

# Assessment of Abengoa RED Bioenergy Sustainability Assurance (RBSA) Scheme

Version as submitted 08 April 2011

## Summary

An assessment has been made on compliance of the Abengoa "RED Bioenergy Sustainability Assurance" (RBSA) Scheme as submitted to the European Commission for recognition, with the sustainability criteria of Directive 2009/28/EC.

The assessment results indicate that the RBSA scheme meets the mandatory sustainability requirements of Directive 2009/28/EC on GHG, land-use, chain of custody and audit quality.

## Scheme scope:

- All feedstocks;
- All geographic regions;
- Two options are made possible for extent of fuel chain covered (depending on decision of scheme participants):
  - from agricultural production units until biofuel conversion unit
  - from agricultural production units until final economic operator.

## Background

Abengoa Bioenergia<sup>1</sup> is a European-based biofuel producer. The company has developed the "RED Bioenergy Sustainability Assurance Scheme" (RBSA), initially intended for use by the company's own biofuel production and retail operations, but also by any economic operators interested in joining the programme.

Abengoa is seeking formal assessment and recognition by the European Commission for the RBSA Scheme, as a 'voluntary scheme' to demonstrate compliance with Articles 17(2)-17(5) of the Renewable Energy Directive (RED).

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<sup>1</sup> <http://www.abengoabioenergy.com/>

## Summary of assessment results:

The summary results of the assessment are presented in the table below. The detailed assessment results are available in Annex 1.

Table 1: Assessment results - summary

RED Article	Abengoa Bioenergy (RBSA)  Version as submitted 08 April 2011	Comments
Sustainability criteria		
17(2): Greenhouse gas emissions savings	Y	
17(3): Conservation of biodiversity	Y	
17(4): Conservation of carbon stocks	Y	
17(5): Conservation of peatlands	Y	
Chain of Custody		
18(1): Use of a mass balance system	Y	
Audit Quality		
18(3): Adequate standard of independent auditing	Y	

## Annex 1: Detailed assessment results

### Sustainability criteria

The sustainability criteria detailed below are the mandatory sustainability criteria of the RED: Article 17(2) – 17(5)). It is intended that it will be possible for a scheme to be recognised for compliance with individual Articles under the RED.

Article 17(2): Greenhouse gas emissions savings	The use and production of biofuels and bioliquids should lead to reductions in greenhouse gas emissions compared to fossil fuels	
Requirement	Guidance	Assessment
1.1 The greenhouse gas emission saving from the use of biofuels and bioliquids shall be at least 35%.	<ul style="list-style-type: none"> <li>In the case of biofuels and bioliquids produced by any installation<sup>2</sup> that was in operation on 23 January 2008, the 35% greenhouse gas saving threshold needs to apply from 1 April 2013, and may also apply before that date.</li> <li>Greenhouse gas emissions from any land-use change that has occurred since 1 January 2008 shall be taken into account in the greenhouse gas calculation, according to the methodology in the RED Annex V.</li> </ul>	<p>Y</p> <p>RBSA_001: General Scheme, section 3.3</p> <ul style="list-style-type: none"> <li>"All batches of biofuel under this scheme will have a GHG emission obtained according to Annex V of the RED and EC communications (reference 2010 / C 160 / 01, and reference 2010 / C 160 / 02) in this matter."</li> <li>Appropriate GHG saving thresholds included: "This GHG saving shall be at least 35%. With effect from January 1, 2017, the GHG emission saving shall be at least 50%. And from January 1, 2018, GHG saving shall be at least 60% for biofuels produced in facilities where production started on or after January 1, 2017."</li> <li>Grandfathering clause included (3.3). "The only</li> </ul>

<sup>2</sup> The term "installation" includes any processing installation used in the production process, as long as it has not been intentionally added to the production chain only to qualify for the exemption.

			<p>exception permitted is for those batches of biofuel with a production pathway including facilities that were in operation on January 23, 2008 (grandfathering clause), for which the 35 % saving threshold is only applicable from April 1, 2013. No RBSA claim shall be made by any facility after this date without meeting the applicable GHG threshold."</p>
<p>1.2 The greenhouse gas emission saving from the use of biofuels and bioliquids shall be calculated in accordance with RED Article 19(1)-19(3), Annex V and Commission Decision 2010/335/EU of 10 June 2010.</p>		Y	<ul style="list-style-type: none"> <li>• RBSA_003: GHG Calculation for Agricultural and Conversion Processing and Distribution</li> <li>• Methodology provided for calculation of actual values, including emissions from land use change is primarily based on the text taken from the RED and Communication.</li> <li>• However land-use change is not permitted under the RBSA scheme, so section 4 states, "Emissions from land use change (e<sub>l</sub>) do not need to be calculated and the value to be taken is zero. According to the General Scheme, reference RBSA_001, the supply chain shall prove with evidence that since 2008 no land use change between the six land categories used by the IPCC (forest land, grassland, cropland, wetlands, settlements and other land) plus a seventh category of perennial crop has occurred. Evidence can be through RBSA sustainable origin and Agricultural production unit self-declaration, both cases are subject to external verification. Emissions from the fuel in use (e<sub>u</sub>) are considered zero for biofuel and therefore not</li> </ul>

			<p>considered in the methodology.”</p> <ul style="list-style-type: none"> <li>Text states that, ‘It would not seem necessary to include in the calculation inputs throughout the supply chain, which will have little or no effect on the result. Little or no effect should be considered those with a result equal or lower than 0.4 gCO<sub>2</sub>/MJ’ (4.2).</li> <li>Transport and distribution includes any back-haulage covered by the biomass.</li> <li>Emissions at the depot and filling station are included in the GHG methodology.</li> </ul>
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Article 17(3): Conservation of biodiversity	Biofuels and bioliquids shall not be made from raw material obtained from land with high biodiversity value	
Requirement	Guidance	Assessment
2.1 Conservation of primary forest and other wooded land	<ul style="list-style-type: none"> <li>Biofuels and bioliquids shall not be made from raw material obtained from land that was primary forest or other wooded land in or after January 2008, whether or not the land continues to have that status</li> <li>Primary forest and other wooded land is defined as forest and other wooded land of native species, where there is no clearly visible indication of human</li> </ul>	<p>Y</p> <p>RSBA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>Cut-off date of January 2008 (4.2).</li> <li>4.1.1 restricts use of :“Primary forest and other (primary) wooded land, namely forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed (Art 17.3a)”</li> <li>RSBA fulfilment: The figures referring to land use established in Articles 17(3)(a) and 17(3)(c) will be</li> </ul>

	activity and the ecological processes are not significantly disturbed.		demonstrated through a comparative analysis between the initial reference year (2008) and the final reference year (4.1.1).
2.2 Conservation of protected areas	<ul style="list-style-type: none"> <li>• Biofuels and bioliquids shall not be made from raw material obtained from land that was a protected area in or after January 2008, whether or not the land continues to have that status.</li> <li>• This includes areas designated: <ul style="list-style-type: none"> <li>i) by law or by the relevant competent authority for nature protection purposes; or</li> <li>ii) for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the International Union for the Conservation of Nature, subject to their recognition in accordance with the second subparagraph of Article 18(4) of the RED;</li> </ul> </li> <li>• An exception is possible if evidence is provided that the production of that raw material did not interfere with those nature protection purposes.</li> </ul>	Y	<p>RBSA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>• Cut-off date of January 2008 (4.2).</li> <li>• 4.1.1 restricts use of nature protection areas, defined as: "Areas designated by law or by the relevant competent authorities for nature protection purposes (Art 17.3bi); or, For the protection of rare, threatened or endangered ecosystems or species recognized by international agreements, or included in lists drawn up by intergovernmental organizations or the International Union for Conservation of Nature (IUCN), subject to their recognition in accordance with the second subparagraph of Article 18, 4 (Art 17.3bii)."</li> <li>• Exception: Evidence is provided that biomass production does not interfere with nature protection purposes (4.1.1).</li> <li>• "The figures referring to protected areas established in Article 17(3)(b) will be determined through a specific biodiversity analysis considering Natura 2000, IUCN classification and national nature protection areas not contemplated in the above figures" (4.1.1).</li> <li>• 5.1.2.4 explains process for adding protected areas to RED Go area list. 5.1.2.5 explains documentary</li> </ul>

			<p>evidence requirement: "Only in the case that each sustainability criteria required by RED (Article 17(3), 17(4) and 17(5)) can be positively demonstrated with at least one or several reliable pieces of evidence from the above list would the studied region be considered a sustainable origin. Records of each piece of documentary evidence must be maintained, complying with updating requirement."</p> <ul style="list-style-type: none"> <li>• RED Article 17(3)(b)(ii) is currently an "empty" provision as the EC has not, at the time of writing, recognised any lists or areas.</li> <li>• Section 11 of RBSA_001_General Scheme details how the scheme will communicate changes and updates with participants.</li> </ul>
2.3 Conservation of highly biodiverse grassland	<ul style="list-style-type: none"> <li>• Biofuels and bioliquids shall not be made from raw material obtained from land that was highly biodiverse grassland in or after January 2008, whether or not the land continues to have that status. Highly biodiverse grassland is defined as: i) natural, namely grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes;</li> </ul>	Y	<p>RBSA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>• Cut-off date of January 2008 (4.2).</li> <li>• 4.1.1 restricts use of Highly biodiverse grassland (Art 17.3c) defined as "Natural: namely grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes; or Non natural: namely grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded."</li> <li>• "This RBSA scheme does not allow to use any</li> </ul>

	<p>or</p> <p>ii) non-natural, namely grassland 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<sup>3</sup></p>		<p>material that was obtained from land which had the status of grassland in or after 2008 - grassland in this context means a permanent status as grassland for five (5) or more years." (4.1.1)</p> <ul style="list-style-type: none"> <li>• RSBA fulfilment: The figures referring to land use established in Articles 17(3)(a) and 17(3)(c) will be demonstrated through a comparative analysis between the initial reference year (2008) and the final reference year (4.1.1).</li> </ul>
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Article 17(4): Conservation of carbon stocks	Biofuels and bioliquids shall not be made from raw material obtained from land with high carbon stock		
Requirement	Guidance	Assessment	
3.1 Conservation of wetlands	<ul style="list-style-type: none"> <li>• Biofuels and bioliquids shall not be made from raw material obtained from land that was wetland in January 2008 and no longer has that status</li> <li>• A wetland is land that is covered with or saturated by water permanently or for a significant part of the year</li> <li>• These provisions shall not apply if, at</li> </ul>	Y	<p>RSBA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>• Cut-off date of January 2008 (4.2).</li> <li>• 4.1.2 restricts use of "Wetlands: namely land that is covered with or saturated by water permanently or for a significant part of the year (Article 17.4a)."</li> <li>• RSBA fulfilment: The figures referring to land use established in Articles 17(4)(a), 17(4)(b) and 17(4)(c) will be demonstrated through a comparative analysis</li> </ul>

<sup>3</sup> The European Commission shall establish the criteria and geographic ranges to determine highly biodiverse grassland (RED 2009-28 EC Article 17(3c)). Further information is awaited following the Comitology process.



	<p>the time the raw material was obtained, the land had the same status as it had in January 2008</p>		<p>between the initial reference year (2008) and the final reference year (4.1.2).</p> <ul style="list-style-type: none"> <li>Exception: The provisions of this paragraph shall not apply if, at the time the biomass was obtained, the land had the same status as it had in January 2008 (4.1.2).</li> </ul>
3.2 Conservation of continuously forested areas	<ul style="list-style-type: none"> <li>Biofuels and bioliquids shall not be made from raw material obtained from land that was continuously forested in January 2008 and no longer has that status</li> <li>Continuously forested areas are defined as land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30%, or trees able to reach those thresholds in situ</li> <li>These provisions shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008</li> </ul>	Y	<p>RSBA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>Cut-off date of January 2008 (4.2).</li> <li>4.1.2 restricts use of "Continuously forested areas namely land spanning more than one hectare with trees higher than five meters and canopy cover of more than 30% or trees able to reach those thresholds in situ (Article 17.4b). It does not include land that is predominantly under agricultural or urban land use."</li> <li>Exception: The provisions of this paragraph shall not apply if, at the time the biomass was obtained, the land had the same status as it had in January 2008 (4.1.2).</li> <li>RSBA fulfilment: The figures referring to land use established in Articles 17(4)(a), 17(4)(b) and 17(4)(c) will be demonstrated through a comparative analysis between the initial reference year (2008) and the final reference year (4.1.2).</li> </ul>

<p>3.3 Conservation of forested areas with 10-30% canopy cover</p>	<ul style="list-style-type: none"> <li>• Biofuels and bioliquids shall not be made from raw material obtained from land that was sparsely forested in January 2008 and no longer has that status</li> <li>• Sparsely forested areas are defined as land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in part C of Annex V is applied, the greenhouse gas threshold (principle 1 above) would still be fulfilled</li> <li>• These provisions shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008</li> </ul>	<p>Y</p>	<p>RBSA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>• Cut-off date of January 2008 (4.2).</li> <li>• 4.1.2 restricts use of "Lands spanning more than one hectare with trees higher than five meters and a canopy cover of between 10% and 30%, or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in part C of Annex V is applied, the conditions laid down in paragraph 2 of this Article would be fulfilled. (Article 17.4c)."</li> <li>• Exception: The provisions of this paragraph shall not apply if, at the time the biomass was obtained, the land had the same status as it had in January 2008 (4.1.2).</li> <li>• RSBA fulfilment: The figures referring to land use established in Articles 17(4)(a), 17(4)(b) and 17(4)(c) will be demonstrated through a comparative analysis between the initial reference year (2008) and the final reference year (4.1.2).</li> <li>• "This RBSA scheme does not allow biomass obtained from any kind of continuously forested area with canopy cover above 10% ." (4.1.2)</li> </ul>
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Article 17(5): Conservation of peatlands	Biofuels and bioliquids shall not be made from raw material obtained from peatland	
Requirement	Guidance	Assessment
4.1 Conservation of peatlands	<ul style="list-style-type: none"> <li>Biofuels and bioliquids shall not be made from raw material obtained from land that was peatland in January 2008,</li> <li>An exception is possible if evidence is provided that the cultivation and harvesting of that raw material does not involve drainage of previously undrained soil.</li> </ul>	<p>Y</p> <p>RSBA_004 Sustainable Maps Methodology:</p> <ul style="list-style-type: none"> <li>Cut-off date of January 2008 (4.2).</li> <li>4.1.3 restricts use of "Raw material (biomass in the framework of this scheme) obtained from land that was peatland in January 2008."</li> <li>Exceptions: Evidence is provided that the ... <ul style="list-style-type: none"> <li>Cultivation and harvesting of that raw material does not involve drainage of previously undrained soil.</li> <li>Soil was completely drained in January 2008.</li> <li>There as been no draining of the soil since January 2008 (4.1.3).</li> </ul> </li> <li>RSBA fulfilment: The figures referring to land use established in Article 17(5) will be demonstrated through a comparative analysis between the initial reference year (2008) and the final reference year (4.1.3).</li> </ul>

Other elements		
Approach to wastes and residues		<p>Y Abengoa has developed a report which sets out criteria to define wastes and residues in the RBSA scheme for the purposes of exemption from the land criteria (Articles 17(3)-(5)) and for assigning zero GHG emissions to the point of collection (Annex V, Part C, 18).</p> <p>According to the criteria Abengoa proposes the following list of feedstocks:</p> <ul style="list-style-type: none"> <li>• Bagasse: land criteria are applicable;</li> <li>• Cereal straw (including husk (for maize) and cob): land criteria are applicable;</li> <li>• Wine alcohol (from legal intervention - according to Council Regulation (EC) No 479/2008 of 29 April 2008 on the common organization of the market in wine, amending Regulations (EC) No 1493/1999);</li> <li>• Wine alcohol (obtained as a result of the distillation of wine lees and grape marcs);</li> <li>• Waste / Residues included in other EC approved Voluntary Schemes for the same purposes.</li> </ul>

## Chain of Custody

Article 18(1): Use of a mass balance system	Economic operators shall use a mass balance system	
Requirement	Guidance	Assessment
5.1 Economic operators shall use a mass balance system	<ul style="list-style-type: none"> <li>The mass balance system:               <ul style="list-style-type: none"> <li>a) allows consignments of raw material or biofuel with differing sustainability characteristics to be mixed;</li> <li>b) requires information about the sustainability characteristics and sizes of the consignments referred to in point (a) to remain assigned to the mixture; and</li> <li>(c) provides for the sum of all consignments withdrawn from the mixture to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture.</li> </ul> </li> </ul>	<div>Y</div> <p>RBSA_002:</p> <ul style="list-style-type: none"> <li>Section 1. "The main rule of the Mass Balance system is to demonstrate that "sustainability attributes in" are equal to "sustainability attributes out" Further guidance also given.</li> <li>"The rule of allocation is that different sustainability attributes cannot be mixed. Specifically, GHG emissions must remain separate and cannot be averaged." (section 4.1)</li> <li>Section 5. Specific requirements included for the mass balance of the agricultural production unit.</li> </ul>
5.2 Prevention of double counting/claiming	<ul style="list-style-type: none"> <li>[No specific text in Directive / Communication]</li> <li>An information system needs to be included which is able to keep track of the flow of information through the supply chain.</li> </ul>	<div>Y</div> <p>RBSA_002 Mass Balance System Requirements section 4.1:</p> <ul style="list-style-type: none"> <li>"The way stipulated in the RBSA scheme to ensure that this balance complies with Article 18(1) of RED, is to use an internal code that allocates the biomass / biofuel entered to the corresponding biomass / biofuel dispatched, enabling the later match up of quantities /</li> </ul>

			<p>volume.”</p> <ul style="list-style-type: none"> <li>“At the end of each balancing period, a specific balance would be executed. Suitable evidence or certificates shall be maintained by the parties responsible for management of the Mass Balance system to justify all quantities balanced. The quantities balanced should be reconciled at the end of each balancing period, in order to determine the accuracy of the balance carried out. Remaining sustainable attributes will be available for the start of the next balancing period. Differences due to biomass / biofuel losses would be sufficiently documented, and reset for the next balancing period. Conversion factors would be kept for each balancing period, when biomass conversion process (pre - treatment of biomass and / or biofuel production) takes place.”</li> </ul> <p>RBSA_001 General Scheme</p> <ul style="list-style-type: none"> <li>RBSA database aims to hold all RBSA certificates, for the agents validated under the scheme (and their validated scope), and therefore be used for checking the validity of claims made by the scheme. (4.4)</li> </ul>
5.3 The mass balance system shall operate at least at the level of a site	<ul style="list-style-type: none"> <li>The mass balance system shall operate at a level where consignments could normally be in contact, such as in a container, processing or logistical facility or site (defined as a</li> </ul>	Y	<ul style="list-style-type: none"> <li>RBSA_002 section 4.1 contains appropriate definition of site: “a processing or logistical facility or site applying the Mass Balance shall be defined as a geographical location with precise boundaries within which products can be mixed. Typically, for a biomass</li> </ul>

	geographical location with precise boundaries within which products can be mixed).		warehousing facility, all silos operated by the same economic operator in a logistical establishment can be included. The same applies for all the existing biofuel depots in a storage terminal. Facilities located in different geographical locations will not be accepted."
5.4 The mass balance shall specify the timeframe over which the system operates	<ul style="list-style-type: none"> <li>• If the balance in the system is continuous in time, a "deficit", i.e. that at any point in time more sustainable material has been withdrawn than has been added, is required not to occur.</li> <li>• Alternatively the balance could be achieved over an appropriate period of time and regularly verified.</li> <li>• In both cases it is necessary for appropriate arrangements to be in place to ensure that the balance is respected.</li> </ul>	Y	<p>RBSA_002 p9:</p> <ul style="list-style-type: none"> <li>• "the consistency of the quantities balanced in the Mass Balance system should be achieved through closing balance calculations carried out over an appropriate period of time. This shall be a maximum of three months... In spite of that, shorter periods of time for the balances may also be allowed"</li> <li>• "during a balancing period, it is not possible to dispatch more quantity of biomass / biofuel with a specific sustainability attribute than the quantity of biomass / biofuel entered into the control system defined in the same balancing period, plus the quantity of biomass / biofuel stored in the same period with that specific sustainability attribute."</li> </ul>

## Audit Quality

Assessment of the audit processes of a voluntary scheme is relevant for auditing of the sustainability criteria and auditing of the chain of custody. The level of complexity of a chain of custody is a function of the features that a scheme allows.

RED Article 18(3):

Member States shall take measures to ensure that economic operators submit reliable information and make available to the Member State, on request, the data that were used to develop the information. Member States shall require economic operators to arrange for an adequate standard of independent auditing of the information submitted, and to provide evidence that this has been done. The auditing shall verify that the systems used by economic operators are accurate, reliable and protected against fraud. It shall evaluate the frequency and methodology of sampling and the robustness of the data.

Article 18(3): Adequate standard of independent auditing	Voluntary Schemes need to ensure a sufficient quality of auditing and verification	
Requirements	Guidance	Assessment
6.1. Documentation management	<ul style="list-style-type: none"> <li>The system ensures that economic operators must have a documentation management system.</li> <li>It should be a condition of participation in voluntary schemes that economic operators: <ul style="list-style-type: none"> <li>i) have an auditable system for the evidence related to the claims they make or rely on;</li> <li>ii) keep any evidence for a minimum of 5 years; and</li> </ul> </li> </ul>	<div>Y</div> <ul style="list-style-type: none"> <li>[Documentation management system also covered by ISO Guide 65.]</li> <li>RBSA_001 General Scheme</li> <li>9.2: "Any certification body seeking RBSA scheme recognition to be able to conduct compliance audits must, at minimum, and at any time upon request provide Abengoa Bioenergy with... Evidence of accreditation by a National or International Accreditation Body of the requirements of ISO / IES guide 65 : 1996"</li> <li>5.1.1.3 "Maintenance of documentation and records to</li> </ul>



	<p>iii) accept responsibility for preparing any information related to the auditing of such evidence.</p> <ul style="list-style-type: none"> <li>The auditable system should normally be a quality system drawing on points 2 and 5.2 of Module D1 ('Quality assurance of the production process') of Annex II of the Decision on a common framework for the marketing of products.</li> </ul>		<p>demonstrate compliance with this scheme which shall be kept for a minimum of five (5) years"</p>
6.2 Retrospective audits	<ul style="list-style-type: none"> <li>The voluntary scheme shall arrange for regular, at least yearly, retrospective auditing of a sample of claims made under the scheme. It is the responsibility of the verifiers to define the size of the sample that will permit them to reach the level of confidence necessary to issue a verification statement.</li> <li>For these audits requirements are that the auditor should be: <ol style="list-style-type: none"> <li>Independent of the activity being audited</li> <li>Free from conflict of interest</li> <li>Competent</li> </ol> </li> </ul>	Y	<p>RBSA_001 General Scheme:</p> <ul style="list-style-type: none"> <li>"Once Validated suppliers<sup>4</sup> pass the qualifying operation, they are allowed to issue RBSA claims (Sustainable biomass attestations or Declarations) covering their following operations (or the operations of their involved suppliers) in one year period. After this time, Validated suppliers are obliged to pass a surveillance process in a sample of all their operations from the previous year (since the first RBSA operation) to check the accuracy of their operations, and the operations of their Involved suppliers. Surveillance process description in all the cases is also provided" (4.2).</li> </ul> <p>RBSA_005 Audit Protocol for Certification Bodies</p> <ul style="list-style-type: none"> <li>Validated suppliers must pass a yearly surveillance</li> </ul>

<sup>4</sup> Validated suppliers are those economic operators that accomplish with the requirements set out in RBSA, and are allowed for supplying RBSA products (biomass or biofuel) when passing a qualifying audit prior to any RBSA claim.

	<ul style="list-style-type: none"> <li>o Point 1 and 2 mean that the audit shall be carried out by an external third party (not the economic operator)</li> <li>o Point 3 mean that the auditor has the generic skills and the verification body has the general skills for performing audits; and</li> <li>o The auditor has the appropriate specific skills necessary for conducting the audit related to the scheme's criteria and the aspect of the scheme that they are auditing (see 6.5).</li> </ul>	<p>compliance audit by the certification body that will assess if the economic operator is still meeting the requirements for certification in order to continue to be a validated supplier under RBSA scheme. After a 5 year period an extension – compliance audit is due (5.2)</p> <ul style="list-style-type: none"> <li>• “Certification body's auditors and sub - contractors are not permitted to carry out any activities which may affect their independence or confidentiality and therefore should not have worked (as an employee or advisor) for the client during the last 3 years. Any certification body's auditor or sub - contractor will advise the certification body executive management as to any and all interests which may potentially affect the certification process and / or which could possibly constitute a conflict of interest, in advance of engaging in the certification process for the requirements of this RBSA scheme.” (4.2.3)</li> <li>• “Once validated through passing a successful compliance audit, validated or Involved suppliers shall be audited retrospectively in a sample of the operations carried out in the previous year in order to check the accuracy of their claims and the claims of their Involved suppliers (if there is any), and this way to retain the RBSA certificate.” (6.1.2)</li> <li>• Sample size for surveillance audits is described in section 6.3.2 and is at minimum • x, with “x” being the number of premises.</li> <li>• Annex 1 and 2 includes specific requirements for</li> </ul>
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			auditors and verifiers skills. Includes land use, GHG, chain of custody and the RBSA requirements.
6.3 Audits before participation to the Voluntary Scheme	<ul style="list-style-type: none"> <li>As a general rule, a voluntary scheme should ensure that economic operators are audited before allowing them to participate in the scheme. There may be exceptions to this rule due to the particular character of certain schemes (for example, schemes that consist only of standard values for greenhouse gas calculations); in these cases, this should be clearly explained when the scheme is put forward for recognition.</li> <li>For these audits requirements are that the auditor should be: <ol style="list-style-type: none"> <li>Independent of the activity being audited</li> <li>Free from conflict of interest</li> <li>Competent <ul style="list-style-type: none"> <li>Point 1 and 2 mean that the audit shall be carried out by an external third party (not the economic operator)</li> <li>Point 3 mean that the auditor has the generic skills and the verification body has the general skills for performing audits; and</li> </ul> </li> </ol> </li> </ul>	Y	<p>RBSA_001 General Scheme:</p> <ul style="list-style-type: none"> <li>"Only validated suppliers can make sustainable claims under the scheme, being designated and awarded a RBSA certificate. To be awarded this certificate, validated suppliers (biomass or biofuel) and Biofuel conversion units (all) will be audited by RBSA scheme approved certification bodies for verification of compliance with the relevant sections of this document, before they can issue any valid claim on this scheme." (4.2).</li> <li>"Validated suppliers (biomass or biofuel) shall have to apply for validation covering a number of installations owned by them, or installations / premises of other economic operators with whom they have a certain relationship for the management. All these declared installations shall have to be previously qualified prior to operating in the RBSA scheme, permitting only grouping rules (for First collector and for Intermediate biomass / biofuel) suppliers when specific requirements are accomplished." (4.2)</li> <li>"Validated suppliers can also operate with Involved suppliers, in order to preserve confidentiality of their supply chain. Involved suppliers are those economic operators that shall have to meet RBSA validation requirements (specifying a previous qualifying audit),</li> </ul>

	<ul style="list-style-type: none"> <li>o The auditor has the appropriate specific skills necessary for conducting the audit related to the scheme's criteria and the aspect of the scheme that they are auditing (see 6.5).</li> </ul>		<p>but instead of being awarded an RBSA certificate, they shall receive an RBSA verification of conformity, that shall be presented to their validated supplier" (4.2)</p> <p>RBSA_005 Audit Protocol for Certification Bodies</p> <ul style="list-style-type: none"> <li>• (4.2.3) "Certification body's auditors and sub - contractors are not permitted to carry out any activities which may affect their independence or confidentiality and therefore should not have worked (as an employee or advisor) for the client during the last 3 years. Any certification body's auditor or sub - contractor will advise the certification body executive management as to any and all interests which may potentially affect the certification process and / or which could possibly constitute a conflict of interest, in advance of engaging in the certification process for the requirements of this RBSA scheme."</li> <li>• Annex 1 and 2 includes specific requirements for auditors and verifiers skills. Includes land use, GHG, chain of custody and the RBSA requirements.</li> <li>• "Each economic operator, who wants to be a validated or Involved supplier, will be audited for full compliance in advance of supplying valid RBSA biomass / biofuel, for the premise/s declared to be included in the certificate." (6.1.1)</li> <li>• "Economic operators opting to be validated, shall present the certification body auditor the premise and / or the list of premises they want to have audited in order to be included in the RBSA certificate – only if</li> </ul>
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			<p>requirements for grouping premises are accomplished, the number of audits could be reduced." (6.2.1) (see criterion 6.4. on Group auditing below)</p> <ul style="list-style-type: none"> <li>• Section 6.2.2 describes the appropriate sample size: "All premises not grouped that an economic operator wants to include in their RBSA certificate for determining their compliance on the RBSA scheme shall be audited prior to any operation." "All involved suppliers presented shall be considered."</li> <li>• Compliance / non-compliance detailed in section 7.</li> </ul>
6.4 Group auditing [OPTIONAL – only relevant when group auditing is applied]	<ul style="list-style-type: none"> <li>• Group auditing - in particular for smallholder farmers, producer organisations and cooperatives - can be performed. [Note that group auditing is only permitted for the producers of raw material only, not other economic operators further down the supply chain.]</li> <li>• In such cases, verification for all units concerned can be performed based on a sample of units, where appropriate taking into account a relevant standard developed for this purpose. <ul style="list-style-type: none"> <li>◦ What is the sample size?</li> <li>◦ What is the threshold for non-compliance and do they apply to the whole group?</li> </ul> </li> </ul>	Y	<ul style="list-style-type: none"> <li>• RBSA_001_General Scheme</li> <li>• (5.2.5) "For the qualifying audit, validated supplier shall present those installations / premises operating within their selected scope that they want to include in their RBSA certificate."</li> <li>• "All declared installations / premises shall be audited in the qualifying audit prior to participating in the scheme. Grouping installations for auditing purposes is only allowed when following requirements are accomplished – group requirements: <ul style="list-style-type: none"> <li>◦ There is an adequate management relationship among validated suppliers and the economic operators managing the installations / premises to be grouped, and</li> <li>◦ There is a common management system in place, integrating the necessary</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ What are the implications/procedures of non-compliance?</li> <li>○ Are downstream parties informed of the non-compliance?</li> </ul> <ul style="list-style-type: none"> <li>• Group auditing for compliance with the scheme's land related criteria is only acceptable when the areas concerned are near each other and have similar characteristics.</li> <li>• Group auditing for the purpose of calculating GHG savings is only acceptable when the units have similar production systems and products.</li> </ul>		<p>aspects for accomplishing with RBSA requirements for the installations / premises to be grouped [...] This grouping option is not allowed for Agricultural production units (that have their particular grouping rules).</p> <ul style="list-style-type: none"> <li>• "Management relationship is considered adequate when validated supplier is parent/daughter/sister company of the economic operators that manage the operations of the installations/premises included in the group. It is also included those cases in which Validated supplier has a legal relationship for the management of the activities of the premises of the economic operators to be included in the group." (footnote 11)</li> </ul> <p>RBSA_005 Audit Protocol for Certification Bodies</p> <ul style="list-style-type: none"> <li>• (6.2.1) "Economic operators opting to be validated, shall present the certification body auditor the premise and / or the list of premises they want to have audited in order to be included in the RBSA certificate – only if requirements for grouping premises are accomplished, the number of audits could be reduced."</li> <li>• (6.2.2 Sample size for qualifying audit) "Only if the relevant requirements are accomplished (group requirements as described in section 5 of RBSA_001), sample size for these installations could be reduced to <ul style="list-style-type: none"> <li>• x, being "x" the number of premises included in the</li> </ul> </li> </ul>
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			<p>group rounded to the nearest whole number - Auditors could increase the size of the samples at any time, if needed on a risk based decision."</p> <ul style="list-style-type: none"> <li>• (6.3.2 Sample size for surveillance audit) "The number of premises audited among those premises grouped that have operated, shall be <math>\bullet x</math>, being "x" the number of premises included in the group, rounded to the nearest whole number."</li> <li>• (6.6.2.1 Group auditing for agricultural production units) "The following rules for group auditing will only account for small holder farmers, producer organisations and cooperatives. In these cases it will be possible to verify the whole group of Agricultural production units based on the inspection of a sample of economic operators. The group auditing will only account for the Land Use criteria and Mass Balance aspects. The GHG calculation will not be a part of the group auditing."</li> <li>• "The group may be organized in itself as a co-operative or as a structured group of producers affiliated, or may be organized by a first collector supplier." (6.6.2.1)</li> <li>• "Additional requirements for Agricultural production units organized by a Cooperative [...] The cooperative shall be organized in groups of farmers according to EC communications in the matter, specifically the members must be homogeneous: the area's concerned must be near each other and having similar agricultural characteristics." (6.6.2.1)</li> </ul>
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			<ul style="list-style-type: none"> <li>• “As reference, two Agricultural production units are considered near each other if belonging to the same administrative region, or to an adjacent one. Two Agricultural production units are considered as having similar characteristics if they have similar biomass (ie grain) and irrigation practices (dry/wet farming).” (footnote 3)</li> <li>• (6.6.2.1 Sample size for group auditing of agricultural production units) “For each group (organized by the First collector or in cooperatives by themselves), at least • x, being “x” the number of Agricultural production units rounded to the nearest whole number in the group shall be audited – additional members could be audited, decision based on a risk analysis of the certification body. If only one member is not in compliance with the scheme, the sample size of inspections in the group will be increased to a 2*• x, being “x” the number of Agricultural production units rounded to the nearest whole number. If this additional inspection leads to another non complying agricultural production unit, 100 % of the group members will be inspected.”</li> <li>• Annex 1 and 2 includes specific requirements for auditors and verifiers skills. Includes land use, GHG, chain of custody and the RBSA requirements.</li> <li>• Compliance / non-compliance detailed in section 7.</li> </ul>
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6.5 Auditor competencies	<ul style="list-style-type: none"> <li>For these audits requirements are that the auditor should be:             <ol style="list-style-type: none"> <li>Independent of the activity being audited</li> <li>Free from conflict of interest</li> <li>Competent                 <ul style="list-style-type: none"> <li>Point 1 and 2 mean that the audit shall be carried out by an external third party (not the economic operator)</li> <li>Point 3 mean that the auditor has the generic skills and the verification body has the general skills for performing audits; and</li> <li>The auditor has the appropriate specific skills necessary for conducting the audit related to the scheme's criteria.</li> <li>Namely:                     <ul style="list-style-type: none"> <li>Land use criteria: Relevant experience, in agriculture, ecology or similar.</li> <li>Chain of Custody system: Experience in mass balance systems, traceability, data handling or similar.</li> <li>GHG: Relevant experience in GHG accounting.</li> </ul> </li> </ul> </li> </ol> </li> </ul>	Y	<p>RBSA_005 Audit Protocol for Certification Bodies</p> <ul style="list-style-type: none"> <li>(4.2.3) "Certification body's auditors and sub - contractors are not permitted to carry out any activities which may affect their independence or confidentiality and therefore should not have worked (as an employee or advisor) for the client during the last 3 years. Any certification body's auditor or sub - contractor will advise the certification body executive management as to any and all interests which may potentially affect the certification process and / or which could possibly constitute a conflict of interest, in advance of engaging in the certification process for the requirements of this RBSA scheme."</li> <li>Annex 1 and 2 includes specific requirements for auditors and verifiers skills. Includes land use, GHG, chain of custody and the RBSA requirements.</li> </ul>
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<p>6.6 Management of the audit</p>	<ul style="list-style-type: none"> <li>• Audits shall be properly planned, conducted and reported on</li> <li>• The sustainability system has clear procedures that describe how audits should be conducted</li> <li>• Audit includes the following: <ul style="list-style-type: none"> <li>◦ Draw up a verification plan which corresponds to the risk analysis and the scope and complexity of the economic operator's activities, and which defines the sampling methods to be used with respect to that operator's activities;</li> <li>◦ Carry out the verification plan by gathering evidence in accordance with the defined sampling methods, plus all relevant additional evidence, upon which the verifier's verification conclusion will be based;</li> <li>◦ Request the operator to provide any missing elements of audit trails, explain variations, or revise claims or calculations, before reaching a final verification conclusion.</li> </ul> </li> <li>• ISO 19011: 2002 (plan, do, act, check), or justified equivalent, covers the above requirements</li> </ul>	<p>Y</p>	<p><a href="#">RBSA_005 Audit Protocol for Certification Bodies</a></p> <ul style="list-style-type: none"> <li>• <a href="#">Section 5.3 details audit planning, including verification plan etc.</a></li> <li>• <a href="#">Annex 1 requirements for auditors includes "Experience with conducting audits on the requirements of EN ISO19011:2002"</a></li> </ul>
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6.7 Establishment of at least a “limited assurance level”	<ul style="list-style-type: none"> <li>A “limited assurance level”<sup>5</sup> implies a reduction in risk to an acceptable level as the basis for a negative form of expression by the auditor such as “based on our assessment nothing has come to our attention to cause us to believe that there are errors in the evidence”</li> </ul>	Y	<p>RBSA_005 Executive Summary</p> <ul style="list-style-type: none"> <li>Verification of IT systems and associated procedures for GHG and map development is to be performed by auditing companies against ISAE 3000 – at least a limited assurance level verification report on compliance with the methodology is needed prior to the use of this IT system, not only for calculation or compliance with the methodology, but also for the gathering of input and proper maintenance of the entire methodologies (page 8).</li> <li>Annual report on the overall operation of the RBSA scheme will be generated and externally verified, specifically covering:</li> <li>IT systems and associated procedures usage for GHG calculations, Sustainable map generation, Agents registered and validity of compliance verification documents – eventually, the list of invalid suppliers, RBSA database and other external control and auditing guarantees page 8).</li> </ul> <p>RBSA_001 General Scheme</p>

<sup>5</sup> A stronger “assurance level” is the “Reasonable assurance level”. Reasonable assurance implies a reduction in risk to an acceptably low level as the basis for a positive form of expression such as “based on our assessment, the evidence is free from material misstatement”.

			<ul style="list-style-type: none"> <li>9.3: "Agencies or auditing companies wishing to conduct verification audits... must have demonstrable... Experience on carrying out audits in conformity with the ISAE 3000"</li> <li>Limited assurance level mentioned throughout section 10.2, but language should be improved.</li> </ul>
6.8 Accreditation	<ul style="list-style-type: none"> <li>Accreditation by a national accreditation body affiliated to the International Accreditation Forum (IAF); or</li> <li>Accreditation as a full member or 'associate' member of ISEAL; or</li> <li>'Commitment to comply' with ISO 17011: 2004 (General requirements for accreditation bodies accrediting conformity assessment bodies), or justified equivalent, within 3 years (consistent with ISEAL associate member)</li> </ul>	Y	<p>RBSA_005 Audit Protocol for Certification Bodies:</p> <ul style="list-style-type: none"> <li>(section 4.1) Any certification body seeking RBSA scheme recognition must, at minimum, be accredited for the requirements of ISO / IES guide 65:1996. To ensure that certification bodies are appropriately accredited for the kind of auditing tasks they are to undertake, the following measures apply: <ul style="list-style-type: none"> <li>Accreditation by a national accreditation body affiliated to the International Accreditation Forum (IAF); or</li> <li>Accreditation as a full member or 'associate' member of ISEAL; or</li> <li>'Commitment to comply' with ISO 17011:2004 (General requirements for accreditation bodies accrediting conformity assessment bodies), or justified equivalent, within 3 years (consistent with ISEAL associate member).</li> </ul> </li> <li>(section 4.1.1) Following management responsibilities, Abengoa Bioenergy will either delegate the approval</li> </ul>

			<p>procedure to a committee of Abengoa Bioenergy employees or to an approved third party company.</p> <ul style="list-style-type: none"><li>• The final approval of the certification bodies will be decided by the Abengoa Bioenergy Sustainability Committee and will be based entirely upon the recommendation of the committee or third party appointed.</li></ul>
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