The Gafta Trade Assurance Scheme (GTAS)

Certification for compliance to the EU Renewable Energy Directive (RED) for feedstocks certified under voluntary farm assurance schemes approved by the EU as RED compliant.

A. Introduction

The EU Renewable Energy Directive **2009/28/EC** came into effect on 5th December 2010. This legislation introduced targets for renewable energy in EU member states and enables the supply of feedstocks for biofuels and bioliquids. The legislation applies to all goods intended to be classified as "sustainable", for use as biofuel and bioliquid in the EU which are intended to count towards national renewable energy targets.

Guidance: It is not prohibited to produce or sell unsustainable biofuels in the EU (ie not counting towards renewable targets and support) and RED does not apply for goods intended for other purposes.

B. Scope

In order to supply the biofuels markets, European legislation requires independent verification of compliance with various sustainability criteria. This manual provides a set of minimum standards of best practice for companies and individuals operating as Traders or Merchants, who trade and handle goods [including imports and exports] intended for use as biofuels or bioliquids and for which demonstration of compliance with the requirements of the EU Renewable Energy Directive is a requirement. The standards apply to goods moving from farm gate to the first gathering point (store/silo/mill), subsequent gathering points (inc points of import/export) and to first processor.

The Gafta Trade Assurance Scheme applies to operators in the supply chain. It covers the trading, handling and transportation of goods. It enables the trading of all types of combinable crops and animal feed materials for food and feed purposes and for use as biofuels or bioliquids. GTAS therefore applies to RED compliant and non RED compliant goods, also assured and non-assured goods, organic and non-organic etc. RED compliance is demonstrated by clearly annotated documentation accompanying goods in transit and by cross checking compliance status with on-line databases. Where RED goods are involved the requirement to operate a RED compliant mass balance system applies. The chain of custody must be kept separate and the HACCP systems audited accordingly. Where applicable RED compliant goods may be separately stored.

Traders who procure and deliver goods for biofuels or bioliquids must be able to provide evidence that the requirements of RED are being met, by production of a proof of sustainability, certificate or equivalent issued under an EU approved certification scheme, for each consignment of goods supplied.

For the purposes of EU RED legislation, GTAS is classified as a "voluntary scheme" that covers some of the sustainability criteria of the Directive. The auditing and certification of companies under an EU recognised voluntary scheme fulfils the criteria for evidencing sustainability as set out in Directive 2009/28/EC.

The RED addendum to GTAS is intended to be applied internationally in countries where goods are grown and certified under a European Community recognised farm assurance scheme.

Operators that are RED certified are identified on the GTAS on-line database checker. Database references are operator and site specific, if multi site operations apply. The on-line database is updated daily and the onus rests with parties to check regularly the status of the parties. Goods should not be unloaded at a store or at end user premises without first checking the status of the transport company and chain of custody online.

The Gafta Trade Assurance Scheme recognises other voluntary schemes that have been approved as being RED compliant by the European Commission and which recognise the full range of land criteria as set out in the Directive (Art. 17 (3) – (5). The list of approved voluntary schemes can be viewed on the EC website using the following link:

http://ec.europa.eu/energy/renewables/biofuels/sustainability_schemes_en.htm

Note: GTAS recognises those schemes that fully comply with the land criteria (without exceptions) to Art. 17 (3) – (5) of the Directive and these can be found listed in the "Overview table including information on updates of recognised voluntary schemes". A list of schemes is available on the Gafta website.

C. Definitions

Biodiesel: a transport fuel usually made from vegetable oils used as a diesel replacer.

Bio ethanol: a transport fuel made from sugar and cereal crops used as a petrol replacer.

Biofuels: liquid or gaseous fuel for transport produced from biomass.

Bioliquids: liquid fuel for energy purposes other than for transport, including electricity and heating and cooling, produced from biomass.

Biomass: the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.

Sustainability: an integrated approach to environmental, social and economic impact issues (both internal and external) leading to long term sustainable profit and growth without compromising the ability of future generations to meet their own needs.

1.0 Contracts with growers.

Growers must provide evidence that crops have been produced on land that meets the new sustainability criteria. This is designed to protect land that is classified as being highly bio diverse, and/or has high carbon stock and the protection of other sensitive land environments like undrained peat land.

Evidence provided by growers must be verified (audited) before confirmation can be made available that the sustainability criteria have been met by individual producers on the crops supplied into the biofuel and bioliquids chain. Independent verification for growers can be achieved (inter alia) as part of the certification of Assured Crops/Farm Assurance schemes that

have been approved by the EU as meeting RED requirements. The normal method by which third parties can check the certification of growers that are members of Assurance Schemes is via an online database facility. Where RED compliance is certified this must be separately annotated for the avoidance of doubt. Growers may be **fully** or **partially** compliant or **not compliant/not participating** in supply of feedstocks for biofuels. Partially compliant growers must keep their own records and be able to demonstrate that the quantity of feedstocks supplied do not exceed the verified percentage of partial compliance.

1.1 Goods intended for use as biofuels, biomass or bio liquids for the production of renewable energy in Europe must comply with the main principles set down in RED. The three main principles may be summarised as:

1st principle: the goods must not have been produced on land that has a high biodiversity value or from land with a high carbon stock. Crops must have been produced on land that meet the sustainability criteria of the Directive as laid out in Art. 17 (3) – (5).

In accordance with Art. 17 (3) this is land with a **high biodiversity value**, namely land that had one of the statuses (as follows) in or after January 2008, whether or not the land continues to have that status:

a) primary forest and other 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;
b) areas designated:
    (i) By law or by the relevant competent authority for nature protection purposes; or
    (ii) 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 the Conservation of Nature, subject to their recognition in accordance with the second sub paragraph of Art. 18(4).

unless evidence is provided that the production of the raw material did not interfere with those nature protection purposes;

c) highly biodiverse grassland that is;

(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; or

(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.

In accordance with Art. 17 (4) this is land with **high carbon stock,** namely land that had one of the following statuses in January 2008 and no longer has that status:

a) wetlands, namely land that is covered with or saturated by water permanently or for a significant part of the year;
b) continuously forested areas, namely 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;
c) 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 methodology laid down in part C of Annex V is applied, the conditions laid down in paragraph 2 of this Article would be fulfilled.

Note: the provisions of Art. 17 (4) do not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008.

In accordance with Art. 17 (5) this is land that was **peatland** in January 2008, unless evidence is provided that the cultivation and harvesting of the raw material does not involve drainage of previously undrained soil.

2nd principle: the goods were produced in compliance with all applicable national and regional laws and international treaties

3rd principle: that good management practices were applied

1.2 Only feedstocks certified as being RED compliant under an EU recognised voluntary farm scheme are permitted. Self declaration is not allowed.

2.0 Mass Balancing.

2.1 The directive enables all economic operators in the chain of custody of biofuels and bioliquids to apply a ***mass balance*** (MB) system. This allows consignments of raw materials or biofuels/bioliquids with different sustainability characteristics to be mixed on a "site basis" (this is defined as one geographical location with precise boundaries which can include a farm store, commercial/merchant storage site, co-operative site, flat store bays, silo bins or vessel). Sustainability characteristics could include: evidence showing compliance with RED sustainability criteria or a statement that the raw materials used were obtained in a way that complies with RED's land related sustainability criteria or the statement "production has been awarded a certificate of type X from a recognised voluntary scheme Y" etc. Sustainability characteristics should always include information about country of origin.

2.2 Where mixing takes place, it requires that information about the sustainability characteristics and size of consignments remain assigned to the mixed bulk and provides for the sum of all consignments withdrawn from the mixed bulk to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture. ***Records must be kept of the mass balance of materials being delivered into and out of stores.*** In order to be considered RED compliant, Storekeepers must be audited for correct application of mass balance accounting. This includes the demonstration that the MB calculation has been correctly applied (balanced) over a designated or ***justifiable time period***.

2.3 For traders, merchants and commercial storage and handling facilities *in the first year of operation* Mass Balancing shall not exceed a twelve month period (a marketing or crop year). ***Thereafter the mass balancing period(s) shall not exceed three months.***

2.4 Under the mass balancing system the averaging of GHG values is not permitted. If consignments are aggregated administratively the worst GHG performance shall be taken for the whole consignment. Disaggregated values can be declared.

2.5 Traders and merchants who supply raw materials to buyers to be used for biofuels and bioliquids must be able to demonstrate that where mass balancing was applied to the goods delivered, that the facility has been certified as competent in mass balance accounting. This can be done by referring to the stores sustainability certification using the appropriate scheme on-line database. Traders and Merchants must be able to supply records to confirm the mass balance of the materials delivered into and out of each store/gathering point in the chain of custody.

2.6 Where a merchant/trader owns and operates a "dependant" storage facility the mass balance shall be determined by the owner/operator for which certification as being RED compliant is required.

2.7 3rd party commercial storage and handling facilities intending to operate mass balancing operations are required to be certified as being RED compliant for this purpose.

2.8 Segregation and Mass Balance options

2.8.1 ***Complete physical separation***. Where individual batches of sustainable and unsustainable goods are physically handled, stored and re-delivered separately and there is no mixing of sustainable goods with differing GHG values, then each batch is deemed to keep its ID and individual values and MB does not apply; in other words Identity Preservation (hard IP).

2.8.2 ***Physical separation of sustainable and unsustainable goods; common bulks of goods with same GHG value; no mixing of lots of differing GHG value.*** Not strictly mass balance, normal record keeping should suffice.

2.8.3 ***No physical separation of sustainable/unsustainable goods.*** Mass Balance methodology allows the mixing of sustainable (with or without differing GHG values) and unsustainable goods in a common bulk. Where this occurs a MB account must be kept. The MB accounting must specify the time period to which it applies.

2.8.4 Economic operators are not permitted to operate a single mass balance approach over more than one geographical location.

Guidance: where mass balancing is done by audited and certified companies (and verified on a scheme online database such as the GTAS web checker) it is probable that evidence of the actual calculation will not be required by the chain of custody, only the outcomes. Storekeepers and others who do this however must be in a position to provide this information to bona fide companies if requested. This is more likely to form part of a contractual agreement than an ad hoc request.

3.0 Responsibility for Compliance under RED.

RED places the responsibility for compliance on the economic operator that benefits from support or is under a blending obligation. Without the proper evidence in the chain the Member State may not give support or allow goods to count towards quotas. Technically the compliance attaches to the feed stocks themselves, which is evidenced by accompanying certification and this information must be carried up the chain of custody to the end processor/user.

4.0 Assessment requirements

4.1 Applicants are required to pass an initial audit before being allowed to participate in the scheme.

4.2 After the initial audit, routine surveillance audits are carried out annually at any time during the year.

4.3 Applicants must have an auditable system for the evidence related to the claims they make or rely on.

4.4 All documentary evidence must be kept for a minimum period of 5 years.

4.5 Applicants must accept responsibility for preparing any information related to the auditing of evidence related to the claims they make or rely on.

4.6 Unless otherwise agreed, the auditable system shall be a quality system covering (inter alia) information flows, documents and control systems.

4.7 Scheme verifiers are required to undertake at least annual retrospective audits of a sample of claims made by individual economic operators under the scheme. The economic operators in

the sample will vary from one period to another. The scheme verifiers will establish the size of sample required to reach the necessary level of confidence for issuing certificates.

4.8 Mass balance – operators in a chain of custody must be able to demonstrate where any intermediate mass balancing operations have taken place for which they are responsible. Verification of MB systems must be performed simultaneously with verification of correctness of the scheme criteria (ie examination of systems used for the purpose of complying with the requirements of MB system).

5.0 Greenhouse Gas Emissions.

5.1 **Calculation of the greenhouse gas (GHG) impact of bio fuels and bio liquids (GHG balance).**

The basis of RED is the assumption that energy produced from biofuels and bioliquids represents a GHG saving over other types of fuel (eg fossil fuels). GHG savings will be reduced in the case of inefficient production of biofuels/bioliquids and therefore RED requires evidence of the actual savings. This is a complex calculation when taken through the entire supply chain and therefore Art 19 of RED sets out the principle of "Typical" "Default" and "Disaggregated Default" values for biofuels and bioliquids (if produced with no net carbon emissions from land use change).

5.1.1 Annex V of RED is a table of rules and values for the calculation of GHG impact.

5.1.2 Where GHG default values are used and accompanying load documentation identifies the address of the grower and/or assurance scheme membership number and/or NUTS2 region code, this is deemed sufficient evidence to identify the origin for the purposes of final declaration of default value. Therefore under these circumstances it is not a requirement to declare GHG values on the documents accompanying the goods. Likewise there is no requirement for GHG default values to be notified from seller to buyer even if the origin of the goods is identified as only the final economic operator can do this once the bio fuel has been produced.

5.1.3 GHG values can be advised by sellers to buyers as part of the usual contractual documents exchanged in the normal manner. This includes contract notes and confirmations, delivery

notes, invoices and other types of document. It is not envisaged that a separate or new document is required for this purpose.

5.1.4 The averaging of GHG values is not permitted. If consignments are aggregated administratively the worst GHG performance should be taken for the whole consignment. In other words aggregating GHG values may not be used to raise the level of non compliant GHG values to levels of compliance. Disaggregated GHG values can be declared.

5.2 Default GHG Values

Economic operators are able to use **default GHG values** set by the EU instead of **actual values** for calculating GHG impacts, to reduce the administrative burden of calculating actual values. The predetermined default values are not location specific. Default values are set by feedstock, but for EU biofuels/bioliquids the default values can only be used if the feedstock was cultivated in a NUTS2 region where the typical GHG emissions from cultivation of agricultural raw materials can be expected to be lower than or equal to the emissions reported under the heading "Disaggregated default values for cultivation" in Part D of Annex V of RED. Default values are subject to updating depending on scientific and technical advances every two years starting in 2010.

5.3 Imported feedstocks

Documents going forward in the chain of custody should contain the statement "For GHG declaration purposes these feedstocks have been imported from a third country and were landed in (place of discharging in the EU)".

Guidance: the regional default values for GHG emissions at NUTS2 level (basic regions for the application of regional policies) are available for EU member states following this link:

http://ec.europa.eu/energy/renewables/transparency_platform/emissions_en.htm

Information regarding NUTS nomenclature is available following this link:

http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction

- Please note: some NUTS2 regional GHG values are not compliant with Annex V RED minimum GHG requirements.

6.0 Mandatory documents

6.1 The provision of documents in the chain of custody establishes the required traceability and verification regarding the feed stocks going forward through the chain. This is generally referred to as the "Statement of Conformity" or "Sustainability Declaration". This must relate to an identifiable consignment (or lot) of goods.

6.2 There are two types of document chain in operation, those that identify and travel with the goods on a load by load basis and those passing from seller to buyer on a contract by contract basis.

6.3 Documents travelling with the goods are issued initially by the grower and thereafter from store to store or end user/export facility, and are well established. They are issued on a load by load basis. Delivery documentation must include a RED declaration. For example: ***"this load (consignment) has been grown on land which meets the requirements of the Renewable Energy Directive sustainability criteria".***

Growers certified under an assurance scheme must clearly show their scheme ID or identifying mark/sticker on the delivery documentation.

6.4 Normal documents passing from sellers to buyers include copies of delivery notes and invoices on a contract by contract basis. Such documents shall contain a statement declaring they are considered to be of a sustainable nature, for example: "***these goods are certified as sustainable in accordance with Directive 2009/28/EC***."

6.5 For ease of administration, parties to a contract may agree that the GHG default values (not actual values - even if available) will be used. This is acceptable practice under the Directive.

6.6 Documents relating to the goods may be used to pass on information that is relevant to the GHG calculation including the geographic area the goods came from. Additionally and if provided by the EU recognised farm assurance scheme, *all information about the annualised emissions from carbon stock changes caused by land use change must be passed on in the chain of custody.*

6.7 The information required by economic operators from the place of first gathering (storage facility) on a load by load basis may be summarised as:

Name and address coordinates of grower

Name of first gathering point

Unique ID/Ref number for consignment (eg weighbridge ticket)

RED scheme ID/mark/sticker

Contract number/purchaser of goods from grower

Description of goods intended for biofuel/bioliquid

Date of delivery to gathering point

Tonnage delivered

GHG value declared (state actual or default) - see 6.6 above.

Mode and ID (vehicle registration number etc) of transport

6.8 The information to be stated on the documents passed from seller to buyer (**Sustainability Declaration)** going forward must include:

Name and address coordinates of customer

Name of first gathering point

Unique ID/Ref number for consignment (eg weighbridge ticket)

Contract number and customer (buyer)

Description of goods intended for biofuel/bioliquid

Date of outloading from gathering point

Tonnage outloaded

GHG value per MB calculation (state actual or default) – see 6.6 above

Mode and ID of transport (as above)

7.0 Records

Records of all relevant documents must be retained for a minimum period of 5 years as required by the EU legislation.

8.0 Simplified step procedure

The following step procedure will apply where an EU recognised RED compliant scheme is in operation and the grower is a member of a recognised voluntary farm Assurance Scheme approved by the EU as being RED compliant.

8.1 Grower is certified as RED compliant under his farm assurance scheme. This is recorded on scheme database for verification use by 3rd parties.

8.2 Grower makes general RED compliance self declaration to country Trader/Merchant (the ***first gatherer***). This is likely to be a requirement that precedes a contract for the purchase of goods.

8.3 Country Merchant/Trader is audited annually and certified for RED compliance (eg GTAS, ISCC etc). Certified operators are recorded on the relevant scheme database for verification by 3rd parties. The office audit of operators will include a percentage of "dependant" (ie owned/exclusively operated) silos/elevators/warehouses where these are not certified as RED compliant in their own right. Group auditing may be possible for multi site operators that follow a common quality management system. GTAS participants can only accept evidence of compliance with an EU recognised voluntary scheme and this applies only to those schemes recognised by the EU for all land-related criteria and only the version and scope of a scheme that is recognised by the EU. The country merchant/trader holds contracts with growers. Receives and files self declarations from growers. Country merchant/traders who operate dependant stores keep records of any mass balancing operations they undertake.

8.4 Storekeeper/handling facilities are audited for RED compliance if mass balancing is to be applied. This is recorded on the scheme online database for verification use by 3rd parties. Storage and handling facilities that are RED compliant are issued with a GTAS RED scheme ID and/or identifying number/mark or sticker.

8.5 Transport of goods is arranged using transport companies certified under GTAS or other recognised assurance scheme. This is recorded on the scheme database for verification by 3rd parties.

8.6 For each load/consignment of goods leaving the grower's premises a loading document is provided to accompany the load, including a statement that ***"this load (consignment) has been grown on land which meets the requirements of the Renewable Energy Directive sustainability criteria".*** Farm Assurance Scheme identification number/mark or sticker is applied to document. Loading document should clearly state the grower's location/Assurance scheme ID.

8.7 For each load arriving at a storage/handling facility (gathering point) the Storekeeper receives goods accompanied by the loading document quoting the RED statement. Storekeeper cross checks certification status of grower by using the scheme database. Once this is confirmed the goods are stored in accordance with requirements. Goods may be stored separately or in a common bulk.

8.8 Where goods for biomass are co-mingled the storekeeper is required to follow mass balancing accounting principles. Mass Balance calculations are recorded.

8.9 Where goods are transported from 1st gathering point to 2nd gathering point/ bio-mill/converter facility or export facility the storekeeper must complete the load documentation to accompany the goods including the RED declaration as provided by the grower. GTAS RED identification numbers/marks or stickers will be applied to the delivery document.

8.10 1st processor/bio-mill/converter facility receives goods for energy production from a gathering point. Intake operator must cross check that the storage facility is RED certified by checking the relevant scheme on-line database.

8.11 Storekeepers/handling facilities with RED certification that are operating mass balancing must keep detailed records of goods received and out loaded for the various MB calculations on a maximum balancing period of three months. If a bona fide request is received, storekeepers will make their MB calculations available.

8.12 Sellers provide buyers in the chain of custody - on a contract by contract basis - with a "Sustainability Declaration" eg "***these goods are certified as sustainable in accordance with***

Directive 2009/28/EC." in respect of all loads delivered. Where mass balancing has occurred sellers must advise buyers of the GHG Default values after receipt of this information from the relevant stores.

8.13 Storekeepers and trader/merchants are audited for compliance with RED annually (see GTAS Storage and Trading Codes)