefore required to provide evidence that forestry residues are sourced from forests with a valid Forest Stewardship Council (FSC) certification or a ny certification scheme with equivalent sustainability requirements as approved by the RSB (for more information, see RSB Standard for certification of biofuels and bio-products based on end-of-life- products, by-products and residues, RSB-STD-01-010).

A note on Greenhouse Gas emissions

- Fossil-fuel baseline: Biofuels certified against the RSB Standard are required to significantly reduce greenhouse gas (GHG) emissions compared to fossil fuels (Principle 3). Operators have different methodological options outlined in Principle 3 to calculate the lifecycle emissions of their product. If operators opt to calculate the GHG emissions by using the RSB GHG Calculation Methodology, the GHG emission of the biofuel is compared to the fossil-fuel baseline set in accordance to the RSB fossil-fuel baseline methodology. The fossil-fuel baseline is a global average calculated in 2011 by the RSB Secretariat, in conjunction with experts from the fields of Life Cycle Assessment and fossil fuels for different fossil fuel types (gasoline, diesel, and jet fuel). The fossil-fuel baseline will be recalculated every 5 years to reflect changes in the carbon intensity of fossil fuels used in the world.
- GHG Trading System: In 2010, the RSB decided to move towards developing a GHG Trading System to comply with the GHG emission reduction requirements in Criterion 3c. As international policies on biofuels sustainability do not foresee a GHG trading system at the moment, the RSB GHG Trading System has not been developed further. If stakeholders ask for a GHG Trading System in order to support the sustainable production of biofuels and biomaterials, the RSB Secretariat will return this topic to the agenda.

Ensuring sustainability for the use of forestry residues Deforestation and unsustainably managed forests are serious environmental risks. The RSB addresses these risks by requiring operators to source forestry residues only from sustainably managed forests. Operators are therefore required to provide evidence that forestry residues are [compliant with the requirements set out in the RSB Standard for Woody Biomass RSB-SA-01](#). ~~sourced from forests with a valid Forest Stewardship Council (FSC) certification or a ny certification scheme with equivalent sustainability requirements as approved by the RSB (for more information, see RSB Standard for certification of biofuels and bio-products based on end-of-life- products, by-products, and residues, RSB-STD-01-010).~~

~~A note on Greenhouse Gas emissions~~

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the use of forced, compulsory, bonded, trafficked or otherwise involuntary labour as defined in ILO Convention 29.
1. Workers shall not be required to lodge their identity documents with the employer or a third party.
2. Retaining parts of the workers' salary is not allowed.
3. Spouses and children of workers shall not be obliged to work in the operations.
4. Workers shall be allowed to leave their employment after due notice according to their contractual agreements.
5. Workers shall be allowed to leave company premises freely at the end of their work shifts.

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4c. No child labour shall occur, except on family farms and then only when work does not interfere with the child's schooling and does not put his or her health at risk.
1. Schooling age limit is that defined in the national legislation or 14, whichever is higher.
2. Hazardous child labour as defined by ILO Convention 138 is not allowed.
3. Work by children on family smallholdings is only acceptable under adult supervision and when work does not interfere with the child's schooling nor puts at risk his or her health.
4d. Workers shall be free of discrimination of any kind, whether in employment or opportunity, with respect to gender, age, wages, working conditions, and social benefits.
1. Employees, contracted labour, small outgrowers, and employees of outgrowers shall all be free of discrimination as per ILO Convention 111.
2. Career development shall be encouraged for all workers

6. Workers know their labour rights and have a written and accepted document explaining the working conditions, including: a) working hours and schedule; b) type of job and description of activities and responsibilities; c) labour rights and existing internal mechanisms (policies, procedures, registries, etc.) to assure these. d) grievance, whistle blower and complaints mechanism explained, confidential and accessible.
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Guidance will be developed by RSB Secretariat and responsible and decent employment conditions. Add UN guiding principles for Business and Human Rights reference.

<p>3. Work sites shall be safe for women; free from sexual harassment and other discrimination and abuse; and promote access to jobs, skills training, recruitment and career development for women to ensure more gender balance in work and career development.</p>	<p>3. <del>Work sites shall be safe for women; free from sexual harassment and other discrimination and abuse; and promote access to jobs, skills training, recruitment, and career development for women to ensure more gender balance in work and career development.</del> Mechanisms (e.g., policies, procedures, registries, etc.) shall be put in place to ensure equitable and safe working environments are in place, free from sexual harassment and other types of discrimination and abuse. Access to jobs, skill trainings, recruitment and career development is assured for women and all independently of race, gender, sexual orientation, age, ethnicity and other vulnerable or marginalised groups.</p>	
	<p>4. P.O.s have clear policies and procedures against discrimination and how to manage potential issues. Management includes training, sensitization, dissemination, and other awareness raising practices. In the case of smallholders, approaches on these aspects could include making trainings at group level or by appointing a community member as focal point / lead on the issue.</p>	
<p>4e. Workers' wages and working conditions shall respect all applicable laws and international conventions, as well as all relevant collective agreements. Where a government-regulated minimum wage is in place in a given country and applies to the specific industry sector, this shall be observed. Where a minimum wage is absent, the wage paid for a particular activity shall be negotiated and agreed on an annual basis with the worker. Men and women shall receive equal remuneration for work of equal value.</p>	<p>4e. Workers' wages and working conditions shall respect all applicable laws and international conventions, as well as all relevant collective agreements. Where a government-regulated minimum wage is in place in a given country and applies to the specific industry sector, this shall be observed. Where a minimum wage is absent, the wage paid for a particular activity shall be negotiated and agreed <del>on an annual basis with the worker</del> with the worker's union and based on an economic salary analysis of the context of operation. Men and women shall receive equal remuneration for work of equal value.</p>	
<p>1. Wages shall be provided in cash or in another form acceptable to workers.</p>	<p>1. Wages shall be provided in cash or in another form acceptable to <del>workers</del> local market customs, and payments are ensured through a transparent and collectively agreed process.</p>	

<p>2. Any housing provided by the operator for permanent or temporary workers shall be built and maintained to ensure good sanitary, health, and safety conditions.</p>	<p>2. Any housing provided by the operator for permanent or temporary workers for long or short term living, shall be provided, built and maintained to ensure good sanitary, health, and safety conditions, including: sanitary facilities (e.g. separate facilities for women and men, incl. toilets, showers, lockers, etc.), adequate drinking water quality, shelter, heating, bedding, cooking facilities, etc. Facilities for storing, preparing and distribution of food provided to workers are designed, built, and regularly maintained to meet the basic needs of the personnel (and their families, if the conditions of employment require family resettlement), comply with legal requirements, and ensure safe and healthy conditions. Guidance can be followed using RSB-GUI-01-005-01 Social Impact Assessment Guidelines.</p>	<p>Include further details in RSB-GUI-01-005-01 Social Impact Assessment Guidelines, Rural and Social Dev. Guideline or develop an additional Guideline for safety and infrastructure working conditions. Also include Building Responsibly Principles as reference.</p>
<p>3. For piecework (pay based on production rather than hours), the pay rate must allow workers to earn at least the legal minimum wage or comparable regional wage, whichever is higher, based on an eight-hour workday under average conditions.</p>	<p>3. For piecework (pay based on production rather than hours), the pay rate must allow workers to earn at least the legal minimum wage or comparable regional wage, whichever is higher, based on an eight-hour workday under average conditions. If no legal minimum wage is available, an analysis is required as per Minimum Requirement 4e.5.</p>	
<p>4. The maximum number of regular hours worked per week must not exceed 48. Workers may work overtime which shall be voluntary, but total working hours shall not exceed 80 per week.</p>	<p>4. The maximum number of regular hours worked per week must not exceed 48. Workers may work overtime under the conditions it is voluntary, but total working hours shall not exceed 80 per week. Additional recommendations for transparent and socially accepted overtime contracting conditions include:  a) overtime work is for short periods of time (e.g. harvest);  b) should be compensated adequately (including remuneration and rest periods);  c) should be agreed on the basis of a collective bargaining process (e.g. between suppliers and contracting party or between employees and employer);  d) should be ratified by a third party (e.g. governmental institution or an organisation agreed on by both parties).  RSB-GUI-01-005-01 RSB Social Impact Assessment Guidelines can be checked for further guidance.</p>	<p>Improve RSB-GUI-01-005-01 RSB Social Impact Assessment Guidelines for further details on the methodology for contextual analysis for average salary payment and methodology for determining "decent" overtime working conditions.</p>
	<p>5. Operators assure workers a decent wage payment by including an assessment within the ESMP when a minimum wage is not available as a reference. (RSB-GUI-01-005-01 Social Impact Assessment Guidelines can be used as reference for determining the level of decent wage).</p>	<p>Improve RSB-GUI-01-005-01 RSB Social Impact Assessment Guidelines for further details on the methodology for contextual analysis for average salary payment and methodology for determining a "decent" wage.</p>
<p>4f. Conditions of occupational safety and health for workers shall follow internationally recognised standards</p>	<p>4f. Conditions of occupational safety and health for workers shall follow internationally recognised standards</p>	

<p>1. Workers shall not be exposed to any occupational health or safety hazards without adequate protection and training as defined in national law and international standards.</p>	<p>1. Workers shall not be exposed to any occupational health or safety hazards without <b>adequate good</b> protection and training as defined in national law and international standards.</p>	<p>Add the following references:  <a href="https://www.osha.gov/personal-protective-equipment/standards">https://www.osha.gov/personal-protective-equipment/standards</a>  <a href="https://www.bvl.bund.de/EN/Tasks/04_Plant_protection_products/04_Users/03_PersonalProtectiveEquipment/ppp_users_PPE_node.html;jsessionid=EE1307C6CB272D235F658A7006CAA0C8.2_cid298#doc11010640bodyText4">https://www.bvl.bund.de/EN/Tasks/04_Plant_protection_products/04_Users/03_PersonalProtectiveEquipment/ppp_users_PPE_node.html;jsessionid=EE1307C6CB272D235F658A7006CAA0C8.2_cid298#doc11010640bodyText4</a>  <a href="https://single-market-economy.ec.europa.eu/sectors/mechanical-engineering/personal-protective-equipment-ppe_en">https://single-market-economy.ec.europa.eu/sectors/mechanical-engineering/personal-protective-equipment-ppe_en</a></p>
<p>2. The operator shall have a health and safety policy in place, which applies to all workers, including contractors. For agricultural operations, this policy shall follow ILO Convention 184 (Safety and Health in Agriculture).</p>	<p>2. The operator shall have a health and safety policy in place, which applies to all workers, including contractors. For agricultural operations, this policy shall follow ILO Convention 184 (Safety and Health in Agriculture).</p>	
<p>3. The operator shall ensure that workers are skilled in the implementation of their prescribed activities and jobs to minimise health and safety risks and the risk of work-related accidents.</p>	<p>3. The operator shall ensure that workers are skilled in the implementation of their prescribed activities and jobs to minimise health and safety risks and the risk of work-related accidents.</p>	
<p>4. The operator shall ensure that workers are - trained and knowledgeable about work-related health and safety risks and preventative measures for minimising the risk to health and safety, - trained and knowledgeable about work-related risks to the environment and/or society, - trained and knowledgeable about correct application, transport, storage and handling of hazardous substances and waste, and - trained and knowledgeable about all other aspects of the operation(s) of the participating operator that pose occupational health and safety risks or risks to the environment and/or to society.</p>	<p>4. The operator shall ensure that workers are - trained and knowledgeable about work-related health and safety risks and preventative measures for minimising the risk to health and safety, - trained and knowledgeable about work-related risks to the environment and/or society, - trained and knowledgeable about correct application, transport, storage and handling of hazardous substances and waste, and - trained and knowledgeable about all other aspects of the operation(s) of the participating operator that pose occupational health and safety risks or risks to the environment and/or to society.</p>	
<p>5. The operator shall implement and maintain procedures and measures addressing emergencies and accidents that are continuously monitored and improved. The participating operator ensures that all workers understand accident and emergency procedures and measures, including the interpretation of labels, markings, signs, and other safety relevant audio and/or visual signals.</p>	<p>5. The operator shall implement and maintain procedures and measures addressing emergencies and accidents that are continuously monitored and improved. The participating operator ensures that all workers understand accident and emergency procedures and measures, including the interpretation of labels, markings, signs, and other safety relevant audio and/or visual signals.</p>	
<p>6. The operator shall maintain, and review periodically records of all work-related accidents, and adjust its accident and emergency procedures to minimise the risk of work-related accidents.</p>	<p>6. The operator shall maintain, and review periodically records of all work-related accidents, and adjust its accident and emergency procedures to minimise the risk of work-related accidents.</p>	

<p>7. The operator shall ensure that first aid kits, fire extinguishers, and spill-response material are available in sufficient quantity (i.e. readily available and accessible to workers) and quality (i.e. current and periodically serviced, and appropriate to address the associated hazards and risks) at all sites including mobile facilities and in the vicinity of agricultural sites, and that workers are knowledgeable of such equipment and its use.</p>	<p>7. The operator shall ensure that first aid kits, fire extinguishers, and spill-response material are available in sufficient quantity (i.e. readily available and accessible to workers) and quality (i.e. current and periodically serviced, and appropriate to address the associated hazards and risks) at all sites including mobile facilities and in the vicinity of agricultural sites, and that workers are knowledgeable of such equipment and its use.</p>	
<p>8. The operator shall ensure that workers are provided with and regularly use personal protective equipment to protect them from all occupational health and safety hazards associated with their respective jobs (e.g., for the handling of plant-protection products or working with electric equipment).</p>	<p>8. The operator shall ensure that workers are provided with and regularly use personal protective equipment to protect them from all occupational health and safety hazards associated with their respective jobs (e.g., for the handling of plant-protection products or working with electric equipment).</p>	
<p>9. The operator ensures that all workers have access to clean sanitary facilities and potable water.</p>	<p>9. The operator ensures that all workers have access to clean sanitary facilities and potable water.</p>	
<p>10. The operator ensures that any living quarters and infrastructure for sleeping, sanitary facilities (e.g. toilet/latrines, showers, etc.) and facilities for storing, preparing and distributing of food provided to workers are designed, built and regularly maintained to meet the basic needs of the personnel and their families, comply with legal requirements, and ensure safe and healthy conditions.</p>	<p>10. The operator ensures that any living quarters and infrastructure for sleeping, sanitary facilities (e.g. toilet/latrines, showers, etc.) and facilities for storing, preparing and distributing of food provided to workers are designed, built and regularly maintained to meet the basic needs of the personnel and their families, comply with legal requirements, and ensure safe and healthy conditions.</p>	
	<p>11. Where potential risks to health are identified to occupational health, workers should have key health indicators monitored during their employment to reduce job related health issues.</p>	<p>Improve RSB-GUI-01-005-01 RSB Social Impact Assessment Guidelines for further details on the types of work-related health indicators relevant to biomass production.</p>
<p>4g. Operators shall implement a mechanism to ensure the human rights and labour rights outlined in this principle apply equally when labour is contracted through third parties.</p>	<p>4g. Operators shall implement a mechanism to ensure the human rights and labour rights outlined in this principle apply equally when labour is contracted through third parties.</p>	
<p>1. Operators shall identify instances where those working within the scope of their operational function (feedstock producer, feedstock processor, or industrial producer) are contracted outside of the direct influence of the operation by external parties and shall implement a mechanism to ensure that such contracted workers are afforded the same rights as described in this principle as employed staff within the process.</p>	<p>1. Operators shall identify instances where those working within the scope of their operational function (feedstock producer, feedstock processor, or industrial producer) are contracted outside of the direct influence of the operation by external parties and shall implement a mechanism to ensure that such contracted workers are afforded the same rights as described in this principle as employed staff within the process.</p>	

<p>4h. Operators shall implement and maintain a transparent and easily accessible grievance mechanism, open for all workers and contracted workers</p>	<p>4h. Operators shall implement and maintain a transparent and easily accessible grievance mechanism, open for all workers and contracted workers</p>	
<p>1. The grievance mechanism shall be a documented system for dealing with complaints and grievances which has the following characteristics:          -The mechanism is communicated and made easily accessible to workers and contracted workers.          -Any grievances shall be acknowledged and dealt with in a timely manner.          -Records of all grievances are kept, including how they were dealt with and the outcome of the process.</p>	<p>1. The grievance mechanism shall be a documented system for dealing with complaints and grievances which has the following characteristics:          -The mechanism is communicated and made easily accessible to workers and contracted workers.          -Any grievances shall be acknowledged and dealt with in a timely manner.          -Records of all grievances are kept, including how they were dealt with and the outcome of the process.</p>	
<p><b>Principle 5: Rural and Social Development   In regions of poverty, operations contribute to the social and economic development of local, rural, and indigenous people and communities.</b></p>	<p><b>Principle 5: Rural and Social Development   In regions of poverty, operations contribute to the social and economic development of local, rural, and Indigenous people and communities.</b></p>	
<p>5a. In regions of poverty, the socioeconomic status of local stakeholders impacted by the operations shall be improved.</p>	<p>5a. In regions of poverty, the socioeconomic status of local stakeholders impacted by the operations shall be improved.</p>	
<p>1. Where the socioeconomic baseline survey undertaken during the social impact assessment process in accordance with the Social Impact Assessment Guidelines (RSB-GUI-01-005-01) identifies an excess of unemployed or underemployed labour in the locality of the operations, operations shall optimise the job-creation potential.</p>	<p>1. Where the socioeconomic baseline survey undertaken during the social impact assessment process in accordance with the Social Impact Assessment Guidelines (RSB-GUI-01-005-01) identifies an excess of unemployed or underemployed labour in the locality of the operations, operations shall optimise the job-creation potential.</p>	
<p>2. The Participating Operator shall assess ways in which the use of permanent and local labour can be promoted and introduced over the use of migrant, seasonal and casual labour</p>	<p>2. The Participating Operator shall assess ways in which the use of permanent and local labour can be promoted and introduced over the use of migrant, seasonal and casual labour</p>	
<p>3. If it is determined through the RSB impact assessment or monitoring process that mechanisation is the optimal choice from an environmental, economic, and social perspective, the transition from labour intensity to mechanisation shall be done in a fair and equitable way for existing workers where as many of the existing workers as possible are retrained and employed in the mechanised process.</p>	<p>3. If it is determined through the RSB impact assessment or monitoring process that mechanisation is the optimal choice from an environmental, economic, and social perspective, the transition from labour intensity to mechanisation shall be done in a fair and equitable way for existing workers where as many of the existing workers as possible are retrained and employed in the mechanised process.</p>	
<p>4. Measured improvements in the social and economic indicators as set against the baseline survey carried out under the social impact assessment process shall be targeted for review every three years.</p>	<p>4. Measured improvements in the social and economic indicators as set against the baseline survey conducted under the social impact assessment process shall be targeted for review every three years.</p>	
<p>5. Skills training shall be provided by the operator if necessary to ensure the implementation of this criterion.</p>	<p>5. Skills training shall be provided by the operator if necessary to ensure the implementation of this criterion.</p>	

<p>Cultural sensitivity and respect for existing social structures shall be applied in the development of options for compliance with this criterion.</p>	<p>Cultural sensitivity and respect for existing social structures shall be applied in the development of options for compliance with this criterion.</p>	
<p>6. At least one measure to significantly optimise the benefits to local stake-holders shall be implemented within a three-year period of the start of the operations, for instance:</p> <ul style="list-style-type: none"> <li>a) Creation of year-round and/or long-term jobs;</li> <li>b) The establishment of governance structures that support empowerment of small-scale farmers and rural communities such as co-operatives and micro-credit schemes;</li> <li>c) Use of the locally produced bio-energy to provide modern energy services to local poor communities;</li> <li>d) Shareholding options, local ownership, joint ventures and partnerships with the local communities;</li> <li>e) Social benefits for the local community such as the building or servicing of clinics, homes, hospitals and schools.</li> </ul>	<p>6. At least one measure to significantly optimise the benefits to local stakeholders shall be implemented <b>based on a local needs assessment and defined and included in the ESMP</b>, within a three-year period of the start of the operations, for instance:</p> <ul style="list-style-type: none"> <li>a) Creation of year-round and/or long-term jobs;</li> <li>b) The establishment of governance structures that support empowerment of small-scale farmers and rural communities such as co-operatives and micro-credit schemes;</li> <li>c) Use of the locally produced bio-energy to provide modern energy services to local poor communities;</li> <li>d) Shareholding options, local ownership, joint ventures and partnerships with the local communities;</li> <li>e) Social benefits for the local community <b>through the investment and implementation in socially oriented projects (e.g. education, health, entrepreneurship, micro-finance, capacity building, etc.).</b> <del>such as the building or servicing of clinics, homes, hospitals and schools.</del></li> </ul> <p>Further references can be checked using the guidance material RSB-GUI-01-005-02 Rural and Social Development Guidelines, to include parameters and aspects covering economic incentives beyond job creation.</p>	<p>Improve guidance material RSB-GUI-01-005-02 Rural and Social Development Guidelines, to include parameters and aspects covering economic incentives beyond job creation.</p>
<p>5b. In regions of poverty, special measures that benefit and encourage the participation of women, youth, indigenous communities and the vulnerable in the operations shall be designed and implemented.</p>	<p>5b. In regions of poverty, special measures that benefit and encourage the participation of women, youth, Indigenous communities and the vulnerable in the operations shall be designed and implemented.</p>	<p>Add a footnote clarifying this applies to the entire supply chain, which must be under certification in all cases, even if the purchasing of biomass is done directly by the industrial operator without it having physical operations in the area of sourcing.</p>
<p>1. Data for rural poor women in regions of poverty shall be disaggregated in the baseline social surveys to assist with the design of special programmes for the targeted people.</p>	<p>1. Data for rural poor women in regions of poverty shall be disaggregated in the baseline social surveys to assist with the design of special programmes for the targeted people.</p>	
<p>2. Training and capacity building shall be required to give effect to this principle. Such training is required for both the workers and also for management that oversees employment protocols and supervision.</p>	<p>2. Training and capacity building shall be required to give effect to this principle. Such training is required for both the workers and also for management that oversees employment protocols and supervision.</p>	

<p>What is a region of poverty? The RSB has set national-level thresholds for Regions of Poverty based on the United Nations Human Development Indicators. If the country is listed at the inequality-adjusted human development index (IHDI), the threshold is 0.59. If no data is available, the Human Development Index (HDI) may be used with the threshold 0.74. Both indices can be accessed via the UNDP Human Development Indicators World Map.</p>
<p><b>Principle 6: Local Food Security.   Operations ensure the human right to adequate food and improve food security in food insecure regions.</b></p>
<p>6a. Operations shall assess risks to food security in the region and locality and shall mitigate any negative impacts that result from their operations.</p>
<p>1. Where the screening exercise of the RSB impact assessment process reveals a direct impact on food security in food-insecure regions, Participating Operators shall conduct a food security assessment in accordance with the RSB Food Security Assessment Guidelines (RSB GUI-01- 006-01).</p>
<p>2. The scope of the food security assessment shall include additional impacts that the operations may have on cross-cutting requirements for food security including land, water, labour, and infrastructure.</p>
<p>3. If the food security assessment indicates a food security risk as a result of the operations, a mitigation plan shall be developed and implemented through the ESMP.</p>

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<p>6a. Operations shall assess risks to food security in the region and locality and shall mitigate any negative impacts that result from their operations.</p>
<p>1. Where the screening exercise of the RSB impact assessment process reveals a direct impact on food security in food-insecure regions, Participating Operators shall conduct a food security assessment in accordance with the RSB Food Security Assessment Guidelines (RSB GUI-01-006-01) and develop a Food Security Action Plan renewable over a 4 year period, that includes climate change mitigation and carbon stock increase, with action plan adjusted to GUI-01-007-01. The results of the Food Security Action Plan show an effective decrease or total mitigation of food insecurity. The Action Plan addresses both immediate and long-term actions and effects on livelihoods, restoration, and compensation as per RSB Food Security Guidelines GUI-01-006-01. The Food Security Action Plan addresses point 5.2 Targeting and implementing mitigation and enhancement measures in Food Security Guidelines GUI-01- 006-01, by including a climate change approach to enhancing food security.</p>
<p>2. The scope of the food security assessment shall include additional impacts that the operations may have on cross-cutting requirements for food security including climate change, carbon stocks, land, water, labour, and infrastructure.</p>
<p>3. If the food security assessment indicates a food security risk as a result of the operations, a mitigation plan shall be developed and implemented through the ESMP.</p>

<p>Improve RSB GUI-01- 006-01 by adding guidance on the added aspects to the Minimum Requirement</p>

<p>4. Measures developed under Principle 5 that mitigate food insecurity shall be integrated with the measures developed under Criterion 6a.</p>	<p>4. Measures developed under Principle 5 that mitigate food insecurity shall be integrated with the measures developed under Criterion 6a.</p>	
<p>6b. In food insecure regions, operations shall enhance the local food security of the directly affected stakeholders.</p>	<p>6b. In food insecure regions, operations shall enhance the local food security of the directly affected stakeholders.</p>	
<p>1. In regions where food security is an ongoing risk and concern, operations shall enhance food security of the locally affected community by, for instance, setting aside land for food growing, increasing yields, providing opportunities for workers to carry out household-level food production, sponsoring agricultural support programmes and activities, and/or making value-added food by-products available to the local market.</p>	<p>1. In regions where food security is an ongoing risk and concern, operations shall enhance food security of the locally affected community by, for instance, setting aside land for food growing, increasing yields, providing opportunities for workers to carry out household-level food production, sponsoring agricultural support programmes and activities, and/or making value-added food by-products available to the local market.</p>	
<p>2. Measures to enhance regional food security shall be integrated with measures that contribute to rural and social development developed under Principle 5.</p>	<p>2. Measures to enhance regional food security shall be integrated with measures that contribute to rural and social development developed under Principle 5.</p>	
<p><b>Principle 7: Conservation   Operations avoid negative impacts on biodiversity, ecosystems, and conservation values.</b></p>	<p><b>Principle 7: Conservation   Operations avoid negative impacts on biodiversity, ecosystems, and conservation values, and contribute to protecting and/or increasing carbon stock accumulation (at soil and/or forest level). Applicable to feedstock producers and their supply chains.</b></p>	
<p>7a. Conservation values of local, regional or global importance within the potential or existing area of operation shall be maintained or enhanced.</p>	<p>7a. Conservation values of local, regional, or global importance within the potential or existing area of operation shall be maintained or enhanced.</p>	
<p>1. Participating Operators shall identify the conservation value(s) within the area of a potential or existing operation during the screening exercise of the RSB impact assessment process (Principle 2).</p>	<p>1. Participating Operators shall identify the conservation value(s) within the area of a potential or existing operation during the screening exercise of the RSB impact assessment process (Principle 2). <a href="#">Add reference.</a></p>	<p>We propose that the new P&amp;C should follow the updated IPCC 2020 Climate zone map categorization to define the climate zone categories.  <a href="https://essd.copernicus.org/articles/12/2959/2020/essd-12-2959-2020.html">https://essd.copernicus.org/articles/12/2959/2020/essd-12-2959-2020.html</a></p>
<p>2. Conversion or use of new areas for operations shall not occur prior to the screening exercise.</p>	<p>2. Conversion or use of new areas for operations shall not occur prior to the screening exercise.</p>	
<p>3. Where conservation values of local, regional or global importance have been identified, Participating Operators shall carry out a specialised impact assessment in accordance with the Conservation Impact Assessment Guidelines (RSB-GUI-01-007-01).</p>	<p>3. Where conservation values of local, regional, or global importance have been identified, Participating Operators shall carry out a specialised impact assessment in accordance with the Conservation Impact Assessment Guidelines (RSB-GUI-01-007-01).</p>	
<p>4. Operations shall prioritise areas with the lowest possible risk of impacts to the identified conservation values.</p>	<p>4. Operations shall prioritise areas with the lowest possible risk of impacts to the identified conservation values.</p>	

5. Areas identified as “no-go areas” shall not be used for operations after the 1st of January 2008, unless feedstock production or processing operations are legally authorised as part of the conservation management for the area concerned. No-go-areas are nationally, regionally, or internationally legally protected areas including but not limited to those designated by any of the of the following:

- The World Conservation Union “IUCN” Category I-IV protected areas <http://www.protectedplanet.net/>
- Wetlands of International Importance designated under the Ramsar Convention <http://ramsar.wetlands.org/>
- World Heritage Sites designated under the UNESCO World Heritage Convention <http://whc.unesco.org/en/list>
- Biosphere Reserves designated under the UNESCO Man and the Biosphere Programme <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/>
- Other legally protected areas.
- Primary Forest, i.e. naturally regenerated forest, where there are no clearly visible indication of human activities and the ecological processes are not significantly disturbed.
- Natural or non-natural highly biodiverse grassland.

5. Areas identified as “no-go areas” and areas that contain identified conservation values of global, regional or local importance or that serve to maintain or enhance such conservation values (i.e. “no-conversion areas”) shall not be converted after the 1st of January 2008, or earlier as prescribed by other relevant international standards, and shall not be used for operations after the 1st of January 2008, unless feedstock production or processing operations are legally authorised as part of the conservation management for the area concerned.

a) No-go-areas are nationally, regionally, or internationally legally protected areas including but not limited to those designated by any of the of the following:

- The World Conservation Union “IUCN” Category I-IV protected areas <http://www.protectedplanet.net/>
- Wetlands of International Importance designated under the Ramsar Convention <http://ramsar.wetlands.org/>
- World Heritage Sites designated under the UNESCO World Heritage Convention <http://whc.unesco.org/en/list>
- Biosphere Reserves designated under the UNESCO Man and the Biosphere Programme <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/>
- Other legally protected areas.
- Primary Forest, i.e. naturally regenerated forest, where there are no clearly visible indication of human activities and the ecological processes are not significantly disturbed.
- Natural or non-natural highly biodiverse grassland.
- Areas of cultural or spiritual importance for indigenous peoples, including their rights to subsistence, land management and tradition.

b) “No conversion” areas include:

- Key Biodiversity Areas (KBA) as indicated in the IBAT for Business Tool ([www.ibatforbusiness.org](http://www.ibatforbusiness.org/)), including Alliance for Zero Extinction Areas (AZEs), Important Bird Areas (IBAs), and IUCN Key Freshwater Biodiversity Areas.
- Natura 2000 sites (as determined under the European Birds and Habitats Directives <http://natura2000.eea.europa.eu>).
- Land with high carbon stock, e.g. Wetland, Peatland.
- Areas listed on the IUCN Red List of Ecosystems.
- Forests, i.e. land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ).

We propose to consolidate 7.a.5 and 7.a.6 into one Minimum Requirement (M.R.) and redefine 7.a.7 to usage only if the newly consolidated 7.a.5 and 7.a.6 M.R. does not supersede. Also, instead of mentioning the resources within the M.R., the M.R. should point out compliance with guidance containing the external resources and a more in-depth methodology contained in RSB-GUI-01-007-01 RSB Conservation Impact Assessment Guidelines. Additionally, include, new legal frameworks, new definitions (e.g., degraded, abandoned), land types, etc.

	<p>-Ancient and Endangered forests and High Carbon Stock forests as mapped in <a href="https://canopyplanet.org/tools/forestmapper/app/">https://canopyplanet.org/tools/forestmapper/app/</a> to the prohibited and no conversion list.</p>	
<p>6. Areas that contain identified conservation values of global, regional or local importance or that serve to maintain or enhance such conservation values shall not be converted after the 1st of January 2008, or earlier as prescribed by other relevant international standards. “No conversion” areas include:          -Key Biodiversity Areas (KBA) as indicated in the IBAT for Business Tool (<a href="http://www.ibatforbusiness.org">www.ibatforbusiness.org</a>), including Alliance for Zero Extinction Areas (AZEs), Important Bird Areas (IBAs), and IUCN Key Freshwater Biodiversity Areas.          -Natura 2000 sites (as determined under the European</p>	<p><del>6. Areas that contain identified conservation values of global, regional or local importance or that serve to maintain or enhance such conservation values shall not be converted after the 1st of January 2008, or earlier as prescribed by other relevant international standards. “No conversion” areas include:          -Key Biodiversity Areas (KBA) as indicated in the IBAT for Business Tool (<a href="http://www.ibatforbusiness.org">www.ibatforbusiness.org</a>), including Alliance for Zero Extinction Areas (AZEs), Important Bird Areas (IBAs), and IUCN Key Freshwater Biodiversity Areas.          -Natura 2000 sites (as determined under the European Birds and Habitats Directives <a href="http://natura2000.eea.europa.eu">http://natura2000.eea.europa.eu</a>).</del></p>	

<p>Birds and Habitats Directives <a href="http://natura2000.eea.europa.eu">http://natura2000.eea.europa.eu</a>).</p> <ul style="list-style-type: none"> <li>-Land with high carbon stock, e.g., Wetland, Peatland.</li> <li>-Areas listed on the IUCN Red List of Ecosystems.</li> <li>-Forests, i.e., land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ).</li> </ul>	<p><del>-Land with high carbon stock, e.g., Wetland, Peatland.</del></p> <p><del>-Areas listed on the IUCN Red List of Ecosystems.</del></p> <p><del>-Forests, i.e., land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ).</del></p>	
<p>7. Areas that contain conservation values of global, regional or local importance or serve to maintain or enhance such conservation values shall only be used if adequate management practices maintain or enhance the identified conservation values (e.g., sustainable biomass harvesting).</p>	<p><del>7. 6. Areas that contain conservation values of global, regional, or local importance or serve to maintain or enhance such conservation values shall only be used if adequate management practices maintain or enhance the identified conservation values (e.g., sustainable biomass harvesting). If areas are identified which do not fall into the categories identified in Minimum Requirement 7.a.5, yet contain conservation values of global, regional or local importance or serve to maintain or enhance such conservation values (as determined by the RSB GUI-01-007-01), these shall only be used if robust management practices maintain or enhance the identified conservation values (e.g. sustainable biomass harvesting, carbon stocks, biodiversity, etc.), where RSB-GUI-01-007-01 Conservation Impact Assessment Guidelines can be used for guidance.</del></p>	<p>Update RSB GUI-01-007-01 RSB Conservation Impact Assessment Guidelines, where the external resources, together with a more in-depth conservation and ecosystem enhancement methodology should be developed, as well as include: 1. new legal frameworks, 2. new definitions (e.g., degraded, abandoned), land types, etc. Define what robust practices are to avoid loopholes and greenwashing in HCV areas, by including guidance in the environmental assessment.</p>
<p>8. Hunting, fishing, ensnaring, poisoning and exploitation of rare, threatened, endangered and legally protected species shall not occur on the operation site.</p>	<p><del>8. 7. Hunting, fishing, ensnaring, poisoning and exploitation of rare, threatened, endangered and legally protected species shall not occur on the operation site.</del></p>	<p>RSB-GUI-01-007-01 RSB Conservation Impact Assessment Guidelines can be improved by including broader context to conservational aspects, including endangered species or add more references to the framework.</p>

<p>What is natural or non-natural highly biodiverse grassland?          Natural highly biodiverse grassland: Area that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes.          Non-natural highly biodiverse grassland: Area that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status          Please find more information and definitions for “Grassland”, “Human intervention” and “species-rich” in RSB Glossary.</p> <p>What are wetlands and peatlands?          Wetlands: Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres (Source: RAMSAR Convention).          Peatlands: Areas with or without vegetation with a naturally accumulated peat layer at the surface of at least 30 cm in depth (Source: EN 16214-1:2012).</p>	<p>What is natural or non-natural highly biodiverse grassland?          Natural highly biodiverse grassland: Area that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes.          Non-natural highly biodiverse grassland: Area that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status          Please find more information and definitions for “Grassland”, “Human intervention” and “species-rich” in RSB Glossary.</p> <p>What are wetlands and peatlands?          Wetlands: Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres (Source: RAMSAR Convention).          Peatlands: Areas with or without vegetation with a naturally accumulated peat layer at the surface of at least 30 cm in depth (Source: EN 16214-1:2012).</p>	
<p>7b. Ecosystem functions and services that are directly affected by the operation shall be maintained or enhanced</p>	<p>7b. Ecosystem functions and services that are directly affected by the operation shall be maintained or enhanced</p>	
<p>1. In accordance with the results of the impact assessment process, Participating Operators shall implement practices through the Environmental and Social Management Plan (ESMP) that maintain ecosystem functions and services, such as biodiversity both inside and outside the operational site, on land which is directly affected by the operations.</p>	<p>1. In accordance with the results of the impact assessment process, Participating Operators shall implement practices through the Environmental and Social Management Plan (ESMP) that maintain <b>and enhance</b> ecosystem functions and services, such as biodiversity <b>and / or carbon stocks</b> both inside and outside the operational site, on land which is directly affected by the operations.</p>	<p><a href="#">RSB-GUI-01-007-01 Improve guidance material to incorporate this concept and other relevant environmental aspects (e.g., climate change).</a></p>
<p>7c. Operations shall protect, restore or create buffer zones.</p>	<p>7c. Operations shall protect, restore, or create buffer zones.</p>	
<p>1. In accordance with the results of the impact assessment process, buffer zones, including riparian vegetation sections, shall be defined according to the region, type of terrain, wildlife and agricultural practices, protected, restored or created to avoid negative impacts from the operations on areas that are contiguous to the operation site.</p>	<p>1. In accordance with the results of the impact assessment process, buffer zones, including riparian vegetation sections, shall be defined according to the region, type of terrain, wildlife, and agricultural practices, protected, restored or created to avoid negative impacts from the operations on areas that are contiguous to the operation site.</p>	

<p>2. In accordance with the results of the impact assessment process, within the operational site, buffer zones, including riparian vegetation sections, shall be protected, restored or created to avoid negative impacts from the operations on areas that contain conservation value(s) of local, regional or global importance.</p>	<p>2. In accordance with the results of the impact assessment process, within the operational site, buffer zones, including riparian vegetation sections, shall be protected, restored, or created to avoid negative impacts from the operations on areas that contain conservation value(s) of local, regional or global importance.</p>	
<p>3. The timetable for the restoration or creation of buffer zones, including riparian vegetation sections shall be part of the ESMP.</p>	<p>3. The timetable for the restoration or creation of buffer zones, including riparian vegetation sections shall be part of the ESMP.</p>	
<p>7d. Ecological corridors shall be protected, restored or created to minimise fragmentation of habitats.</p>	<p>7d. Ecological corridors shall be protected, restored, or created to minimise fragmentation of habitats.</p>	
<p>1. Existing ecological corridors within the operational site shall be set-aside and protected with appropriate surrounding buffer zones.</p>	<p>1. Existing ecological corridors within the operational site shall be set-aside and protected with appropriate surrounding buffer zones. <a href="#">RSB-GUI-01-007-01 RSB Conservation Impact Assessment Guidelines</a> should be checked for guidance.</p>	
<p>2. Whenever the operational site impairs the connectivity between surrounding ecosystems, ecological corridors shall be created by the operator.</p>	<p>2. Whenever the operational site impairs the connectivity between surrounding ecosystems, ecological corridors shall be created by the operator.</p>	<p>Improve guidance: <a href="#">RSB-GUI-01-007-01 RSB Conservation Impact Assessment Guidelines</a> can be improved by including an improved methodological approach to “connectivity” and “ecological corridor creation”.</p>
<p>3. New ecological corridors shall be created within the operation site if it is surrounded by areas containing wildlife and there is evidence that such corridors would improve connectivity.</p>	<p>3. New ecological corridors shall be created within the operation site if it is surrounded by areas containing wildlife and there is evidence that such corridors would improve connectivity.</p>	
<p>4. Any ecological corridor destroyed after 1st of January 2004 on or near the operation site and for which the Participating Operator is directly accountable shall be restored.</p>	<p>4. Any ecological corridor destroyed after 1st of January 2004 on or near the operation site and for which the Participating Operator is directly accountable shall be restored.</p>	
<p>7e. Operations shall prevent invasive species from invading areas outside the operation site.</p>	<p>7e. Operations shall prevent invasive species from invading <a href="#">or spreading into</a> areas <a href="#">inside and / or</a> outside the operation site.</p>	
<p>1. Operators shall not use any species officially prohibited in the country of operation.</p>	<p>1. Operators shall not use any species officially prohibited in the country of operation, <a href="#">and shall put in place a system to monitor, control and minimize the spread of introduced invasive species and new pests.</a> Operators shall follow official requirements and recommendations in place to <a href="#">identify and monitor introduced invasive species and new pests, or monitor severe outbreaks of existing pests, contributing to minimize their spread.</a></p>	

<p>2. If the species of interest is not prohibited in the country of operation, operators shall seek adequate information about the invasiveness of the species to be used for feedstock production, e.g., in the Global Invasive Species Database (GISD)13.</p>	<p>2. If the species of interest is not prohibited in the country of operation <b>or no official system for the species identification and monitoring is in place</b>, operators shall seek adequate information about the invasiveness of the species to be used for feedstock production <b>or for any other operational purposes</b> (e.g. in the Global Invasive Species Database - (GISD)13. <b>In cases where the operator has identified a new pest or invasive species, or has detected severe outbreaks of existing pests, the operator shall report these findings to the relevant authorities and organisations.</b></p>	
<p>3. If the species is recorded as highly invasive under similar conditions (similar climate, and similar local ecosystems, and similar soil types), this species shall not be used.</p>	<p>3. If the species is recorded as highly invasive under similar conditions (similar climate, and similar local ecosystems, and similar soil types), this species shall not be used.</p>	
<p>4. If the species has not been recorded as representing a high risk of invasiveness under similar conditions (climate, local ecosystems, soil type), operators shall follow the specific steps:</p> <p>1) During the feedstock selection and development, operators shall conduct a Weed Risk Assessment (WRA) to identify the potential threat of invasion. If the species is deemed highly invasive after the Weed Risk Assessment, this species shall not be used.</p> <p>2) During feedstock production, operators shall set up a management plan, which includes cultivation practices that minimise the risks of invasion, immediate mitigation actions (eradication, containment or management) in case of escape of a plant species outside the operation site (possibly through the provision of a specific fund), as well as a monitoring system that checks for escapes and the presence of pests and pathogens outside the operation site.</p> <p>3) During harvesting, processing, transport and trade, operators shall contain propagules in an appropriate manner on site and during transport.</p>	<p>4. <b>In cases where the operator intends to introduce a new species for feedstock production purposes, and <del>if</del> the species has not <del>yet</del> been recorded as representing a high risk of invasiveness under similar conditions (climate, local ecosystems, soil type), operators shall follow the specific steps:</b></p> <p><b>1 a)</b> During the feedstock selection and development, operators shall conduct a Weed Risk Assessment (WRA) to identify the potential threat of invasion. If the species is deemed highly invasive after the Weed Risk Assessment, this species shall not be used.</p> <p><b>2 b)</b> During feedstock production, operators shall set up a management plan, which includes cultivation practices that minimise the risks of invasion, immediate mitigation actions (eradication, containment or management) in case of escape of a plant species outside the operation site (possibly through the provision of a specific fund), as well as a monitoring system that checks for escapes and the presence of pests and pathogens outside the operation site.</p> <p><b>3 c)</b> During harvesting, processing, transport and trade, operators shall contain propagules in an appropriate manner on site and during transport.</p>	
<p><b>Principle 8: Soil   Operations shall implement practices to maintain or enhance soil's physical, chemical, and biological conditions.</b></p>	<p><b>Principle 8: Soil   Operations shall implement practices to maintain or enhance soil's physical, chemical, and biological conditions.</b></p>	

<p>8a. Operators shall implement practices to maintain or enhance soil's physical, chemical, and biological conditions.</p>	<p>8a. Operators shall implement practices to maintain or enhance soil's physical, chemical, and biological conditions.</p>	<p>Include improvements in: RSB-GUI-01-008-01-RSB Soil Impact Assessment Guidelines_3.0, by considering other key soil resources to build on existing guidelines Use additional external references to benchmark or recognize other approaches for soil conservation. Additionally, include criteria in the RSB checklist, with reference documents.</p>
<p>1. Soil erosion shall be minimised through the design of the feedstock production site and use of sustainable practices in order to enhance soil physical health on a watershed scale.</p>	<p>1. Soil <b>wind and water</b> erosion shall be minimised through the design of the feedstock production site and use of sustainable practices in order to enhance soil physical health on a watershed scale <b>or to the scope determined in the ESMP.</b></p>	
<p>2. Operators shall implement practices to protect soil structure, including the prevention of compaction, and maintain or enhance soil organic matter on the feedstock production site.</p>	<p>2. Operators shall implement practices <b>(in accordance with RSB-GUI-01-008-01)</b> to protect soil structure, including the prevention <b>and mitigation</b> of compaction, <b>erosion, and degradation</b>, and <b>that</b> maintain or enhance soil organic matter, <b>carbon sequestration and overall soil fertility and biological activity</b> on the feedstock production site.</p>	<p>Expand existing RSB-GUI-01-008-01 to include all the above-mentioned aspects, implement a soil carbon estimation methodology (e.g., embed / adopt IPCC estimation methodology). Resources other than IPCC to use as a basis for improved Guidance include Comet-Farm tool and the RothC model, the Argonne National Lab that started embedding soil carbon into GREET calculations, FAO document on measuring and modelling soil carbon, the climate modelling and farm-level vulnerability assessments, and the WCRP Coupled Model Intercomparison Project (CMIP). Develop indicators for improved guidance and biological activity. Soil organic matter (including soil carbon) maintenance and enhancement is a complex and timely theme, warranting a separate topic with specific guidelines.</p>

<p>3. The use of agrarian and forestry residual products for feedstock production, including lignocellulosic material, shall not be at the expense of long-term soil stability and organic matter content.</p>	<p>3. The use of agrarian and forestry residual products for feedstock production, including lignocellulosic material, shall not be at the expense of long-term soil <b>fertility (including, but not limited to, structural stability and organic matter, nutrient cycling, water retention capacity content, soil temperature etc.)</b>. Follow RSB-SA-01 Standard Amendment for Woody Biomass and RSB-GUI-01-008-01-RSB Soil Impact Assessment Guidelines for further guidance.</p>	<p>Expand RSB-SA-01 or convert RSB-SA-01 into compliance guidelines indicating use of other biomass materials labelled as “residues” other than forestry residues are used sustainably and traced back to origin effectively. Additionally, include in the guidance, rigorous language about the need for soil carbon conservation in instances where waste residues may be removed for use in various end products. For forestry residues the requirements of the Standard Amendment for Woody Biomass shall be implemented. Include improvements in the RSB soil guidelines RSB-GUI-01-008-01-RSB Soil Impact Assessment Guidelines_3.0. Include aspects of crop residue removal, which can be partially compensated by organic amendments such as compost, manure, biosolids and agro-industrial waste/residues/byproducts.</p>
<p>4. Operators shall implement practices to maintain and improve the soil nutrient balance and reduce nitrate pollution.</p>	<p>4. Operators shall implement practices to maintain and improve the soil nutrient <b>balance use efficiency</b> and reduce nitrate, <b>phosphate, and other chemical</b> pollution, <b>such as trace metals, agrochemicals and microplastics</b>.</p>	
<p>5. Operators shall implement measures to improve soil health, such as the following Conservation Agriculture practices:          -Direct seeding or planting: Involves growing crops without mechanical seedbed preparation and with minimal soil disturbance;          -Maintenance of a permanent soil cover, by mulch or growing cover crops to protect the soil surface;          -Diversifying and fitting crop rotations and associations in the case of annual crops and plant associations in the case of perennial crops.</p>	<p>5. Operators shall implement measures to improve soil health, <b>following an agronomical analysis to be included as part of the ESMP and which includes soil types, climates, topographies, and crops</b>. Follow RSB-GUI-01-008-01-RSB Soil Impact Assessment Guidelines for guidance on topics such as: <b>Conservation Agriculture practices:</b>          -Direct seeding or planting: Involves growing crops without mechanical seedbed preparation and with minimal soil disturbance;          -Maintenance of a permanent soil cover, by mulch or growing cover crops to protect the soil surface;          -Diversifying and fitting crop rotations and associations in the case of annual crops and plant associations in the case of perennial crops.  <b>-Implementation of crop-livestock and/or silvopastoral integrated systems.</b></p>	<p>Expand RSB-GUI-01-008-01 to include other conservation or agricultural approaches to soil health.</p>

<p>6. Where the screening exercise has triggered the need for a Soil Impact Assessment (RSB-GUI-01-008-01), operators shall:</p> <ul style="list-style-type: none"> <li>-Develop a soil management plan as part of the Environmental and Social Management Plan (ESMP).</li> <li>-Perform periodic sampling of soil on the feedstock production site to evaluate the effect of the soil management plan on the organic matter content. Where the practices included in the soil management plan are not seen during monitoring to maintain soil organic matter at the optimal level, alternative practices shall be investigated.</li> </ul>	<p>6. Biomass producers shall develop a Soil Management Plan adapted to the production plan, local agroecological and soil conditions. Where the screening exercise has triggered the need for a Soil Impact Assessment (RSB-GUI-01-008-01), operators shall:</p> <ul style="list-style-type: none"> <li>a) Develop and implement a soil management plan as part of the Environmental and Social Management Plan (ESMP), which demonstrates continuous improvement of soil parameters overtime.</li> <li>b) Perform periodic sampling of soil on the feedstock production site to evaluate the effect of the soil management plan on the content of organic matter <del>content</del> and other soil quality parameters (e.g. C/N, N%, P%, etc.). <del>Where</del> If the practices included in the soil management plan <del>are not seen during monitoring</del> do not show evidences or positive effects to maintain soil organic matter and other key soil quality indicators (i.e. as defined in the Soil Management Plan) at the optimal level during the monitoring process, alternative practices shall be investigated and implemented to assure improved results overtime.</li> <li>c) Efforts that produce increased Organic Matter content, should be accompanied by appropriate nutrient management, to avoid unintended negative consequences such as increased GHG emissions.</li> </ul>	<p>Improve and update Soil Risk Assessment tool taking into account new edits, for example what is required for an appropriate soil sampling methodology, e.g. what is the periodic frequency, how to obtain samples at field level and what aspects (i.e. nutrients) need to be tested.</p> <p>Add a footnote including: end products (packaging, foodservice ware, textiles if applicable) containing PFAS or PFAS coating, will not be considered under RSB certification.</p>
<p>What is Conservation Agriculture? Conservation Agriculture (CA) is an approach to managing agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the resources base and the environment. CA principles are universally applicable to all agricultural landscapes and land uses with locally adapted practices. Read more here: <a href="http://www.fao.org/ag/ca/1a.html">http://www.fao.org/ag/ca/1a.html</a></p>	<p>What is Conservation Agriculture? Conservation Agriculture (CA) is an approach to managing agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the resources base and the environment. CA principles are universally applicable to all agricultural landscapes and land uses with locally adapted practices. Read more here: <a href="http://www.fao.org/ag/ca/1a.html">http://www.fao.org/ag/ca/1a.html</a></p>	<p>Improve other resources</p>
<p><b>Principle 9: Water   Operations maintain or enhance the quality and quantity of surface and groundwater resources, and respect prior formal or customary water rights.</b></p>	<p><b>Principle 9: Water   Operations maintain or enhance the quality and quantity of surface and groundwater resources, and respect prior formal or customary water rights.</b></p>	
<p>9a. Operations shall respect the existing water rights of local and indigenous communities.</p>	<p>9a. Operations shall respect the existing water rights of local and Indigenous communities.</p>	
<p>1. The use of water for the operations shall not be at the expense of the water needed by the communities that rely on the same water source(s) for subsistence.</p>	<p>1. The use of water for the operations shall not be at the expense of the water needed by the communities that rely on the same water source(s) for subsistence.</p>	
<p>2. The operator shall assess the potential impacts of the operations on water availability within the local community</p>	<p>2. The operator shall assess the potential impacts of the operations on water availability within the local community</p>	

<p>and ecosystems during the screening exercise of the impact assessment process and mitigate any negative impacts.</p>	<p>and ecosystems during the screening exercise of the impact assessment process and mitigate any negative impacts.</p>	
<p>3. Water resources under legitimate dispute shall not be used for the operations until any legitimate disputes have been settled through negotiated agreements with affected stakeholders - following a free, prior and informed consent (as described in 2a and its guidance) enabling process.</p>	<p>3. Water resources under legitimate dispute shall not be used for the operations until any legitimate disputes have been settled through negotiated agreements with affected stakeholders - following a free, prior, and informed consent (as described in 2a and its guidance) enabling process.</p>	
<p>4. Where the screening exercise has triggered the need for a Water Assessment (RSB-GUI-01-009-01), operators shall:</p> <ul style="list-style-type: none"> <li>-Identify downstream or groundwater users and determine the formal or customary water rights that exist.</li> <li>-Evaluate and document the potential impacts of the operations on formal or customary water rights that exist.</li> <li>-Respect and protect all formal or customary water rights that exist through the Environmental and Social Management Plan (ESMP) to prevent infringement of such rights. No modification of the existing rights can happen without the Free Prior and Informed Consent (as described in 2a and its guidance) of the parties affected.</li> </ul>	<p>4. Where the screening exercise has triggered the need for a Water Assessment (RSB-GUI-01-009-01), operators shall:</p> <ul style="list-style-type: none"> <li>-Identify downstream or groundwater users and determine the formal or customary water rights that exist.</li> <li>-Evaluate and document the potential impacts of the operations on formal or customary water rights that exist.</li> <li>-Respect and protect all formal or customary water rights that exist through the Environmental and Social Management Plan (ESMP) to prevent infringement of such rights. No modification of the existing rights can happen without the Free Prior and Informed Consent (as described in 2a and its guidance) of the parties affected.</li> </ul>	
<p>9b. Operations shall include a water management plan which aims to use water efficiently and to maintain or enhance the quality of the water resources that are used for the operations.</p>	<p>9b. Operations shall include a water management plan which aims to use water efficiently and to maintain or enhance the quality of the water resources that are used for the operations.</p>	
<p>1. Operators shall develop and implement a water management plan and integrate it into the Environmental and Social Management Plan (ESMP).</p>	<p>1. Operators shall develop and implement a water management plan based on <a href="#">Circular Economy principles</a> and integrate it into the Environmental and Social Management Plan (ESMP). <a href="#">Water management resources and guidelines for water footprint calculation</a> are encouraged to be used and integrated to the ESMP.</p>	<p>Include development or adoption of water management and water footprint calculation resources (e.g. <a href="https://waterfootprint.org/en/resources/interactive-tools/">https://waterfootprint.org/en/resources/interactive-tools/</a>), which address Circular Economy Strategies that help to address efficient use of water, such as: 1. Reduction of water usage; 2. Reuse: optimization of water usage; 3. Recycle water (water treatment) to be used for the same or other purposes; 4. Cascading: water (whether untreated or treated) can be used again and again in multiple stages of industrial and domestic processes.</p>

<p>2. The water management plan shall contain good water management practices to optimise water use, including:          -For rain-fed crops: practices that ensure that rain water is captured and used (e.g. use of cover crops, retaining crop stubble, etc.).          -For irrigated crops: practices that ensure good management of storage and delivery systems (e.g.; application of water saving irrigation techniques).          -The operator shall implement water-saving practices to increase the efficiency of the water use and reduce the amount of water used and/or wasted.</p>	<p>2. The water management plan shall contain good water management practices to optimise water use, including:  <b>a)</b> For rain-fed crops: practices that ensure that rain water is captured and used (e.g. use of cover crops, retaining crop stubble, etc.).  <b>b)</b> For irrigated crops: practices that ensure good management of storage and delivery systems (e.g.; application of water saving irrigation techniques).  <b>c)</b> The operator shall implement water-saving practices to increase the efficiency of the water use and reduce the amount of water used and/or wasted.  <b>d)</b> The water management plan shall include key performance monitoring indicators that assess different water parameters and variables associated to the operation’s water usage, including aspects of usage related to water quantity and quality.</p>	
<p>3. The water management plan shall be made available to the public, unless limited by national law or international agreements on intellectual property.</p>	<p>3. The water management plan shall be made available to the public, unless limited by national law or international agreements on intellectual property.</p>	
<p>4. The water management plan shall be consistent with local rainfall conditions, not contradict any local or regional water management plans, and include the neighbouring areas, which receive direct runoff from the operational site. Any negative impact on these neighbouring areas shall be mitigated.</p>	<p>4. The water management plan shall be consistent with local rainfall conditions, not contradict any local or regional water management plans, and include the neighbouring areas, which receive direct runoff from the operational site. Any negative impact on these neighbouring areas shall be mitigated.</p>	
<p>5. The operator shall undertake annual monitoring of the effectiveness of the water management plan.</p>	<p>5. The operator shall undertake annual monitoring of the effectiveness of the water management plan.</p>	
<p>6. The water management plan shall include steps for reusing or recycling wastewater, appropriate to the scale and intensity of operation.</p>	<p>6. The water management plan shall include steps for reusing or recycling wastewater, appropriate to the scale and intensity of operation.</p>	
<p>9c. Operations shall not contribute to the depletion of surface or groundwater resources beyond replenishment capacities.</p>	<p>9c. Operations shall not contribute to the depletion of surface or groundwater resources beyond replenishment capacities.</p>	
<p>1. Water used for the operations shall not be withdrawn beyond replenishment capacity of the water table, watercourse, or reservoir from which the water comes.</p>	<p>1. Water used for the operations shall not be withdrawn beyond replenishment capacity of the water table, watercourse, or reservoir from which the water comes.</p>	
<p>2. Irrigated crops and freshwater intensive operations systems shall not be established in long-term freshwater stressed areas, unless the implementation of:          -good practices or;          -an adequate mitigation process that does not contradict other requirements in this standard ensures that the water level remains stable.</p>	<p>2. Irrigated crops and freshwater intensive operations systems shall not be established in long-term freshwater stressed areas, unless the implementation of:  <b>a)</b> good practices <b>is assured</b>, or;  <b>b)</b> an adequate mitigation process that does not contradict other requirements in this standard ensures that the water level remains stable.</p>	

<p>3. Operators shall not withdraw water from natural watercourses to the extent that it modifies its natural course or the physical, chemical and biological equilibrium it had before the beginning of operations.</p>	<p>3. Operators shall not withdraw water from natural watercourses to the extent that it modifies its natural course or the physical, chemical, and biological equilibrium it had before the beginning of operations.</p>	
<p>4. Where the screening exercise has triggered the need for a Water Assessment (RSB-GUI-01-009-01), operators shall:</p> <ul style="list-style-type: none"> <li>-Identify critical aquifer recharge areas, replenishment capacities of local water tables, watercourses, and ecosystem needs. The potential impacts of operations on any of these aspects shall be evaluated, and any negative impacts mitigated.</li> <li>-Define the use and share of water resources for operations in agreement with local experts and the community; any water-user committees shall be consulted.</li> </ul>	<p>4. Where the screening exercise has triggered the need for a Water Assessment (RSB-GUI-01-009-01), operators shall:</p> <ul style="list-style-type: none"> <li>a) Identify critical aquifer recharge areas, replenishment capacities of local water tables, watercourses, and ecosystem needs. The potential impacts of operations on any of these aspects shall be evaluated, and any negative impacts mitigated.</li> <li>b) Define the use and share of water resources for operations in agreement with local experts and the community; any water-user committees shall be consulted.</li> </ul>	
<p>9d. Operations shall contribute to the enhancement or maintaining of the quality of the surface and groundwater resources.</p>	<p>9d. Operations shall contribute to the enhancement or maintaining of the quality of the surface and groundwater resources.</p>	
<p>1. Operations shall not occur on a critical aquifer recharge area without a specific authorisation from legal authorities.</p>	<p>1. Operations shall not occur on a critical aquifer recharge area without a specific authorisation from legal authorities.</p>	
<p>2. Operators shall implement the best available practices which aim to maintain or enhance the quality of surface and groundwater resources that are used for the operations to the level deemed optimal for the local system for sustained water supply, ecosystem functioning and ecological services.</p>	<p>2. Operators shall implement the best available practices which aim to maintain or enhance the quality of surface and groundwater resources that are used for the operations to the level deemed optimal for the local system for sustained water supply, ecosystem functioning and ecological services.</p>	
<p>3. Adequate precautions shall be taken to contain effluents and avoid runoffs and leaching and contamination of surface and groundwater resources, in particular from chemicals and biological agents.</p>	<p>3. Adequate precautions shall be taken to contain effluents and avoid runoffs and leaching and contamination of surface and groundwater resources, in particular from chemicals and biological agents.</p>	
<p>4. Buffer zones shall be set between the operation site and surface or groundwater resources.</p>	<p>4. Buffer zones shall be set between the operation site and surface or groundwater resources.</p>	
<p>5. Where the screening exercise has triggered the need for a Water Assessment (RSB-GUI-01-009-01), Participating Operators shall determine the optimal water quality level required to sustain the system, taking into account local economic, climatic, hydrologic and ecological conditions.</p>	<p>5. Where the screening exercise has triggered the need for a Water Assessment (RSB-GUI-01-009-01), Participating Operators shall determine the optimal water quality level required to sustain the system, taking into account local economic, climatic, hydrologic and ecological conditions.</p>	
<p>6. For existing operations, degradation of water resources that occurred prior to certification and for which the Participating Operator is directly accountable shall be reversed. Wherever applicable, operators (except small-scale operators) shall participate in projects that aim to improve water quality at a watershed scale.</p>	<p>6. For existing operations, degradation of water resources that occurred prior to certification and for which the Participating Operator is directly accountable shall be reversed. Wherever applicable, operators (except small-scale operators) shall participate in projects that aim to improve water quality at a watershed scale.</p>	

<p>7. Wastewater or runoff that contains potential organic and mineral contaminants shall be treated or recycled to prevent any negative impact on humans, wildlife, and natural compartments (water, soil).</p>	<p>7. Wastewater or runoff that contains potential organic and mineral contaminants shall be treated or recycled to prevent any negative impact on humans, wildlife, and natural compartments (water, soil).</p>	<p>Suggestion to make this a section of its own under P9 water management with accompanying guidance specific to industrial sites and to agricultural sites but with separate guidance. See the AWS STANDARD 2.0 GUIDANCE 01.01.20 – Section 1.3.5 Page 12.</p>
<p><b>Principle 10: Air Quality   Air pollution from the operations is minimised along the supply chain.</b></p>		
<p>10a. Air pollution emission sources from the operations shall be identified, and air pollutant emissions minimised through an air management plan.</p>	<p>10a. Air pollution emission sources from the operations shall be identified, and air pollutant emissions minimised through an air management plan.</p>	<p>Create an internal guideline that contains:</p> <ul style="list-style-type: none"> <li>a) Definitions on major air pollutants (outdoor) from industries, critical industrial sources, and establish limit values.</li> <li>b) Definitions for Limit Values to different type of air pollutants in outdoor emissions from industries, with priority given to industries located close to urban areas.</li> <li>c) Include a list of major air pollutant in the guideline and showcase in the P&amp;C as an annex, rather than listing in criterion 10a.1. List should include: PM2.5, PM10, O3, NOx, SOx and BaP.</li> <li>d) Use additional credible sources for guidance, such as (but not limited to) WHO or the European Directives: <ul style="list-style-type: none"> <li>• Annex II, Annex V (PARTS 1, 2, 7), Annex VI (PARTS 3, 4, 5), Annex VII (PARTS 2, 4), 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions (integrated pollution prevention and control) – Recast. List of air pollutant substances.</li> <li>• Article 6 and Annex II of the 2015/2193 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants. Includes SOx, NOx, and dust emissions into the air from medium combustion plants.</li> </ul> </li> </ul>

<p>1. An emission-control plan appropriate to the scale and intensity of operations shall be included as part of the Environmental and Social Management Plan (EMP) that identifies major air pollutants including carbon monoxide, nitrogen oxides, volatile organic compounds, particulate matter, sulphur compounds, dioxins and other substances recognised as potentially harmful for the environment or human health. The plan shall identify all potential air pollution sources and describe their nature. The plan shall describe any air pollution mitigation strategies that are employed, or else the rationale for not utilising such strategies.</p>	<p>1. An emission-control plan appropriate to the scale and intensity of operations shall be included as part of the Environmental and Social Management Plan (EMP) that identifies major air pollutants including carbon monoxide, nitrogen oxides, volatile organic compounds, particulate matter, sulphur compounds, dioxins and other substances recognised as potentially harmful for the environment or human health. The plan shall identify all potential air pollution sources and describe their nature. The plan shall describe any air pollution mitigation strategies that are employed, or else the rationale for not utilising such strategies.</p>	
<p>2. The operator shall investigate and, whenever possible in the local context, implement Best Available Technology (BAT) to reduce air pollution, appropriate to the scale and intensity of operation.</p>	<p>2. The operator shall investigate and, whenever possible in the local context, implement Best Available Technology (BAT) to reduce air pollution, appropriate to the scale and intensity of operation <b>if no regulatory requirements are stated by the regulator.</b></p>	<p>Improve the definition of BAT and provide further guidance where P.O.s can find a list of accepted or suggested technologies, including for measuring emissions, mitigating emissions, including performance indicators and targets, etc. Additionally, develop a joint water and air RSB Guideline, using and updating existing RSB-GUI-01-009-01_RSB Water Assessment Guidelines_3.0_ to produce a joint "RSB-GUI-01-009-02_RSB Water and Air Assessment Guidelines".</p>
<p>10b. Operations shall avoid and, where possible, eliminate open-air burning of residues, wastes or by-products, or open air burning to clear the land.</p>	<p>10b. Operations shall avoid and, where possible, eliminate open-air burning of residues, wastes or by-products, or open air burning to clear the land.</p>	
<p>1. A plan shall be put in place to phase out any open-air burning of leaves, straw and other agricultural residues within three years following certification. If workers' health and safety is at stake or when no viable alternative is available or affordable in the local context, if burning may prevent natural fires, or if the cultivation of the crop periodically requires burning for viability in the long-term without any equivalent alternatives, limited open-air burning practices may occur.</p>	<p>1. A plan shall be put in place to phase out any open-air burning of leaves, straw and other agricultural residues within three years following certification. If workers' health and safety is at stake or when no viable alternative is available or affordable in the local context, if burning may prevent natural fires, or if the cultivation of the crop periodically requires burning for viability in the long-term without any equivalent alternatives, limited open-air burning practices may occur.</p>	
<p>2. Open air burning of agricultural residues and by-products shall not occur following the phase-out plan (10b.1).</p>	<p>2. Open air burning of agricultural residues and by-products shall not occur following the phase-out plan (10b.1).</p>	
<p><b>Principle 11: Use of Technology, Inputs, and Management of Waste   The use of technologies in operations seeks to maximise production efficiency and social and environmental performance and</b></p>	<p><b>Principle 11: Use of Technology, Inputs, and Management of Waste   The use of technologies in operations seeks to maximise production efficiency, <b>boosting circular economy</b> and social and environmental</b></p>	

minimise the risk of damages to the environment and people.
11a. Information on the use of technologies in operations shall be fully available, unless limited by national law or international agreements on intellectual property.
1. When complying with and auditing against this criterion, proprietary technology shall be protected from competitors and intellectual property rights shall be respected
2. The operator shall disclose technologies with hazardous or potentially hazardous effects when such technology is used and make this information available to the public upon request.
11b. The technologies used in operations including genetically modified plants, micro-organisms, and algae, shall minimise the risk of damages to environment and people, and improve environmental and/or social performance over the long term.
1. The use of genetically modified organisms shall follow relevant national or international guidelines, laws and agreements, crop-specific stewardship systems, and local and community coexistence agreements or understandings.
2. The operator shall demonstrate that the use of genetically modified plants has clear environmental or social benefits compared to non-GMO alternatives, e.g., grow on non-fertile soil or reduced inputs (water, fertiliser, pesticides). The use of genetically modified plant shall not result in an increased use of pesticides.
3. For new operations, operators shall provide evidence that the hazardous technologies they use do not contradict any of the RSB principles and criteria before the beginning of operations.
4. Operators using GMOs shall take measures to prevent migration of genetically modified material and shall cooperate with neighbours, regulatory and conservation authorities, and local stakeholders to implement monitoring and preventative measures. Crop-specific and technology specific mitigation strategies shall be utilised.

performance, and minimise the risk of damages to the environment and people.
11a. Information on the use of technologies in operations shall be fully available, unless limited by national law or international agreements on intellectual property.
1. When complying with and auditing against this criterion, proprietary technology shall be protected from competitors and intellectual property rights shall be respected
2. The operator shall disclose technologies with hazardous or potentially hazardous effects when such technology is used and make this information available to the public upon request.
11b. The technologies used in operations including genetically modified plants, micro-organisms, <del>and</del> algae, <del>and</del> other biological or non-biological tools (e.g., agrochemicals), shall minimise the risk of damages to the environment and people, <del>and</del> promoting and implementing circular economy strategies and shall improve the operations environmental and/or social performance over the long term.
1. The use of genetically modified organisms shall follow relevant national or international guidelines, laws and agreements, crop-specific stewardship systems, and local and community coexistence agreements or understandings.
2. The operator shall demonstrate that the use of genetically modified plants has clear environmental or social benefits compared to non-GMO alternatives, e.g., grow on non-fertile soil or reduced inputs (water, fertiliser, pesticides). The use of genetically modified plant shall not result in an increased use of pesticides.
3. For new operations, operators shall provide evidence that the hazardous technologies they use do not contradict any of the RSB principles and criteria before the beginning of operations.
4. Operators using GMOs shall take measures to prevent migration of genetically modified material and shall cooperate with neighbours, regulatory and conservation authorities, and local stakeholders to implement monitoring and preventative measures. Crop-specific and technology specific mitigation strategies shall be utilised.

<p>5. The Biosafety Clearing-House established under the Cartagena Protocol on Biosafety, or any other such clearinghouse established by law, shall be consulted before providing information about specific GMOs, including related risk and countries' decisions regarding that technology.</p>	<p>5. The Biosafety Clearing-House established under the Cartagena Protocol on Biosafety, or any other such clearinghouse established by law, shall be consulted before providing information about specific GMOs, including related risk and countries' decisions regarding that technology.</p>	
<p>6. For new operations, feedstock producers shall use indigenous crops whenever alternative crops reduce yield and/or environmental and/or social performance compared to indigenous crops.</p>	<p>6. For new operations, feedstock producers shall use indigenous crops whenever alternative crops reduce yield and/or environmental and/or social performance compared to indigenous crops.</p>	
<p>11c. Micro-organisms used in operations which may represent a risk to the environment or people shall be adequately contained to prevent release into the environment.</p>	<p>11c. Micro-organisms used in operations which may represent a risk to the environment or people shall be adequately contained to prevent release into the environment.</p>	
<p>1. In no case shall genetically modified microorganisms or any micro-organisms that pose a risk (pathogenic, mutagenic, contaminant, etc.) to human health or the environment be released outside the processing / production unit. Any such organism used for processing shall be destroyed or adequately neutralised (i.e., loss of any potentially hazardous character) before being disposed of.</p>	<p>1. In no case shall genetically modified microorganisms or any micro-organisms that pose a risk (pathogenic, mutagenic, contaminant, etc.) to human health or the environment be released outside the processing / production unit. Any such organism used for processing shall be destroyed or adequately neutralised (i.e., loss of any potentially hazardous character) before being disposed of.</p>	
<p>2. Operators using such technologies shall include as part of their ESMP a plan that includes adequate monitoring and an emergency procedure in case of accidental dissemination of any such micro-organisms into the environment.</p>	<p>2. Operators using such technologies shall include as part of their ESMP a plan that includes adequate monitoring and an emergency procedure in case of accidental dissemination of any such micro-organisms into the environment.</p>	
<p>11d. Good practices shall be implemented for the storage, handling, use, and disposal of biofuels, fertilisers and chemicals.</p>	<p>11d. Good practices shall be implemented for the storage, handling, use, and disposal of biofuels, fertilisers, and chemicals.</p>	
<p>1. The operator shall implement and monitor Integrated Pest Management techniques (IPM) that are adequate for the target crop to reduce the development of pest populations and minimise risks to human health and the environment.</p>	<p>1. The operator shall implement and monitor Integrated Pest Management techniques (IPM) that are adequate for the target crop to reduce the development of pest populations and minimise risks to human health and the environment. <b>In the case of use of biological control agents, these are documented, monitored, and controlled in accordance with national laws and internationally accepted scientific protocols and a history of all use of biological control agents is maintained.</b></p>	

<p>2. None of the chemicals recorded in the WHO's 1a and 1b lists shall be used. The use of chemicals recorded in Annex III of the Rotterdam Convention, in the Stockholm Convention on Persistent Organic Pollutants (POPs) and the Montreal Protocol on Substances that Deplete the Ozone Layer shall be listed (type and annual volume used) and a plan to phase out any such chemical over the three years following certification shall be described in the ESMP.</p>	<p>2. None of the chemicals recorded in the WHO's 1a and 1b lists shall be used. The use of chemicals recorded in Annex III of the Rotterdam Convention, in the Stockholm Convention on Persistent Organic Pollutants (POPs) and the Montreal Protocol on Substances that Deplete the Ozone Layer shall be listed (type and annual volume used) and a plan to phase out any such chemical over the three years following certification shall be described in the ESMP.</p>	
<p>3. Manufacturer's safety instructions for the storage, handling, use, and disposal of chemicals shall be followed.</p>	<p>3. Manufacturer's safety instructions for the storage, handling, use, and disposal of chemicals shall be followed.</p>	
<p>4. Records of the pesticides use shall be kept, including at least the justification why the application is needed, the name of the pest treated, the product specification of the pesticide, the content of active ingredients, the amount applied per ha, location, date, target crop and number of applications).</p>	<p>4. Records of the pesticides use shall be kept, including at least the justification why the application is needed, the name of the pest treated, the product specification of the pesticide, the content of active ingredients, the amount applied per ha, location, date, target crop and number of applications).</p>	
<p>5. The handling, storage and disposal of pesticides shall comply with the FAO's Guidelines on Good Practices for Ground and Aerial Applications of Pesticides<sup>15</sup></p>	<p>5. The handling, application, storage, transportation and disposal of pesticides and their containers shall comply with the FAO's Guidelines on Good Practices for Ground and Aerial Applications of Pesticides<sup>15</sup>, including different aspects such as:</p> <ul style="list-style-type: none"> <li>a) assure use of safety equipment and protective gear (e.g. gloves, mouthpiece, protective eyewear, etc.);</li> <li>b) observe recommended safety distances for application near urban or peri-urban areas, or near critical facilities (e.g. rural schools or other sensitive infrastructure);</li> <li>c) observe recommended safety distances for application near water bodies or other sensitive ecological or conservation areas;</li> <li>d) observe required environmental and weather conditions for an effective and safe application (i.e.; including temperature, wind velocity, relative air humidity, etc.);</li> <li>e) check adequate working conditions of application equipment (e.g. nozzles, hoses, containers, etc.);</li> <li>f) use signage and / or different communication mechanisms to alert the community of application activities and identify applied field-plots;</li> <li>g) agrochemical containers are safely disposed of, reused or recycled.</li> </ul>	
<p>6. Fertilisers shall be stored in a safe and secure way for humans and the environment.</p>	<p>6. Fertilisers shall be transported and stored in a safe and secure way for humans and the environment.</p>	

<p>7. None of the chemicals recorded in Annex III of the Rotterdam Convention, in the Stockholm Convention on Persistent Organic Pollutants or the Montreal Protocol on Substances that Deplete the Ozone Layer shall be used within three years after certification.</p>	<p>7. None of the chemicals recorded in Annex III of the Rotterdam Convention, in the Stockholm Convention on Persistent Organic Pollutants or the Montreal Protocol on Substances that Deplete the Ozone Layer shall be used within three years after certification.</p>	
<p>8. The operator should use waste and co-products for a material purpose or for energy generation. Operators shall use waste and/or co-products for energy generation only if: - the use for material purposes is not possible (e.g., no market is accessible), - the use is in line with RSB Principle 10 (Air Quality) and the use provides a greenhouse gas benefit in comparison to the alternative.</p>	<p>8. The operator should use waste and co-products for a material purpose or for energy generation. Operators shall use waste and/or co-products for energy generation only if: <b>a)</b> the use for material purposes is not possible (e.g., no market is accessible), <b>b)</b> the use is in line with RSB Principle 10 (Air Quality) and the use provides a greenhouse gas benefit in comparison to the alternative.</p>	
<p>11e. Residues, wastes and by-products from feedstock processing and biofuel or biomaterial production units shall be managed such that soil, water and air's physical, chemical, and biological conditions are not damaged.</p>	<p>11e. Residues, wastes and by-products from feedstock processing and biofuel or biomaterial production units shall be managed such that soil, water and air's physical, chemical, and biological conditions are not damaged.</p>	
<p>1. A waste and by-product management plan shall be included in the ESMP to ensure that wastes and by-products are handled and/or disposed of in appropriate containers and to prevent any environmental contamination and damage to human health.</p>	<p>1. A waste and by-product management plan shall be included in the ESMP to ensure that wastes and by-products are handled and/or disposed of in appropriate containers and to prevent any environmental contamination and damage to human health.</p>	
<p>2. These products shall not be in direct contact with soils, water sources and air outside the processing and production units unless their innocuousness to the environment and people is officially stated by manufacturers or the country or regional (e.g., EU, ASEAN, ALENA) guidelines. In all other cases, handling and disposal must follow the manufacturer's recommendation and the country or regional (e.g., EU, ASEAN, ALENA) guidelines.</p>	<p>2. These products shall not be in direct contact with soils, water sources and air outside the processing and production units, unless their innocuousness to the environment and people is officially stated by manufacturers or the country or regional (e.g., EU, ASEAN, ALENA) guidelines. In all other cases, handling and disposal must follow the manufacturer's recommendation and the country or regional (e.g., EU, ASEAN, ALENA) guidelines.</p>	
<p>3. For new and expanding operations, the design of operations shall integrate the necessary infrastructure for safe burning of processing waste and by-products in line with criterion 10b.</p>	<p>3. For new and expanding operations, the design of operations shall integrate the necessary infrastructure for safe burning of processing waste and by-products in line with criterion 10b.</p>	
<p>4. For existing operations, a strategy shall be set to develop the necessary infrastructures for safe burning of waste and by-products in line with criterion 10b.</p>	<p>4. For existing operations, a strategy shall be set to develop the necessary infrastructures for safe burning of waste and by-products in line with criterion 10b.</p>	
<p>5. Measures shall be taken to implement clean and efficient processes for conversion of residues, wastes or by-products into energy appropriate to the scale and intensity of the operation. Such processes shall always occur in an appropriate facility to minimise air pollution from</p>	<p>5. Measures shall be taken to implement clean and efficient processes for conversion of residues, wastes or by-products into energy appropriate to the scale and intensity of the operation. Such processes shall always occur in an appropriate facility to minimise air pollution from substances</p>	

<p>substances recognised as potentially harmful for the environment or human health. Solid residues from fermentation or burning shall be disposed of such that soil and water conditions are not damaged or according to national regulations.</p>	<p>recognised as potentially harmful for the environment or human health. Solid residues from fermentation or burning shall be disposed of such that soil and water conditions are not damaged or according to national regulations.</p>	
<p>6. For medium and large-scale operators, by-products or wastes shall also be reused by the processing/production unit or transferred to other sectors whenever their use may improve the overall system's energy balance, greenhouse gas emissions, and/or economic viability without impairing the other principles and criteria in this standard.</p>	<p>6. For medium and large-scale operators, by-products or wastes shall also be reused by the processing/production unit or transferred to other sectors following <a href="#">Circular Economy criteria (e.g., recycling, reuse of products / materials)</a>. This should be implemented whenever their use may improve the overall system's energy balance, greenhouse gas emissions, and/or economic viability without impairing the other principles and criteria in this standard.</p>	
	<p><a href="#">Criteria 11.f. Introduction of new technology which enables continuous improvement in social and environmental performance shall be encouraged, when and if appropriate security measures are taken prior and during their use.</a></p>	
	<p><a href="#">11.f.1 New technologies introduced to optimise and enable continuous environmental and social performance, will have a prior risk assessment and mitigation analysis to assure security measures before and during the adoption have been taken. Prior to the implementation of the technology, stakeholder consultation will be implemented as part of the ESMP stakeholder engagement process.</a></p>	

<b>Principle 12: Land Rights   Operations respect land rights and land-use rights.</b>
12a. Existing land rights and land-use rights, both formal and informal, shall be assessed, documented, and established. The right to use land for the operations shall be established only when these rights are determined.
1. Where the screening exercise of the RSB impact assessment process reveals a negative impact to existing land rights and land-use rights by the operations, the operator shall conduct a Land Rights Assessment (RSB-GUI- 01-012-01).
2. Land under legitimate dispute shall not be used for operations until any legitimate disputes have been settled through Free, Prior and Informed Consent and negotiated agreements with affected land users.
12b. Free, Prior, and Informed Consent shall form the basis for all negotiated agreements for any compensation, acquisition, or voluntary relinquishment of rights by land users or owners for operations.
1. No involuntary resettlement shall be allowed for biofuel, biomaterial or biomass operations.
2. The Impact Assessment Guidelines (RSBGUI- 01-002-01) shall be referred to for guidance on Free Prior and Informed Consent.

<b>Principle 12: Land Rights   Operations respect land rights and land-use rights.</b>
11.f.2 New technology adoption will have an adequate management system, including monitoring and performance evaluation as part of the ESMP and ESMP monitoring process.
12a. Existing land rights and land-use rights, both formal and informal, shall be assessed, documented, and established. The right to use land for the operations shall be established only when these rights are determined.
1. Where the screening exercise of the RSB impact assessment process reveals a negative impact to existing land rights and land-use rights by the operations, the operator shall conduct a Land Rights Assessment (RSB-GUI-01-012-01).
2. Land under legitimate dispute shall not be used for operations until any legitimate disputes have been settled through Free, Prior and Informed Consent and negotiated agreements with affected land users.
12b. Free, Prior, and Informed Consent shall form the basis for all negotiated agreements for any compensation, acquisition, or voluntary relinquishment of rights by land users or owners for operations.
1. No involuntary resettlement shall be allowed for biofuel, biomaterial or biomass operations.
2. The Impact Assessment Guidelines (RSB-GUI-01-002-01) shall be referred to for guidance on Free Prior and Informed Consent.

<b>Principle 12: Land Rights   Operations respect land rights and land-use rights.</b>
11.f.2 New technology adoption will have an adequate management system, including monitoring and performance evaluation as part of the ESMP and ESMP monitoring process.
12a. Existing land rights and land-use rights, both formal and informal, shall be assessed, documented, and established. The right to use land for the operations shall be established only when these rights are determined.
1. Where the screening exercise of the RSB impact assessment process reveals a negative impact to existing land rights and land-use rights by the operations, the operator shall conduct a Land Rights Assessment (RSB-GUI-01-012-01).
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Improve Impact Assessment Guidelines (RSB-GUI- 01-002-01), Land Rights Assessment RSB GUI- 01-012-01, and consolidate a RSB FPIC guideline. Re-word M.R. 12.b.2. The Impact Assessment Guidelines (RSB-GUI- 01-002-01) shall be referred to for guidance on Free Prior and Informed Consent" to align to 12. a.2.
Improve Impact Assessment Guidelines (RSB-GUI- 01-002-01), Land Rights Assessment RSB GUI- 01-012-01, and consolidate a RSB FPIC guideline. Re-word M.R. 12.b.2. The Impact Assessment Guidelines (RSB-GUI- 01-002-01) shall be referred to for guidance on Free Prior and Informed Consent" to align to 12.a.2.

<p>3. Where land rights and land use rights are voluntarily relinquished and/or acquired on a willing seller-willing buyer basis, local people shall be fairly, equitably and timely compensated.</p>	<p>3. Where land rights and land use rights are voluntarily relinquished and/or acquired on a willing seller-willing buyer basis, local people shall be fairly, equitably, and timely compensated.</p>	
<p>4. Compensation for voluntary relinquishment and/or acquisition shall include appropriate balancing measures needed to preserve the ability of the persons concerned to sustain their livelihoods in an autonomous and dignified manner.</p>	<p>4. Compensation for voluntary relinquishment and/or acquisition shall include appropriate balancing measures needed to preserve the ability of the persons concerned to sustain their livelihoods in an autonomous and dignified manner.</p>	
<p>5. Independent, qualified land valuation specialists shall be used for valuing all land and asset values.</p>	<p>5. Independent, qualified land valuation specialists shall be used for valuing all land and asset values.</p>	
<p>6. Where land is to be sold it shall be done on a willing seller/ willing-buyer basis.</p>	<p>6. Where land is to be sold it shall be done on a willing seller/ willing-buyer basis.</p>	
<p>7. Coercion to alter existing land rights or land use rights shall not be allowed in operations</p>	<p>7. Coercion to alter existing land rights or land use rights shall not be allowed in operations</p>	
<p>8. Where the rule of law is not adequately applied, international and regional legal bodies shall be consulted for rulings and information on disputes.</p>	<p>8. Where the rule of law is not adequately applied, international and regional legal bodies shall be consulted for rulings and information on disputes.</p>	
<p>9. If there are disputes about the tenure agreements of the land among stake-holders, operations shall not be certified.</p>	<p>9. If there are disputes about the tenure agreements of the land among stake-holders, operations shall not be certified.</p>	