RSPO
Roundtable on Sustainable Palm Oil

**RSPO-RED Requirements
for compliance with the
EU Renewable Energy Directive requirements**

Version 4 – 10 February 2012 (final version)

1.Introduction

The RSPO-RED Requirements for compliance with the EU Renewable Energy Directive requirements - Version 4, has been designed as voluntary add-on to the RSPO Principles & Criteria, and will allow palm oil producers and processors under certain conditions to comply with requirements in Directive 2009/28/EC on the promotion of the use of energy from renewable sources. This Directive (commonly referred to as 'EU RED') specifies sustainability requirements for biofuels and bioliquids in the European Union.

The RSPO-RED Requirements specifically allow producers whose land was under palm oil cultivation in January 2008 to comply with EU-RED requirements, provided that also a number of additional requirements have been met. It also allows supply chain operators obtaining palm oil from these producers to comply under certain conditions with EU-RED requirements.
Plantations established after January 2008 can currently <u>not</u> be certified under the RSPO-RED scheme.

It is anticipated that RSPO will either develop a greenhouse gas calculation tool, or will assess and approve an existing -EU-RED approved- greenhouse gas calculation tool for use with the RSPO-RED requirements. Any RSPO developed tool will also be submitted to the EC for validation and approval before it can be used for RSPO-RED requirements.

The RSPO-RED Requirements have been designed to be used in conjunction with the RSPO Principles & Criteria, the RSPO Certification System requirements, the RSPO Supply Chain Certification System requirements, the RSPO Supply Chain Certification Standard. The RSPO-RED Requirements apply to all countries, irrespective of current or future differences in RSPO National Interpretations.

RSPO standards for certification of independent smallholders (group certification) are under development, meaning that certification of these producers is currently not possible under RSPO-RED requirements. When standards for group certification have been fully approved by RSPO, this will be revisited.

All RSPO-RED Requirements are mandatory for supply chain operators wishing to comply with EU-RED requirements. Claims can only be made about compliance with RSPO-RED requirements if the operator has been successfully assessed against the RSPO-RED requirements.

2. Specification of RSPO-RED Compliance Requirements

2.1 RSPO-RED Compliance Requirements for producers
Producers whose land was under oil palm cultivation in January 2008, and who wish to comply with sustainability standards in the EU Renewable Energy Directive shall meet the following requirements in addition to the existing guidance under the RSPO Principles & Criteria:

(i) There is evidence that the land was under palm oil production in January 2008.

(ii) There is evidence that the land is not designated for nature protection purposes by law or by the relevant competent authority. There is evidence that the land is not designated 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 the recognition of these organisations as outlined in Article 18(4) of the EU-RED .

(iii) There is evidence that the land was <u>not</u> a wetlands in January 2008. In case the land <u>was</u> a wetlands in January 2008, there is evidence that the production of palm oil has not changed the nature and the status of the wetlands.

(iv) There is evidence that the land was <u>not</u> a peatland in January 2008. In case the land <u>was</u> a peatland, there is evidence that the production of palm oil does not involve drainage of previously undrained soil. This means that for peatland that was partially drained in January 2008 a subsequent deeper drainage, affecting soil that was not already fully drained, would constitute a breach of the criterion.

(v) Greenhouse gas criterion
One of the following options must be used to for the EU-RED greenhouse gas criterion:

> *(a) Use of a default value specified in Annex V of EU-RED, which complies with the 35% greenhouse gas reduction criterion specified in EU-RED (and the 50% greenhouse gas reduction criterion from 1 January 2017).*
> *For palm oil biodiesel and hydrotreated vegetable oil from palm oil, currently only default values assuming methane capture at palm oil mills comply with the 35% greenhouse gas reduction criterion (and 50% from 1 January 2017). In Annex V of EU-RED, the aggregated default value for cultivation, processing (including methane capture at palm oil mill), transport and distribution of palm oil biodiesel is set at 37 g CO_{2eq}/MJ (equivalent to an actual greenhouse gas emission saving of 56%). The aggregated default value for cultivation, processing (including methane capture at palm oil mill), transport and distribution of hydrotreated vegetable oil is set at 29 g CO_{2eq}/MJ (equivalent to an actual greenhouse gas emission saving of 65%).*

> *In order to use these default values, there shall be evidence that biogas capture from palm oil mill effluent (POME) is applied.*

> *Note: The default values in Annex V of EU-RED may be subject to change in future. Any changes will be applicable to the RSPO-RED requirements with immediate effect.*

Or

   (b) *Use of actual greenhouse gas values to calculate total greenhouse gas savings according to the EU-RED methodology. This option is currently on hold, until an EC approved calculation tool(s) are available.*

Or

   (c) *Until 31 March 2013, palm oil can be claimed to be in compliance with the EU-RED greenhouse gas criterion if there is evidence that the palm oil mill was in operation on or before 23 January 2008 (this is the grandfathering option). From 1 April 2013 no scheme-compliant claim can be made without meeting the EU-RED greenhouse gas threshold, regardless of when the palm oil was processed.*

Requirements on the level of sampling
The level of sampling to take place during a RSPO-RED certification assessment shall include every mill and be based on a minimum sample of √y where y is the number of management sub-units. This formula takes precedence over the sample formula specified in Section 4.2.9 of the RSPO Certification Systems document.

This sampling formula shall be used as a <u>minimum</u>, and may be increased depending on the complexity and risk associated with the operations.

Note: The level of sampling is based on Section 5 of the IAF MD01:2007 (IAF Mandatory document for the certification of multiple sites based on sampling). IAF MD01:2007 is mandatory for the consistent application of Clause 9.1.5. of ISO/IEC 17021:2006 and is based upon guidance previously provided in IAF GD2: 2005 Annex 3 and IAF GD6:2003, clause G.5.3.5 – G.5.3.13. All clauses of ISO/IEC 17021:2006 continue to apply and this document does not supersede any of the requirements in that standard. This mandatory document is not exclusively for Quality Management Systems (QMS) and Environmental Management Systems (EMS) and may be used for other management systems. However, relevant standards may provide specific requirements for multiple sites or preclude the use of sampling (eg. ISO/IEC 27006, ISO/TS 22003).

2.2 RSPO-RED Compliance Requirements for the Supply Chain

Tracking RSPO-RED certified palm oil products is ensured through RSPO supply chain certification, including a number of additional requirements listed in this section.

2.2.1 General
The **RSPO Supply Chain Certification Requirements** and the **RSPO Supply Chain Certification Standard** regulate the handling of the certified product at every stage of the supply chain. Through supply chain certification, a company proves that its operations comply with the rules governing the entire supply chain of RSPO certified palm oil products. RSPO has devised four supply chain systems, three of which follow physical oil through the supply chain: Identity Preserved (IP), Segregated (SG) and Mass Balance (MB). These three systems all have their own requirements. The fourth system is a book & claim certificate trading system which is <u>not</u> allowed under EU-RED requirements.

The RSPO Supply Chain Certification Requirements and the RSPO Supply Chain Certification Standard apply to each supply chain operator which takes legal ownership and physically receives RSPO certified palm oil products.

Only retail companies that do not manufacture, modify, (re)package or (re)label consumer goods in any way are exempt from the certification requirement. For bio-energy, the same exemption applies to supply chain operators which do not manufacture or modify the product. This allows re-blending of biofuels downstream of the biofuel production, without requirements for RSPO supply chain certification.

Certifications are valid for five years with annual surveillance.

Further details on the RSPO supply chain certification system can be found in the documents 'RSPO Supply Chain Certification Systems' and 'RSPO Supply Chain Standard'.

In addition to the requirements laid down in the 'RSPO Supply Chain Certification Systems' and the 'RSPO Supply Chain Standard', RSPO is using a transaction registration system for certified palm oil products (refer to Annex I for a brief description). The transaction registration system, sometimes also referred to as the IT-system, is not an essential element of supply chain certification (systems), but is merely a 'double check' of total claims of certified palm oil products made against total production of certified palm oil.

2.2.2 Mass balance

Mass balance is a method that allows mixing material with different (or no) sustainability characteristics. This method allows the operator to separate the sustainability characteristics from the physical consignment. This method works on the basis that input of sustainability characteristics match output of sustainability characteristics:

When consignments with different (or no) sustainability characteristics are mixed,separate sizes and sustainability characteristics of each consignment remain assigned to the mixture. If a mixture is split up, any consignment taken out of it can be assigned any of the sets of sustainability characteristics (accompanied with sizes) as long as the combination of all consignments taken out of the mixture has the same sizes for each of the sets of sustainability characteristics that were in the mixture. A "mixture" can have any form where consignments would normally be in contact, such as in a container, processing or logistical facility or site (defined as a geographical location with precise boundaries within which products can be mixed).

The mass balance system operates at site/facility level and cannot be operated at aggregated company level.

Positive stocks

RSPO Supply Chain Certification Requirements do not allow a facility to ship more RSPO certified product than has been received. In other words: it is nog possible to exceed stock volumes for any certified palm oil product, nor is it possible to have a negative stock of claims at any time. It is possible to sell RSPO certified product short (meaning the seller makes a contract for RSPO certified sustainable palm oil but has not yet received or delivered the physical material). However this is a commercial risk and under no circumstances can the seller have a negative stock of claims of certified material.

Furthermore, at every re-audit the certification body shall verify the facility's annual summary records to confirm a positive or neutral balance between RSPO certified palm oil purchased and sold

within the inventory period of the audit. The certification body shall confirm the amounts purchased and claimed as part of its audit report.

N.B. In other words: there is not a fixed inventory period for volumes RSPO certified product received and shipped, but a continuous check ensuring that no more RSPO certified product is shipped than received.

2.2.3 Counting rules for palm oil and palm oil fractions

A facility can recalculate palm oil stocks' details by:

    a. Refining RSPO palm oil product stocks into one of its derivatives;

    b. Downgrading palm oil stocks from segregation to mass balance.

a.Refining RSPO palm oil product stocks into one of its derivatives

For converting RSPO certified palm oil products to derivatives, RSPO uses standard conversion ratios. For trading under the mass balance supply chain model RSPO uses mandatory industry average default ratios. For trading under the segregated supply chain model RSPO uses industry average default values, which may be adjusted by operators within a bandwith of +/-2%.

These default values have been set by the RSPO Trade & Traceability working group based on accepted industry standards. Default conversion ratios have been summarised in Annex 4 of the RSPO Supply Chain Certification Systems.

Ratios applied by operators will be checked as part of the Supply Chain Certification requirements during the supply chain certification audit.

Facilities need to keep stock accounts of individual products, which will be checked during the supply chain certification audit.

b.Downgrading palm oil stocks from segregation to mass balance.

Companies can downgrade stock of RSPO certified palm oil products from segregation to mass balance. RSPO Supply Chain Certification Requirements do not allow to 'upgrade' stock product from mass balance to segregation; it is not possible to undo a downgrade.

Companies that process palm oil products into derivatives have two options for selling their certified products:

    1. Purchase segregated palm oil products and apply the segregated claim to all fractions;

    2. Purchase mass balance palm products and allocate mass balance claims to products going out, ensuring that the input matches the output, using the harmonized yield schemes as specified in Annex 4 of the RSPO Supply Chain Certification Systems.

2.2.4 Additional requirements for EU-RED compliance

Facilities who wish to comply with sustainability standards in the EU Renewable Energy Directive shall meet the following requirements in relation to the RSPO Supply Chain Certification requirements and the RSPO Supply Chain Certification Standard:

(i) Facilities shall use a RSPO supply chain system which follows physical oil through the supply chain (Identity Preserved, Segregated or Mass Balance). The RSPO Book & Claim option is not allowed under EU-RED requirements.

(ii) The crude palm oil mill shall be included in the supply chain audits and certification, following the requirements as specified in Module D and E of the RSPO Supply Chain Certification Standard.

(iii) Purchase orders for RSPO certified palm oil or palm oil product shall specify:
- *the country of origin;*
- *that the palm oil (product) meets the land use requirements outlined in Section 2.1;*
- *the cumulative greenhouse gas intensity (g CO_2/tonne or gCO_2/MJ)of the emissions of greenhouse gases relative to the sustainable fraction of the delivered consignment.*

(iv) Greenhouse gas criterion

One of the following options must be used to for the EU-RED greenhouse gas criterion:

(a) Use of a default value specified in Annex V of EU-RED, which complies with the 35% greenhouse gas reduction criterion specified in EU-RED (and the 50% greenhouse gas reduction criterion from 1 January 2017).

For palm oil biodiesel and hydrotreated vegetable oil from palm oil, currently only default values assuming methane capture at palm oil mills comply with the 35% greenhouse gas reduction criterion (and 50% from 1 January 2017). In Annex V of EU-RED, the aggregated default value for cultivation, processing (including methane capture at palm oil mill), transport and distribution of palm oil biodiesel is set at 37 g CO_{2eq}/MJ (equivalent to an actual greenhouse gas emission saving of 56%). The aggregated default value for cultivation, processing (including methane capture at palm oil mill), transport and distribution of hydrotreated vegetable oil is set at 29 g CO_{2eq}/MJ (equivalent to an actual greenhouse gas emission saving of 65%).

In order to use these default values, there shall be evidence that biogas capture from palm oil mill effluent (POME) is applied.

Note: The default values in Annex V of EU-RED may be subject to change in future.

Or

(b) Use of actual greenhouse gas values to calculate total greenhouse gas savings according to the EU-RED methodology. This option is currently on hold, until an EC approved calculation tool(s) are available.

Or

(c) Until 31 March 2013, palm oil can be claimed to be in compliance with the EU-RED greenhouse gas criterion if there is evidence that the palm oil mill was in operation on or before 23 January 2008 (this is the grandfathering option). From 1 April 2013 no scheme-compliant claim can be made without meeting the EU-RED greenhouse gas threshold, regardless of when the palm oil was processed.

2.3 Further RSPO-RED Compliance requirements for all supply chain operators physically handling palm oil (products)

Further to the RSPO-RED Compliance Requirements specified in Section 2.1 and 2.2, the following are mandatory requirements for all supply chain operators physically handling palm oil (products) (and receiving into storage) seeking compliance against the RSPO-RED scheme:

Audits before participation in the RSPO-RED scheme
All supply chain operators physically handling palm oil (products) shall be certified against the RSPO-RED Compliance Requirements before being allowed to participate in the scheme.

Document management
All operators wishing to comply with EU-RED requirements, shall have a documentation management system. The system shall as a minimum contain all necessary documentation/evidence in relation to the claims they make or rely on. The documentation/evidence shall be kept for a minimum of 5 years.

Multi site certification and audit
All operators wishing to comply with EU-RED requirements, and wishing to use multi-site certification, shall comply with the requirements specified in Annex 2 of the RSPO Supply Chain Certification Systems document.

All operators wishing to comply with EU-RED requirements, and wishing to use multi-site certification, shall use the following sample audit formula for initial assessments:
'Square root of the total number of sites, rounded up to a whole number for each Set, plus Central Office'. This formula takes precedence over the sample audit formula for initial assessments specified in Annex 2 of the RSPO Supply Chain Certification Systems document.

For operators wishing to comply with EU-RED requirements, the applicable multi-site sampling formulas shall be used as a <u>minimum</u>, and may be increased depending on the complexity and risk associated with the operations.

Limited assurance level
Retrospective audits shall include control of quantitative claims made by operators, in particular in relation to mass balance data and greenhouse gas data. Based on the sampling of data, the auditor shall produce an audit statement specifying the level of limited assurance, based on the guidelines laid down in the ISAE 3000 (Revised) standard of IFAC.

3. Definitions and clarification issues

Continuously forested areas: 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

Country of origin: the country where the palm oil fruits (Fresh Fruit Bunches) were grown

10-30% forested areas: land that is similar to continuously forested areas but has canopy cover between 10% and 30%

EU-RED: European Union Directive on the promotion of the use of energy from renewable sources (Renewable Energy Directive, 2009/28/CE)

Facility (site): a single functional unit of an organisation or a combination of units situated at one locality, which is geographically distinct from other units.

Installation: Any processing installation used in the production process. It does not include production facilities that have been intentionally added to the production chain to qualify for the exemption set out in Directive 2009/28/EC, Article 17.2

Management unit: a crude palm oil mill and its supply base. RSPO assessments cover the operations of the mill (where the FFB are processed), and the oil palm estates where FFB are produced.

Management sub-units: sources of FFB which deliver to the crude palm oil mill (i.e. estates and/or smallholders)

Wetlands: land that is covered with or saturated by water permanently or for a significant part of the year

Scope of work of 'annual surveillance' planned for facilities processing less than 500 tonnes per year: for facilities processing less than 500 mt/yr, a certificate issued is only valid for one year. This means that another full audit (as defined in RSPO Certification Systems document) must be conducted prior to issuance of a new certificate.

Assessments other than 'on-site audits': such audits are not allowed. The Supply Chain Certification Systems document makes reference to compliance with ISO17021. Section 9.2.3.2 of the ISO17021 document clearly stipulates that 'the stage 2 audit shall take place at the site'.

Annex I The RSPO-RED transaction registration system for certified palm oil products (RSPO IT-system)

1.General

Tracking RSPO certified palm oil products is ensured through supply chain certification. In addition, a transaction registration system ensures that volumes of certified palm oil products claimed do not exceed actual volumes produced.

The *RSPO Supply Chain Certification Requirements* and the *RSPO Supply Chain Certification Standard* regulate the handling of the certified product at every stage of the supply chain.

Through supply chain certification, a company proves that its operations comply with the rules governing the entire supply chain of RSPO certified palm oil products. RSPO has devised four supply chain systems, three of which follow physical oil through the supply chain: Identity Preserved (IP), Segregated (SG) and Mass Balance (MB). These three systems all have their own requirements. The fourth system is a book & claim certificate trading system which is not allowed under EU-RED requirements and is not discussed further in this document.

The RSPO Supply Chain Certification Requirements and RSPO Supply Chain Certification Standard apply to each facility which stores, transports, trades, refines, processes, packs or labels sustainable palm oil products and wishes to make product-related claims regarding certified palm oil (derivatives). Only retail companies that do not manufacture, modify, (re)package or (re)label consumer goods in any way are exempt from the certification requirement. Certifications are valid for five years. A company that requests supply chain certification must be a member of RSPO.

Further details on RSPO supply chain certification can be found in the document 'RSPO Supply Chain Certification Systems' and 'RSPO Supply Chain Certification Standard'.

While tracking of RSPO certified palm oil products is ensured through supply chain certification, a *Transaction Registration System* ensures that volumes of certified palm oil products claimed do not exceed actual volumes produced. The Transaction Registration System keeps a database of all transactions of certified product and/or data throughout the supply chain. It monitors the certified product flows from one supply chain actor to the next, up to the final palm oil refinery. The transaction registration system operates at the level of individual facilities.

Section 2 of this document explains key operational procedures of the Transaction Registration System.

2. The Transaction Registration system

2.1 Technology and conditions for participation

RSPO uses a web-based Transaction Registration System (hereafter also referred to as: the System) developed and currently managed by UTZCertified.
All System users can access the system with a personal login code.

The System includes accounts of the stocks of sustainable palm oil products of all operators that are supply chain certified. It allows supply chain actors to amend their stocks as a result of purchases and

sales. The System is designed in such a way that the total (global) quantity of products claimed as sustainable can never exceed the total (global) production of sustainable palm oil.

All supply chain actors wishing to trade RSPO certified palm oil, operating before and including the final palm oil refinery need to use the System. Users of this System must be RSPO member and RSPO Supply Chain certified. Upon registration with RSPO, supply chain actors are automatically registered within the System, and receive log in details for access.

RSPO members need to register and certify each of their sites which actively physically handle RSPO certified palm oil products.

2.2 Calculating the production of certified palm oil

During the process of certifying a palm oil mill against RSPO Principles & Criteria, the Certification Body estimates the annual production of palm oil by the mill, based on historic production data and foreseeable future yield changes (e.g. related to maturity level of trees, replanting schemes, foreseeable climatic influences). This estimated quantity is the maximum volume which the mill can trade as RSPO certified palm oil.

The Certification Body forwards information on the estimated quantity of RSPO certified palm oil, together with mill details and the date of certification, to the System manager (currently UtzCertified). This information is added to the Transaction Registration System.

During the required annual follow up audits to the mill (generally referred to as 'annual surveillance'), the Certification Body checks the actual palm oil production during the past certification year, against the estimated quantity for that year. Differences are reported by the Certification Body to the System Manager. The maximum volume which the mill can trade as RSPO certified palm oil is amended accordingly in the System, as is the estimation for the following year.

2.3 Shipment of Certified Sustainable Palm Oil from a mill

The RSPO supply chain starts with the RSPO certified palm oil mill, being the certificate holder for the unit of certification (=the mill plus its supply base).

Upon the shipment of RSPO certified palm oil by a mill to a buyer, the mill has to announce this in the Transaction Registration System by registering a Shipping Announcement (refer to Annex III for example). This contains the following shipping information:
• The contract number and the buyer of the product;
• The type of product and the weight in MT;
• Transport information.

The System then automatically checks whether the mill is RSPO certified and has sufficient RSPO certified volume left to make the shipping announcement. If this is the case, the System will generate a unique, randomly generated, Traceability Number for this shipment. The Traceability Number is sent to the mill and also placed in the System's inbox of the buyer. The volume of the shipment is then deducted from the mill's stock volume.

If it appears that the mill is not RSPO certified or has insufficient RSPO certified volume left to make the shipping announcement, the System does not process the Shipping Announcement, and the announcement receives the status 'Pending' (no traceability number is provided). Consequently, the

volume cannot be shipped as sustainable, because the buyer will not accept it (as sustainable) without the Traceability Number.

When the buyer of the RSPO certified palm oil receives the shipment from the mill, he verifies that the palm oil mill received matches its sustainable purchase as recorded in the System by the Traceability Number. He then has to confirm receipt of this shipment in the System by registering a Shipping Confirmation. The volume of the shipment is then added to the buyer's stock volume.

If the buyer rejects the shipping announcement, the seller receives a message saying that the Shipping Announcement has been 'Rejected'. Upon entering 'Rejected', the system automatically requests the buyer to elaborate on the reason for rejecting. In such a case, the System Manager will verify why the information does not match, and will contact the buyer within two days.

When an announcement has been rejected, it receives the status 'cancelled' in the system. The volume is not added to the buyer's stock, but instead added back to the seller's stock. Rejected announcements cannot be undone; the seller will have to register a new shipping announcement (with a new Traceability Number).

2.4 Shipments of Certified Sustainable Palm Oil further in the supply chain
When the buyer of the palm oil from the mill sells the RSPO certified palm oil onwards he has to announce this in the System by registering a Shipping Announcement, including the following shipping information:
- The contract number and the buyer of the product;
- The type of product and the weight in metric tons (MT);
- Transport information.

When registering a Shipping Announcement, the volume of the certified palm oil shipped is deducted from the company stock volume and a new unique Traceability Number is generated for this shipment. The Traceability Number is sent to the seller of the palm oil and also placed in the System's inbox of the buyer.

When the buyer of the RSPO certified palm oil receives the shipment from its supplier, he verifies that the palm oil matches its sustainable purchase as recorded in the System by the Traceability Number. He then has to confirm receipt of this shipment in the System by registering a Shipping Confirmation. The volume of the shipment is then added to the buyer's stock volume.

If the buyer rejects the shipping announcement, the seller receives a message saying that the Shipping Announcement has been 'Rejected'. Upon entering 'Rejected', the system automatically requests the buyer to elaborate on the reason for rejecting. In such case, the System Manager will look why the information does not match, and will contact the buyer directly within two days.

The process of registering Shipping Announcements (deducting stock volumes) and Shipping Confirmations (building up stock volumes) repeats itself until the palm oil is received by the final palm oil refinery.

2.5 Sales Record

When the final palm oil refinery redeems the Traceability Number in the System, it will receive a Sales Record for its purchase. The Sales Record confirms that the palm oil bought by the refinery indeed contains and/or supports the production of RSPO certified palm oil in origin.

2.6 Trade through the supply chain from final refinery

Once the final palm oil refinery has processed the palm oil into half- or end-products, further shipment of the product along the supply chain (e.g. to esterification plants, end-product manufacturers, brands and retailers) does not have to be registered in the System. However, all actors further down the supply chain have to be Supply Chain Certified.