

RECS
Domain Protocol

for
Republic of South Africa

Prepared for RECSA
Renewable Energy Certificate Association of South Africa

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A INTRODUCTION AND PURPOSE

A1 Introduction

- A1.1 Certification of the quality and method of energy output provides an efficient mechanism for accounting for: the quality of energy supplied to consumers and its method of production; the progress made towards targets for the use of sustainable energy technologies; and the production and consumption of energy for the purposes of stimulating investment in sustainable energy plant. Moreover, certification enables a value to be accorded to specific types of energy output and traded separately from the energy itself.
- A1.2 For a system of energy certification to discharge these functions effectively, users of the Certificates – producers, traders, suppliers, consumers, NGO's and governments – must be satisfied that the Certificates provide reliable evidence of the qualities to which they relate. The European Energy Certification System (EECS) framework is designed to give all such users confidence in the Certificates issued and processed under EECS.
- A1.3 The life cycle of a RECS (TREC) Certificate encompasses three phases: issuance, transfer and redemption:
- (a) Electronic Certificates are issued on registries in respect the energy output of Production Devices registered specifically for the purposes of RECS.
 - (b) These Certificates may be transferred from the account of the producer to that of a trader, and so on; either within the country of origin or to other registries in the EECS network across Europe.
 - (c) Redemption is the mechanism whereby the Certificate is removed from circulation. Redemption occurs at the point at which the value of the Certificate is realised. Examples of circumstances in which the Redemption of a Certificate may occur include: in connection with payment from a consumer in recognition of the qualities it represents; in connection with the award by government of a financial incentive, such as a tax rebate; or by way of discharge of a contractual or legal obligation.
- A1.4 Together with the Standard Terms and Conditions, this Domain Protocol establishes the EECS Scheme for the Domain defined in B1.2 below.

A2 Purpose

- A2.1 This Domain Protocol sets out the procedures, rights and obligations for RECS as used within this Domain.
- A2.2 This Domain Protocol is made binding between the Scheme Participant and RECSA by agreement in the form of the Standard Terms and Conditions. The duties under this Domain Protocol are owed specifically between RECSA and the Scheme Participant.
- A2.3 The objective is to ensure quality in the robustness and transparency in facilitating RECS for all Scheme Participants.
- A2.4 This document also contains explanatory text to help Scheme Participants. This text is for information only and is identified by having a shaded background.
- A2.5 Important contact information is provided in Annex 1.

B SCOPE AND RESPONSIBILITY

B1 This Domain Protocol

B1.1 This Domain Protocol specifies the procedures for the issue, and use as evidence of transfer of ownership and eventually removal of RECS Certificates held within the EECS Registration Database of RECSA and may only be amended or added to by RECSA in accordance with section I below.

B1.2 This Domain Protocol for South Africa applies to Republic of South Africa, in conjunction with RECS Certificates held within the EECS Registration Database.

B2 Responsibility

B2.1 RECSA is responsible for the operation of the RECS system for this Domain.

B2.2 Some of the functions facilitating system operation may be contracted out to approved agents of RECSA.

B2.3 The Central Monitoring Office (CMO) is the primary role in the operation of an EECS Scheme in a Domain. The function of the CMO is to administer and maintain the database of qualifying Production Devices and RECS Certificates for that Domain. In South Africa this function is performed by RECSA CMO. The charges for accounts and transactions are shown on the website www.zaRECS.co.za

B2.4 The CMO is not responsible for the authorisation of Certificates, although it is responsible for 'issuing'; the creation of Certificate records within its registry.

C Definitions

C1 This document

C1.1

Unless the context otherwise requires or there is express provision to the contrary, all terms in this Domain Protocol shall have the meanings ascribed to them in section B of the Principles and Rules of Operation of the Association of Issuing Bodies (AIB) for The European Energy Certification System, which can be found at <http://www.aib-net.org>

| TERM | MEANING |
|----------------------------------|---|
| CMO | RECSA CMO being the person appointed by RECSA to administer the operation of the EECS Registration Database for the purposes of RECS within South Africa; |
| Competent Authority | in relation to the exercise or discharge of any legislative, governmental, regulatory or administrative function, the body duly authorised under the laws and regulations of South Africa to exercise or discharge that function; |
| Scheme Participant | an Account Holder or a Registrant of a Production Device on the EECS Registration Database for the purposes of RECS within South Africa; |
| Net Electrical Energy Generation | the gross electricity production of a Production Device as evidenced by measured values collected and determined by an Authorised Body (or where appropriate an Approved Measurement Body) with reference to its Import and Export Meters (adjusted by meter amendments and the outcome of any disputes) minus the demand of any generating auxiliaries and minus losses in the main generator transformers on the site of the Production Device; |

D Renewable Energy Certificate System (RECS)

D1 Scheme Definition

D1.1 The 'Renewable Energy Certificate System' (RECS) enables international trade in the renewable attribute of energy generation by uncoupling environmental value from the associated physical energy. It is a voluntary system whose trading is governed by RECS International.

D2 Supplementary Definitions for RECS

Renewable Source Factor in relation to any Production Device and period of time the proportion expressed as a factor of less than one of the Net Electrical Energy Generation of that Production Device which is RES-E in accordance with the qualifying criteria set out in D3 below, as specified in the Production Declaration for that Production Device with respect to the period over which the electricity was generated.

D3 Qualifying Criteria

D3.1 The criteria for Production Devices to qualify for registration for the purposes of RECS are:

- (a) that the Production Device is capable of generating RES-E (being Electricity produced from Renewable Energy which has the meaning assigned to it by the Directive 2001/77/EC); and
- (b) that the owner of Production Device will not during the period of its registration for the purposes of RECS and for the same unit of electrical energy receive tradable evidence such as Certificates which represent the benefit of renewable electricity generation from both RECS and another similar system that similarly certifies the origin or represents the benefits of the associated renewable electricity and can be exchanged for financial support.

D3.2 Qualifying energy must be RES-E (being Electricity produced from Renewable Energy which has the meaning assigned to it by the Directive 2001-77-EC).

D3.3 To ensure maintenance of the Qualifying Criteria, a Production Audit will be conducted in relation to each Production Device in South Africa which is Registered for the purposes of RECS:

- (a) not less than once every five years; and
- (b) where such Production Device is fuelled in whole or in part by biomass, no less than once a year.

D4 Support Schemes

D4.1 Support schemes that are relevant to the operation of the RECS scheme are listed in AIB PRO Fact Sheet 3 – Types of Public Support. This document can be viewed at www.aib-net.org under the section: Association – Documents – Regulation – PRO.

D4.2 The Registrant of a Production Device must guarantee that the owner of the Production Device, or his agent, will not during the period of its registration for the purposes of RECS and for the same unit of electrical energy receive tradable evidence such as Certificates which represent the benefit of RES-E generation from both RECS and another similar system that similarly certifies the origin or represents the benefits of the associated renewable electricity and can be exchanged for financial support.

D4.3 The Registrant of a Production Device must notify RECSA whether, and if so what type of, Public Support has been, or is due to be, received by the Production Device.

D4.4 The Registrant of a Production Device must provide details of any prior infringements by itself or any affiliate of the terms of any Domain Scheme with respect to RECS to RECSA on application for registration.

D5 **Certificate Face Values**

D5.1 RECS Certificates can be Issued with the following Face Values:

- (a) 1MWh

D6 **Issuing of RECS Certificates**

D6.1 This section is supplemental to the provisions of section F below.

D6.2 Where a Production Device only produces RES-E in accordance with the qualifying criteria set out in D3, the amount of RES-E determined for the purposes of RECS as having been produced by a Production Device shall be the amount of Net Electrical Energy Generation produced by that Production Device.

D6.3 Where a Production Device produces RES-E in accordance with the qualifying criteria set out in D3 and electricity which is not in accordance with the qualifying criteria set out in D3, the amount of RES-E determined for the purposes of RECS as having been produced by a Production Device shall be the amount of Net Electrical Energy Generation produced by that Production Device multiplied by the Renewable Source Factor.

D6.4 RECS Certificates can be Issued in respect of output up to the entirety of the RES-E output of a Production Device in accordance with the qualifying criteria set out in D3 in any period.

D6.5 Irrespective of the actual date on which a RECS Certificate is issued, the date of Issue of a RECS Certificate is the last day on which the energy output to which the RECS Certificate relates was generated.

D6.6 A RECS Certificate must indicate:

- (a) whether Public Support is associated with the Originating Production Device; and
- (b) the nominated capacity (in kW) of the Originating Production Device.

E PARTICIPATION AND REGISTRATION

E1 Scheme Participation

- E1.1 Any legal person who is not a member of the Association of Issuing Bodies or such member's affiliate or agent can be a RECS Scheme Participant.
- E1.2 The application form to open an Account can be found in Annex 5 and on the website www.zaRECS.co.za.
- E1.3 The RECS Scheme Participant must contract with RECSA under the Standard Terms and Conditions.
- E1.4 RECSA will issue each authorised user with an identification and password to enable secure communications. It is the responsibility of the Scheme Participant to keep such identification secret.
- E1.5 In very limited circumstances, including recovery of undisputed debt from a Scheme Participant in default and purchases for its own use, RECSA can buy and sell certificates. Such activities are reported to the Association of Issuing Bodies.
- E1.6 [insert other account administration and security details here]

E2 Registration of a Production Device

- E2.1 Only the owner of a Production Device, or a Registrant duly authorised by the owner, may register a Production Device, which is located in South Africa in the EECS Registration Database.
- E2.2 The Registrant of the Production Device must provide evidence to the satisfaction of RECSA that it has the appropriate authority to register the Production Device and that it can comply with the requirements of the RECS Scheme and this Domain Protocol with respect to the imposition of duties on the owner and/or operator of the Production Device. Such evidence is a power of Attorney.
- E2.3 An applicant registering a Production Device must provide the following information:
- (a) the applicant's name and address and additional contact details, including the name of the individual responsible for the application, phone number, fax number and e-mail address;
 - (b) the names of persons authorised to act for the Registrant;
 - (c) the EECS Scheme or Schemes with respect to which it is applying for registration;
 - (d) the Transferable Account into which Scheme Certificates in respect of that Production Device are to be Issued;
 - (e) the location of that Production Device, its name and address;
 - (f) details of the Export Meter(s) for that Production Device;
 - (g) details of any generating auxiliaries associated with that Production Device;
 - (h) where there are generating auxiliaries associated with that Production Device and the consumption of these auxiliaries is not determined by an Export Meter, details of Import Meter(s) which determine the electricity consumption by the Production Device;
 - (i) (irrespective of whether or not there is any intention to use such sources of energy in connection with the Production Device) all sources of energy that may be converted into energy outputs by that Production Device by reference to the source types set out in Annex 3;
 - (j) the nature of that Production Device, in terms of technology by reference to the types set out in Annex 3;
 - (k) the Nominal Capacity of that Production Device;
 - (l) where at the time of such application it has been commissioned, the date on which that Production Device was commissioned;

- (m) the identity of the Authorised Body or, where appropriate, Approved Measurement Body responsible for collecting and determining the measured values of the energy outputs of that Production Device and providing such measured values to RECSA;
- (n) a diagram of that Production Device, including details the location of:
 - (i) the Export Meter(s) for the Production Device;
 - (ii) any transformer substations at the site of the Production Device;
 - (iii) any generating auxiliaries for the Production Device; and
 - (iv) any Import Meters for the Production Device.
- (o) a description of how the amount of Net Electrical Energy Generation produced by that Production Device shall be calculated from the meter readings to be provided.

E2.4 The registration form containing all the items listed in D2.3 above can be found in Annex 2 to this Domain Protocol.

E2.5 The Qualifying Criteria for a Production Device within the RECS scheme are given in D3 above.

E2.6 The Registrant must warrant that the information provided to RECSA in connection with its application is complete and accurate and that the Production Device meets the qualification criteria for RECS.

E2.7 The Registrant must also provide details of any payments (other than payments arising from the sale of RECS Certificates) which have been received by, or are due to accrue to, any person in relation to the Production Device under any of the Public Support schemes identified in D4.1 above.

E2.8 The CMO, RECSA, will respond to the application within 10 working days from its receipt.

E2.9 The Registrant must have the information in the registration form verified by a Production Registrar (see H2.1 below) as part of the approval process.

E2.10 Where the Production Device is already accredited to another EECS Scheme or legislative support scheme, the CMO, RECSA may determine that part or all of the verification of this application is not required.

E2.11 An application for the registration of a Production Device for the purposes of RECS will be rejected if:

- (a) in relation to that application, the applicant has failed to comply with any requirements of this Domain Protocol or the Standard Terms and Conditions;
- (b) the Qualification Criteria are not satisfied in respect to that Production Device;
- (c) there are one or more generating auxiliaries for that Production Device the consumption of which are not determined by an Export Meter, and it is not fitted with Import Meters; or
- (d) the Production Registrar is prevented from satisfactorily verifying the application by the applicant or the owner or operator of the relevant Production Device.

E2.12 On successful completion of the registration process, RECSA will assign a unique identifier to each registered Production Device, if one has not already been assigned in that EECS Registration Database under another EECS Scheme.

The identifier consists of a number with 18 numeric characters that also identifies the Domain of origin. EAN/GSRN (Global Service Relational Number) coding is used.

E2.13 The Registrant consents to the publication by RECSA or its CMO of data provided in the course of its application for registration in relation to each of its Production Device registered on the database on its web page www.zaRECS.co.za with the exception of:

- (a) detailed descriptions of plant and equipment;
- (b) graphical representations of the Production Device and its location, including diagrams and photographs; and
- (c) details of:
 - (i) the person responsible for the application; and

- (ii) where the Registrant of the Production Device is not its owner, the Production Device's owner.

E3 Changes in Registered Details

E3.1 The Registrant of a Production Device must notify RECSA of any planned changes due to come into effect that will result, or unplanned changes that have resulted, in:

- (a) the information recorded in the EECS Registration Database in relation to the Production Device becoming inaccurate; or
- (b) the Qualification Criteria for RECS ceasing to be satisfied with respect to that Production Device.

E3.2 On receipt of a change of details notification (following an inspection or otherwise), RECSA will evaluate the impact of the changes on the Qualifying Criteria and respond to the Registrant within 10 working days specifying the decision taken.

E3.3 Where RECSA becomes aware that a Production Device no longer fulfils, or will no longer fulfil, the Qualification Criteria, the EECS Registration Database record for that Production Device will be updated to show that the Production Device no longer qualifies for RECS Certificates with effect from:

- (a) (in relation to planned changes notified in advance) the date on which such planned changes are due to come into effect; or
- (b) (in relation to other changes) as soon as reasonably practicable after becoming so aware.

E4 Withdrawing from the Scheme - Closing an Account

E4.1 The Account Holder must notify RECSA of an intent to close his account using the form shown in Annex 5. The effective date of closure must not be less than 10 working days from the date of receipt by RECSA.

E4.2 RECSA will amend the EECS Registration Database to seal that Account as of the effective date on the request or 30 working days from the date of receipt by RECSA whichever is the later.

E4.3 [Insert commercial provisions here]

E5 Withdrawing from the Scheme - Deregistering a Production Device

E5.1 The Registrant must notify RECSA of an intent to deregister his Production Device in writing.

E5.2 [Insert commercial provisions here]

E6 Withdrawing from the Scheme - Registration Expiry

D1.1 Unless otherwise directed by legislation identified in D1 above, the registration of a Production Device as qualifying for RECS in the EECS Registration Database will expire after five (5) years. RECSA will amend with immediate effect the relevant records in the EECS Registration Database to indicate that the Production Device no longer qualifies for RECS.

E6.1 The Registrant may avoid expiry by successfully completing re-registration of the relevant Production Device as set out in section D2 above. Following expiry, the Registrant may apply for re-registration of the relevant Production Device.

F PRODUCTION DATA

F1 Metering

- F1.1 Only Production Devices that are equipped with metering equipment that complies with the relevant regulations for the trading of generation energy shall be registered. The metering equipment may measure on a scalar basis (meter advance only) or on a period basis (energy measured in units of time) according to the regulations.
- F1.2 For the avoidance of doubt, the relevant regulations are the versions of the following agreements and codes presently in force at the time:
- (a) [list of trading and settlement codes]
- F1.3 Unless determined under the regulations listed in E1.2 above, the metering Measurement Frequency shall be no more than twelve-monthly.

F2 Data Provision

- F2.1 If the Registrant wishes to receive RECS Certificates for his Production Device in an issuing period, he must submit a Production Declaration to RECSA.
- (a) If the Production Device has a single energy source (i.e. excluding biomass and pumped storage hydro), the Registrant must submit a Production Declaration for that Production Device at least once in any 12 month period.
- (b) If the Production Device has multiple energy sources (i.e. including all biomass, CHP, and pumped storage hydro), the Registrant must submit a Production Declaration for that Production Device for every issuing period as defined in F1.2 below.

The Production Declaration form can be found in Annex 4 to this Domain Protocol.

- F2.2 The Registrant is responsible for the timely delivery of accurate metering data for his Production Device, although metered energy values must be provided, or verified, by a Measurement Body (see H3 below).
- F2.3 Production Declarations are subject to verification by a Production Auditor (see H1 below) on a random and periodic basis.
- F2.4 In the event that it transpires that the data in any Scheme Certificate is inaccurate (whether or not through an act or omission of the Registrant of the Originating Production Device):
- (a) RECSA shall (provided that such RECS Certificates are, at the time of such Withdrawal, in the Transferable Account of that Registrant) Withdraw those Certificates; and
- (b) the Registrant shall pay RECSA the cost of securing the agreement of another Account Holder to the Withdrawal of RECS Certificates of the same type from that other Account Holder's Transferables Account,
- so that, as far as reasonably practicable, RECS Certificates are withdrawn with a Face Value and a financial value which make good the discrepancy.
- F2.5 The Registrant must provide metering data for his Production Device for the entire duration of registration of that Production Device (regardless of whether the generation is eligible or certificates are required).
- F2.6 A person submitting a Production Declaration (See Annex 4) in accordance with E2.1 above shall be obliged to specify therein:
- (a) the values of M^i and C^i for each fuel type 'i'; and
- (b) as the Energy Source Factor for that period, a factor no greater than L,

Where:

$$L^i = \frac{\sum_i^j M^i x C^i}{\sum_i^n M^i x C^i}$$

And

M^i is the mass of each fuel type 'i' for that Production Device during the relevant period.

C^i is the average calorific value of each fuel type 'i' for that Production Device during the relevant period.

i to j are qualifying energy sources for that Production Device during the relevant period.

j to n are not qualifying energy sources for that Production Device during the relevant period.

F2.7 In some cases, additional information is required by the issuer to ensure the number of Certificates issued correctly represents the qualifying energy that was metered. These cases, and the additional information required is set out below:

(a) [x]

F2.8 [insert here the exact timing, format and addressing of data provision here]

G PROCESSING OF CERTIFICATES

G1 Issuing for Transfer

G1.1 RECS Certificates are only issued under this Domain Protocol:

- (a) in respect of a Production Device which is, at the time of Issue:
 - (i) situated in South Africa;
 - (ii) registered in the EECS Registration Database of RECSA as qualifying for RECS Certificates; and
 - (iii) the Registrant of which does not have any outstanding fees payable to RECSA or its agents in conjunction with RECS Certificates;
- (b) in respect of the qualifying energy output of such a Production Device during any period in which it was registered in an EECS Registration Database for the purposes of the RECS scheme, provided the last day on which the measured energy output was generated is not more than:
 - (i) thirteen (13) calendar months after the first day on which the measured energy output was generated; and
 - (ii) twelve (12) calendar months before the date of issue of any related EECS certificates; and
- (c) to an Account Holder who does not have any outstanding fees payable to RECSA or its agents in conjunction with RECS Certificates; and
- (d) energy output in respect of which (save to the extent permitted under sections F4 to F6 below) no other Certificate, of any variety, has been, or is being, issued.

G1.2 Subject to F1.1 above RECS Certificates are issued against energy data submitted in accordance with E2.2 above.

G1.3 Where the Measurement Frequency is not more than monthly, the Issuing Frequency shall be at least monthly; and where the Measurement Frequency is more than monthly, then the Issuing Frequency shall be the same as the Measurement Frequency.

G1.4 Where the Measurement Frequency is more than monthly, then the number of RECS Certificates issued to a Production Device for each month must either be equal, or as directed by an officially approved production profile.

G1.5 Only persons duly authorised by the Registrant may request the issue of RECS Certificates in relation to the output of that Production Device.

G1.6 The CMO will check the Production Declaration against the metered data provided for the Production Device for the period to which the Production Declaration relates. The EECS Registration Database will also be checked to ensure that no more than one RECS Certificate is Issued in respect of the same qualifying energy output.

G1.7 One RECS Certificate will be issued for each whole one MWh of qualifying energy output of the Production Device. Any identifiable residual kWh will be carried forward to the next issuing period.

G1.8 The CMO will deposit the Certificates in the Transferable Account nominated by the Registrant within the EECS Registration Database no later than 10 working days after the receipt of a valid Production Declaration at the end of every issuing period and the Account Holder will be notified accordingly.

G1.9 The RECS Certificates shall be issued in such format as may be determined by AIB from time to time.

G1.10 A RECS Certificate identifies the entitlement of the Account Holder of the Transferable Account in which it is held to the attributes of:

- (a) the energy source for the quantity of energy output to which it relates; and/or
- (b) the method and quality of the production of such energy output;

so as to enable the Account Holder to realise such real and intangible benefits as may be accorded to such entitlement. These entitlements are dependent on the laws of the country in which the Originating Production Device is situated and the laws applicable in any Domain to which they may be transferred for realisation on Redemption.

G2 Transfer

G2.1 A RECS Account Holder can hold RECS Certificates in an account within the EECS Registration Database for South Africa.

On request the CMO will open an account within 10 working days. The account will be uniquely identified by a number and a name.

G2.2 The Account Holder can get secure access to the Account to make transfers of Certificates to another Account in the same EECS Registration Database or to another EECS Registration Database for RECS Certificates in another Domain through the website www.zaRECS.co.za

G2.3 Only persons duly authorised by the Account Holder may request the transfer of RECS Certificates out of that Account Holder's Transferable Account. Authorised persons must be identified on the account application form (see Annex 5).

G2.4 Where a Transfer Request is received with respect to one or more Scheme Certificates held in a Transferable Account on its EECS Registration Database, RECSA will, having confirmed that the Transfer Request is valid:

- (a) remove from that Transferables Account the details of the RECS Certificate(s) specified in the Transfer Request;
- (b) where the Transferee's Transferables Account specified in the Transfer Request is in the same EECS Registration Database:
 - (i) include the full details of the RECS Certificate(s) referred to in (a) above in the Transferee's Transferables Account;
 - (ii) confirm, to the Transferor, the identity of the RECS Certificates so transferred and any RECS Certificate split in connection with such transfer by reference to their unique identifying number(s) and Face Values; and
 - (iii) confirm, to the Transferee, the identity of the Transferor and of the RECS Certificates so transferred by reference to their unique identifying number and Face Values; and
- (c) where the Transferee's Transferables Account specified in the Transfer Request is on a different EECS Registration Database:
 - (i) notify the operator of that other EECS Registration Database of that Transfer Request;
 - (ii) subject to F2.7 below, send the full details of the RECS Certificates referred to at (a) above to the operator of that other EECS Registration Database;
 - (iii) record on its own EECS Registration Database, the export of such RECS Certificates, and, where appropriate as a result of the operation of F2.7, the cancellation of their status as Scheme Certificates under any EECS Scheme;
 - (iv) on receipt of confirmation from the operator of that other EECS Registration Database that the transfer has been completed, confirm to the Transferor the identity of the operator of that other EECS Registration Database and of the RECS Certificates so transferred and of any split in connection with such transfer by reference to their unique identifying numbers and Face Values.

G2.5 Where RECSA is notified by another EECS Registration Database operator of a Transfer Request including details of a RECS Certificate which are consistent with the Transfer Criteria for RECS Certificates together with the account number for a Transferable Account on its own EECS Registration Database, it will:

- (a) insert the full details of that RECS Certificate in that Account Holder's Transferable Account;

- (b) confirm to the EECS Registration Database operator that notified it of such Transfer Request that the transfer of that RECS Certificate has been completed; and
- (c) confirm, to the Transferee, that such EECS Certificate has been transferred by reference to its unique identifying number and Face Value.

G2.6 Where RECSA is notified by another EECS Registration Database operator of a Transfer Request involving a Scheme Certificate which does not satisfy the Transfer Criteria for such RECS Certificates and/or receives an account number which does not correspond with an account number for a Transferable Account on its own EECS Registration Database, RECSA will use reasonable endeavours to exchange information such that the RECS Certificate can be rendered compliant with the RECS for South Africa or the correct account number identified (as the case may be), failing which:

- (a) the full details of the RECS Certificate shall be re-entered into the Transferor's Transferable Account on the relevant EECS Registration Database and that EECS Registration Database shall be amended so that the RECS Certificate is no longer recorded as having been exported; and
- (b) all details of the RECS Certificate shall be removed from the other EECS Registration Database.

G2.7 Where:

- (a) RECSA receives a Transfer Request in respect of a RECS Certificate which is a Scheme Certificate under more than one EECS Scheme; and
- (b) the Transferee's Transferables Account specified in the Transfer Request is on a registry that is not part of RECS,

the details of the RECS Certificate referred to in F2.4(c)(ii) above will be amended to remove any identifier indicating that the certificate is a RECS Certificate.

G2.8 The CMO will process a transfer request within the following deadlines:

- (a) A request for transferral of RECS Certificates to an account in the same EECS Registration Database will be executed within 5 working days.
- (b) On a request for transferral of RECS Certificates to an account in a different EECS Registration Database, the export message will be sent to the receiving CMO within 1 working days.
- (c) On receiving an export message, the CMO will execute that message within 1 working day.
- (d) A request for transferral of RECS Certificates to an account in a Registration Database that is outside the EECS network will be executed within 3 working days.

In many cases these processes are fully automated and will occur according to the operational timescales of the Transfer Link which may be significantly ahead of these processing deadlines.

G2.9 The Account Holder is required to retain all records to which he has had access relating to RECS Certificates for a period not less than 10 years.

G3 **Redemption**

G3.1 Redemption is the removal of a Certificate from circulation and is the point at which it ceases to be tradable. Once in a Redemption Account, a RECS Certificate cannot be moved to any other account.

G3.2 Only persons duly authorised by the Account Holder may request the redemption of RECS Certificates out of that Account Holder's Transferables Account and into its Redemption Account. The request is given electronically through the web site www.RECSA.ca.

G3.3 A redemption request can be made by a person duly authorised by the Account Holder to transfer RECS Certificates out of that Account Holder's Transferable Account and into the Redemption Account of a Redeeming Body. The request must include:

- (a) the name of the Account Holder;
- (b) the relevant Production Device id(s);

- (c) the relevant number of RECS Certificates associated with each Production Device listed in (b) to be redeemed;
- (d) the relevant production period(s); and
- (e) the usage into which this redemption falls, where this is one of:
 - (i) support, where the certificate is being redeemed in order to receive financial support;
 - (ii) disclosure, where the certificate is being redeemed under a green labelling scheme or as proof of supply to consumers or for own use, and has not been used in order to receive financial support;
 - (iii) error, where the certificate being redeemed was issued by RECSA and the redemption is due to its being issued in error; or
 - (iv) other, for any other purpose.

G3.4 On receipt of valid redemption request, RECSA will:

- (a) remove the details of that RECS Certificate from that Transferable Account;
- (b) insert the details of that RECS Certificate in the Redemption Account of the Redemption Body which made, or is specified, in that request; provide the Account Holder with access to the full details of that RECS Certificate certifying that it has been Redeemed; and
- (c) provide details of the Redeemed RECS Certificate to the Redeeming Body and its auditors where requested to do so.

G3.5 A request for redemption of a RECS Certificate will be executed within 3 working day(s).

G3.6 On request from an Account Holder, the CMO will produce a standard format, non-transferable, redemption statement within 3 working day(s). The request should include the following details:

- (a) The RECS Certificates to be redeemed.
- (b) The recipient of those Certificates, if not the Account Holder.
- (c) Any other information to be included on the statement
- (d) The production/issuing date if not sufficiently identified in (a) above.

G3.7 According to the request, the statement will include some or all of the Certificates held in that Account Holder's Redemption Account that have not previously been included on such a statement.

The format of the redemption statement is shown in Annex 6 to this document.

G4 **Splitting**

G4.1 An RECS Certificate may be split into Certificates of lower Face Values if directly requested by the Account Holder or implied by the volume in a Transfer Request. This is achieved by deleting it and replacing it with RECS Certificates identical with that RECS Certificate in every respect save as to their denominations in MWh and any unique identification numbers. The aggregated Face Values of the replacement RECS Certificates will be the same as the Face Value of the original RECS Certificate.

G4.2 Where a split of a Certificate is implied by a Transfer Request, that Transfer Request will be deemed to apply to all the replacement Certificates up to the volume implied by that Transfer Request.

G5 **Withdrawals**

G5.1 RECSA may Withdraw a RECS Certificate held in a Transferable Account on its EECS Registration Database at the request of the Account Holder of that Account, or otherwise in accordance with the provisions of the RECS scheme, thereby cancelling it.

G6 **Errors**

G6.1 Where an error is introduced (subsequent to its Issue) into, or with respect to, a RECS Certificate held in the Account Holder's Transferables Account in the EECS Registration Database:

- (a) in the course of its Transfer into that Account; or
- (b) during such time as it is in such Account,

RECSA will correct the error in or with respect to that RECS Certificate and any errors replicated in RECS Certificates split from it, provided that such RECS Certificate(s) have not been transferred out of that Transferable Account.

G6.2 RECSA may Withdraw or alter a RECS Certificate held in its EECS Registration Database to give effect to an agreement reached with the Account Holder under provisions of the Standard Terms and Conditions.

G6.3 RECSA may alter a RECS Certificate held in its EECS Registration Database so as to rectify an error which occurred prior to its transfer into the Account in which it is held at such time, provided:

- (a) the Account Holder has agreed to such alteration;
- (b) it is reasonably satisfied that any unjust enrichment of a RECS Scheme Participant as a consequence of such error has, to the extent reasonably practicable, been nullified;
- (c) it is reasonably satisfied that the alteration itself does not give rise to undue enrichment of the Account Holder.

H MONITORING AND REPORTING

H1 Monitoring

- H1.1 The Registrant, on behalf of the owner and operator, of a Production Device must permit RECSA, or its agent, to access the Production Device or records associated with it, its energy output and sources of energy when conducting inspections in accordance with this section G1, including, if so required, without prior notice. Refusal to permit such access may be considered a breach of the Standard Terms and Conditions.
- H1.2 RECSA, or its agent, will periodically conduct inspections of a Production Device registered on its EECS Registration Database and any associated Import and Export Meters to confirm that:
- (a) the information recorded in relation thereto on the EECS Registration Database is accurate;
 - (b) the Registrant and, where applicable, the owner and/or operator of the Production Device, is complying with all relevant obligations under the relevant EECS Schemes; and
 - (c) such Production Device continues to meet the Qualification Criteria for the EECS Schemes in relation to which it is registered.
- H1.3 The period between inspections of a Production Device under G1.2 above will not exceed 5 years. RECSA will request the Registrant of a Production Device to produce a report from its nominated Production Auditor stating that the registration continues to satisfy the criteria in G1.2 above. See also H1.6 below.
- H1.4 RECSA, or its agent, may conduct ad-hoc inspections of records associated with relevant Public Support in relation to Production Devices registered on its EECS Registration Database for the purposes of EECS Schemes.

H2 Activity Reporting

- H2.1 In order to maintain an open and orderly market, RECSA has a duty to publish information in relation to the activities of that market.
- H2.2 Each Production Auditor will report to RECSA every 6 months specifying the auditing measures it has carried out in the preceding 6 months.
- H2.3 RECSA will publish an activity report no less than once every three months on the number of RECS Certificates which, within the preceding three calendar months:
- (a) it has Issued;
 - (b) (where relevant) have been transferred within its EECS Registration Database from Accounts associated with one Domain to Accounts associated with another Domain held on the same EECS Registration Database;
 - (c) have been transferred into its EECS Registration Database from EECS Registration Databases of other EECS Scheme registry operators;
 - (d) have been transferred from its EECS Registration Database to EECS Registration Databases of other EECS Scheme registry operators;
 - (e) it has transferred from Transferable Accounts to Redemption Accounts.
- H2.4 The AIB will publish in respect of each calendar year an annual report within six months of the end of that calendar year on the functioning and efficiency of the market in Scheme Certificates Issued or transferred to accounts in its members' EECS Registration Databases.
- H2.5 The annual report referred to G2.4 above shall specify any institutional, structural, and legal impediments to the efficient functioning of the RECS scheme within South Africa.

H3 Exception Reporting

- H3.1 Where as a consequence of an inspection conducted pursuant to G1 above, RECSA determines that the Scheme Participant is in breach of this Domain Protocol or the Standard

Terms and Conditions, or determines that a Production Device is in breach of the Qualifying Criteria for an EECS Scheme in relation to which it is registered, RECSA will:

- (a) take such action as is necessary to secure that RECS Certificates are correctly being issued, such action to include, in a case of material non-compliance with the this Domain Protocol or the Standard Terms and Conditions by the Registrant, the withdrawal of registration of the relevant Production Device for the purposes of the EECS Scheme; and
- (b) notify the AIB of such breach where RECSA is of the reasonable opinion that such breach could affect the transfer of EECS Certificates out of its EECS Registration Database into another EECS Registration Database.

H3.2 RECSA will report any failures by the Scheme Participant to comply with the provisions of this Domain Protocol or the Standard Terms and Conditions to the Competent Authorities in relation to such matters. Such failures shall include behaviour by the Scheme Participant of which RECSA is aware and which, in its reasonable opinion, amounts to a breach of Competition Law, or applicable law governing the conduct of financial markets.

H3.3 RECSA will also notify the AIB of any report made by it under G3.1 above providing as much information in relation to such a report as is consistent with any duty of confidentiality it may have to the Scheme Participant.

I AGENTS AND MEASUREMENT BODIES

I1 Production Auditor

- I1.1 The role of the Production Auditor is to verify Production Declarations and (where appropriate) Consumption Declarations made by Registrants of Production Devices to the CMO for the purposes of Certificate issuing. This is to ensure the continued fulfilment of the conditions of registration.
- I1.2 The Production Auditor is an agent of RECSA. The full list of approved Production Auditors is given in Annex 1 to this document and on the website www.zaRECS.co.za.
- I1.3 To be a Production Auditor, the company must gain approval from RECSA. The operation of the Production Auditor is under the control of RECSA and the Association of Issuing Bodies.
- I1.4 The Registrant of the Production Device may nominate a Production Auditor from the list in Annex 1. Such a Production Auditor must be independent of the owner or the Registrant of the Production Device.
- I1.5 The Production Auditor will receive information about the issued RECS Certificates from RECSA and the registered information relating to the Production Device for the period being reviewed. The Production Auditor will compare generation capacity with the issued number of Certificates and other relevant data e.g. wind speeds, to identify any potential abnormalities.
- I1.6 The Production Auditor will report any discrepancies from the registered information to RECSA as soon as possible.
- I1.7 A Production Auditor may also perform the role of Production Registrar.

I2 Production Registrar

- I2.1 As part of the registration process for the Production Device, it is necessary for the information provided by the applicant to be independently verified. This is normally achieved through a site inspection. RECSA must verify the application, but can delegate the activity to a Production Registrar as his agent.
- I2.2 The full list of authorised Production Registrars is given in Annex 1 to this document and on the website www.zaRECS.co.za.
- I2.3 The structure of charges to the applicant for this service and verification timings for each Production Registrar are shown on the website www.zaRECS.co.za.
- I2.4 The Registrant, on behalf of the owner and operator, of a Production Device must permit RECSA, or a Production Registrar as its agent, to access the Production Device or records associated with it, its energy output and sources of energy when conducting inspections in accordance with section H2.1 above.
- I2.5 A Production Registrar may also perform the role of Production Auditor.

I3 Measurement Body

- I3.1 A Measurement Body is an organisation responsible for the collection of metering data relating to the output of the Production Device.
- I3.2 The full list of Measurement Bodies, approved to provide data for RECS in South Africa is given in Annex 1 to this document and on the website www.zaRECS.co.za.

J MODIFICATIONS

J1 Modifications to this Domain Protocol

- J1.1 The Scheme Participant may propose a modification to this Domain Protocol;
- J1.2 Such a proposal will include a detailed description, including an exact specification of any proposed modification of this Domain Protocol and be passed in writing to RECSA.
- J1.3 On receipt of such a request, RECSA will:
- (a) Respond to the request within 10 working days, describing the procedures to be followed, and estimating when a reply can be expected;
 - (b) Consult with the other RECS Scheme Participants within South Africa;
 - (c) Decide whether the request and its consequences are in its opinion reasonable;
 - (d) Inform the RECS Scheme Participants within South Africa the outcome of this decision.
- J1.4 RECSA may make such modifications to this Domain Protocol as are in its opinion necessary to the effective and efficient operation of the market.
- J1.5 Any modifications to this Domain Protocol are subject to approval by the AIB that such changes do not conflict with the Principles and Rules of Operation of the Association of Issuing Bodies (AIB) for The European Energy Certification System.
- J1.6 Implementation of modifications will be notified by email to the Scheme Participant and will take effect on publication of the documentation on the website www.zaRECs.co.za.

K ASSOCIATION OF ISSUING BODIES

K1 Membership

- K1.1 RECSA will apply to become an associate member of the Association of Issuing Bodies (AIB) and will be bound by the quality standards of that Association for the international transfer of certificates. Continued membership is essential to facilitate international transfers of RECS Certificates.
- K1.2 In order to maintain the quality standard across the entire EECS network, all AIB members are subject to audit and periodic peer review.
- K1.3 In the event of RECSA or one of its agents failing to maintain the quality standard, there may be a suspension of RECS Certificate issuing and/or international transfers into or out of South Africa.
- K1.4 Should RECSA decide to withdraw from AIB membership in respect of RECS in South Africa, it will give notice in writing to the Scheme Participant in accordance with the Standard Terms and Conditions.

Annex 1 – Contacts List

Central Monitoring Office

| | |
|----------------|---|
| Company | zaRECs (Pty) Ltd. |
| Contact Person | Jason Schäffler |
| Address | 304 Northcliff Atrium, 189 Beyers Naude Drive, Northcliff, Johannesburg |
| Country | South Africa |
| Phone number | +27 (0)11 888 8238 |
| Email address | crd@zarecs.co.za |

Certificate Authority *(if different from the CMO)*

| | |
|----------------|--|
| Company | |
| Contact Person | |
| Address | |
| Country | |
| Phone number | |
| Email address | |

Production Registrars

| | |
|----------------|---|
| Company | Nano Energy (Pty) Ltd. |
| Contact Person | Jason Schäffler |
| Address | 304 Northcliff Atrium, 189 Beyers Naude Drive, Northcliff, Johannesburg |
| Country | South Africa |
| Phone number | +27 (0)11 888 8238 |
| Email address | jason@nano.co.za |

Production Auditors

| | |
|----------------|--|
| Company | |
| Contact Person | |
| Address | |
| Country | |
| Phone number | |
| Email address | |

Measurement Bodies

| | |
|----------------|--|
| Company | |
| Contact Person | |
| Address | |

| | |
|---------------|--|
| Country | |
| Phone number | |
| Email address | |

Annex 2 – Registration Form

| | | | |
|---|---|--------------------------------------|--------------------------|
| Registrant of Production Device | | | |
| Applicant status: | Owner/Registrant only (delete as appropriate) | Declaration of changes ¹ | <input type="checkbox"/> |
| Name: | | Contact person: | |
| Street: | | Postal code: | |
| City: | | Phone #: | |
| Country: | | Fax #: | |
| e-mail: | | ERD ² account #: | |
| Issuing Body: | | | |
| Production Device | | | |
| Device name and street: | | Postal code: | |
| City: | | EAN code (if applicable) | |
| Country: | | ID for meter readings: | |
| Grid reference: | | Connection Voltage (kVA) | |
| Production Device is connected directly to the grid: Yes/No | | | |
| If the Production Device is <i>not</i> connected directly to the grid, specify the circumstances, and additional relevant meter registration numbers: | | | |
| Installed capacity, MWe: | | Date of commissioning: | |
| Heat category ³ | | Predominant use of heat ³ | |
| Energy sources | | | |
| List all possible energy sources and codes for the production device from the list in Annex 3 | | | |
| Energy source | Code | Energy source | Code |
| | | | |
| Public Support schemes | | | |
| List all Public Support schemes associated with the production device (see AIB PRO Fact Sheet 3 – Types of Public Support) | | | |

¹ Highlight changed data on declaration of changes. ² ERD = EECS Registration Database. Only for changes. ³ CHP devices only

| | | |
|--------------|-------------|--------------------|
| Place | Date | Verified by |
|--------------|-------------|--------------------|

Signature Registrant

Production Registrar

| | |
|-----------------------------|--|
| Authorised personnel | |
| | |
| | |
| | |

By undersigning this registration form the Registrant also reaffirms the relevant requirements of the Domain Protocol:

- The Registrant is authorised by the owner of the Production Device, which is the object of this registration form to so register that Production Device for RECS in South Africa.
- The electrical energy produced by the Production Device is produced according to the Qualifying Criteria set out in D3 of the Domain Protocol for RECS in South Africa and will in addition be supported by such other criteria as may be from time to time prescribed by the scheme authority or CMO responsible for the Domain within which the Production Device lies.
- The information given in this registration form is truthful and exhaustive.
- Any planned changes concerning the information given in this registration form will be announced in advance to the Production Registrar and the CMO. Any unplanned changes will be announced to the Production Registrar and the CMO at the first possible occasion.
- The owner of the production device and the Registrant as his agent accept the possibility of unannounced control and auditing visits to their own premises and/or the premises of the production device, as prescribed in the Domain Protocol for RECS in South Africa.

Annex 3 – Energy Source Types and Technology Types

Reference should be made to AIB PRO Fact Sheet 5 on the website www.aib-net.org for the latest version of these tables.

Renewable Source Electricity (Schemes: RECS and EECS-GoO)

| Source | Technology | Type | Combustible? | CO ₂ ¹ (kg/GJ) | Code | |
|--|--|-----------------------|--------------|--------------------------------------|------|----|
| Wind | Wind turbine | Onshore | No | 0.0 | 01 | |
| | | Offshore | No | 0.0 | 02 | |
| Solar | Photovoltaic | | No | 0.0 | 03 | |
| | Thermal | | No | 0.0 | 04 | |
| Energy from water (excluding electricity used for pumping hydro) | Hydro power | | No | 0.0 | 05 | |
| | Tidal energy | Onshore | No | 0.0 | 06 | |
| | | Offshore | No | 0.0 | 07 | |
| | Wave energy | Onshore | No | 0.0 | 08 | |
| Offshore | | No | 0.0 | 09 | | |
| Geothermal | | | No | 0.0 | 10 | |
| Biomass, using gasification and non-gasification technologies ² | Energy crops | | Yes | 0.0 | 11 | |
| | Forestry and agricultural by-products and waste | | Yes | 0.0 | 12 | |
| | Biogas | Landfill gas | | Yes | 0.0 | 13 |
| | | Sewage gas | | Yes | 0.0 | 14 |
| | | Other | | Yes | 0.0 | 15 |
| | Energy from by-products and waste (with varying levels of filtration) ³ | Municipal solid waste | | Yes | 0.0 | 16 |
| Industrial by-products & commercial waste | | | Yes | 0.0 | 17 | |

¹ This reflects the IPCC statistics where available, and otherwise the Dutch table of standard CO₂ emission factors for energy production

² As variously defined in the Renewable Energy, Large Combustion Plants and Waste Combustion Plants Directives

³ Note that RES certificates will only be issued for the estimated non-fossil proportion (i.e. excluding plastics) of Energy from By-Products and Waste

Cogeneration (Scheme: CHP-GO)

| Source | Technology | Type | | Combustible? | CO ₂ ⁴ (kg/GJ) | Code |
|---|---|---|---------------|--------------|--------------------------------------|------|
| Biomass, using gasification and non- gasification technologies ⁵ | Wood fuels ⁶ | | | Yes | 0.0 | 30 |
| | Solid (biodegradable) waste & agricultural biomass ⁷ | | | Yes | 0.0 | 31 |
| | Liquid biodegradable waste (black liquor etc) | | | Yes | 0.0 | 32 |
| | Liquid biofuels (Vegetable oils, biodiesel, bio-ethanol, bio-crude-oil etc) | | | Yes | 0.0 | 33 |
| | Biogas | | | Yes | 0.0 | 34 |
| Fossil | Solid fuel | Hard coal / coke | Anthracite | Yes | 98.3 | 50 |
| | | Oil shale | | Yes | 106.7 | 58 |
| | | Lignite / lignite brickettes | | Yes | 101.2 | 59 |
| | | Peat / peat brickettes | | Yes | 106.0 | 60 |
| | Gases | Natural gas | | Yes | 56.1 | 61 |
| | | Refinery gas, hydrogen | | Yes | 0.0 | 64 |
| | | Coke oven gas, blast furnace gas + other waste gases (including recovered waste heat) | Coke oven gas | Yes | 41.2 | 68 |
| | Liquid Fuel | Gas/diesel oil | | Yes | 74.3 | 70 |

⁴ This reflects the IPCC statistics where available, and otherwise the Dutch table of standard CO₂ emission factors for energy production

⁵ As defined in the Guidelines to the CHP Directive

⁶ Wood fuels: Firewood, wood chips, bark, wood pellets, briquettes, sawdust, shavings, chips, purpose grown crops like willow, industrial wood waste, demolition wood

⁷ Agricultural biomass: solid agricultural crops (perennial and annual herbaceous crops), residues and waste (straw, rice husks, nut shells, poultry litter, crushed grape dregs etc)

Disclosure (Scheme: EECS-Disclosure)

| Source | Technology | Type | Combustible? | CO ₂ ⁸ (kg/GJ) | Code | |
|---|---------------|---|---|--------------------------------------|------|----|
| Wind | Wind turbine | Onshore | No | 0.0 | 01 | |
| | | Offshore | No | 0.0 | 02 | |
| Solar | Photovoltaic | | No | 0.0 | 03 | |
| | Thermal | | No | 0.0 | 04 | |
| Energy from water (excluding electricity used for pumping hydro) | Hydro power | | No | 0.0 | 05 | |
| | Tidal energy | Onshore | No | 0.0 | 06 | |
| | | Offshore | No | 0.0 | 07 | |
| | Wave energy | Onshore | No | 0.0 | 08 | |
| Offshore | | No | 0.0 | 09 | | |
| Geothermal | | | No | 0.0 | 10 | |
| Biomass, using gasification and non-gasification technologies ⁹ | Non-CHP plant | Energy crops | Yes | 0.0 | 11 | |
| | | Forestry and agricultural by-products and waste | Yes | 0.0 | 12 | |
| | | Biogas | Landfill gas | Yes | 0.0 | 13 |
| | | | Sewage gas | Yes | 0.0 | 14 |
| | | | Other | Yes | 0.0 | 15 |
| | | Energy from by-products and waste (with varying levels of filtration) ¹⁰ | Municipal solid waste | Yes | 0.0 | 16 |
| | | | Industrial by-products & commercial waste | Yes | 0.0 | 17 |
| | CHP Plant | Wood fuels ¹¹ | Yes | 0.0 | 30 | |
| | | Solid (biodegradable) waste & agricultural biomass ¹² | Yes | 0.0 | 31 | |
| | | Liquid biodegradable waste (black liquor etc) | Yes | 0.0 | 32 | |
| Liquid biofuels (Vegetable oils, biodiesel, bio-ethanol, bio-crude-oil etc) | | Yes | 0.0 | 33 | | |
| Biogas | | Yes | 0.0 | 34 | | |
| Fossil | Solid fuel | Hard coal / coke | Anthracite | Yes | 98.3 | 50 |
| | | | Coking coal | Yes | 94.0 | 51 |
| | | | Coking coal (used in coke oven) | Yes | 95.4 | 52 |
| | | | Coking coal (used in blast furnace) | Yes | 89.8 | 53 |

⁸ This reflects the IPCC statistics where available, and otherwise the Dutch table of standard CO₂ emission factors for energy production

⁹ As variously defined in the Renewable Energy, Large Combustion Plants and Waste Combustion Plants Directives; and the Guidelines to the CHP Directive. In general, plant operators are likely to use RES terms for non-CHP plant, and CHP terms for CHP plant; however, this is not mandatory

¹⁰ Note that RES certificates will only be issued for the estimated non-fossil proportion (i.e. excluding plastics) of energy from by-products and waste

¹¹ Wood fuels: Firewood, wood chips, bark, wood pellets, briquettes, sawdust, shavings, chips, purpose grown crops like willow, industrial wood waste, demolition wood

¹² Agricultural biomass: solid agricultural crops (perennial and annual herbaceous crops), residues and waste (straw, rice husks, nut shells, poultry litter, crushed grape dregs etc)

| Source | Technology | Type | Combustible? | CO ₂ ⁸ (kg/GJ) | Code | |
|-----------------------------------|-------------------|------------------------------|---------------------|--------------------------------------|-------|------|
| | | Other bituminous coal | Yes | 94.7 | 54 | |
| | | Sub-bituminous coal | Yes | 96.1 | 55 | |
| | | BKB and Patent Fuel | | Yes | 94.6 | 56 |
| | | Coke Oven / Gas Coke | | Yes | 111.9 | 57 |
| | | Oil shale | | Yes | 106.7 | 58 |
| | | Lignite / lignite briquettes | | Yes | 101.2 | 59 |
| | | Peat / peat briquettes | | Yes | 106.0 | 60 |
| | | Gases | Natural gas | | Yes | 56.1 |
| | Carbon monoxide | | Yes | 155.2 | 62 | |
| | Methane | | Yes | 54.9 | 63 | |
| | Hydrogen | | Yes | 0.0 | 64 | |
| | Phosphor gas | | Yes | 149.5 | 65 | |
| | Oxy gas | | Yes | 191.9 | 66 | |
| | Blast furnace gas | | Yes | 247.4 | 67 | |
| | Coke oven gas | | Yes | 41.2 | 68 | |
| | Liquid fuel | Oil | Gas/diesel oil | Yes | 74.3 | 70 |
| | | | Residual fuel oil | Yes | 77.4 | 71 |
| | | | LPG | Yes | 66.7 | 72 |
| | | Other oils | Crude oil | Yes | 73.3 | 73 |
| | | | Orimulsion | Yes | 80.7 | 74 |
| | | | Natural gas liquids | Yes | 63.1 | 75 |
| | | | Gasoline | Yes | 72.0 | 76 |
| | | | Jet kerosene | Yes | 71.5 | 77 |
| | | | Other kerosene | Yes | 71.9 | 78 |
| | | | Shale oil | Yes | 73.3 | 79 |
| | | | Ethane | Yes | 61.6 | 80 |
| | | | Naphtha | Yes | 73.3 | 81 |
| | | | Bitumen | Yes | 80.7 | 82 |
| | | | Lubricants | Yes | 73.3 | 83 |
| Petroleum coke | | | Yes | 100.8 | 84 | |
| Refinery feedstocks | | | Yes | 73.3 | 85 | |
| Refinery gas | | | Yes | 66.7 | 86 | |
| Chemical waste gas | | | Yes | 66.7 | 87 | |
| Other oil | | | Yes | 73.3 | 88 | |
| Non-renewable proportion of waste | | Yes | 73.6 | 89 | | |
| Nuclear | | | No | 0.0 | 90 | |
| Other | | | Yes ¹³ | User specified | 95 | |

¹³ Other might include both combustible and non-combustible energy sources, but defaults to "combustible" to provide necessary safeguards

Annex 4 – Production/Consumption Declaration

General

This Production Declaration states the proportion of the actual equivalent electricity production that qualifies for RECS Certificates within this time period. An approved independent Production Auditor must verify sections II to IV of this Production Declaration.

I. Owner of Production Device/Generator

| | |
|--|--|
| 1. Name of Owner | |
| 2. Name of Registrant, if different | |
| 3. Contact person | |

II. Production Device

| | |
|--|--|
| 1. Production Device reference number | |
| 2. Date of last registration form | |
| 3. The period of production | |

III. The percentage share of the total electricity produced during the associated period of production that is based on each fuel source (electricity from biomass and multiple fuel source Production Devices only)

The share of electricity from each fuel source shall be verified based on information submitted to the administrator of a Public Support scheme, or by a review of documents showing changes in stock and purchased fuels.

It is assumed that the efficiency factor is independent of fuel type. The generator is free to make a separate verification of the efficiency factor.

| | | Fuels in stock, at the beginning of the period | Purchased fuels during the period | Fuels in stock, at the end of the period | Consumption during the period | Average Net (lower) Calorific Value | Energy Source Factor |
|--------------------------|-------------|--|-----------------------------------|--|-------------------------------|-------------------------------------|----------------------|
| Period start date | | | | | M^i | C^i | F^i |
| Period end date | | | | | | | |
| Energy source | Code | | | | | | |
| | | kg | | | | | |
| | | kg | | | | | |
| | | kg | | | | | |
| | | kg | | | | | |
| Total Biomass | | kg | | | | | |
| Total Non Biomass | | kg | | | | | |

Energy Source Factor (in accordance with E2.6)

$$L^i = \frac{\sum_j M^i x C^i}{\sum_i M^i x C^i}$$

IV. The percentage share of the total electricity produced during the associated period of production that is based on the renewable energy sources (electricity from pumped storage hydro only)

- a. Total electricity generated this period (GWh) _____
 - b. Total electricity consumed this period (GWh) _____
 - c. Total potential energy resulting from previous period pumping (GWh) _____
 - d. Overall efficiency of pumping/generating (%) _____
- Total natural inflow derived energy (= a - b/d - c) _____ GWh

V. Declaration of CHP Attributes (CHP Devices only)

- a. Gross electricity production _____ MWh
- b. Electricity exported to grid _____ MWh
- c. Mechanical energy production _____ MWh thermal
- d. Total useful heat production _____ GJ
- e. Non-CHP useful heat production _____ GJ

VI. Verification of the Production Declaration

The undersigned Production Auditor has reviewed the Production Declaration and has no material reason to doubt the correctness of the data under II-V.

Name.....

On behalf of Production Auditor

VI. Number of Certificates

Proportion of eligible MWh for which certificates are being applied is: _____% / _____MWh (complete as applicable). Note: energy sold under a labelling system may not qualify for RECS Certificates. Please check with the issuer or scheme authority.

VII. Signature for the Registrant

Name

On behalf of

Date

Annex 5 – Account Application/Amendment Form

Application for account opening/amendment in South Africa for RECS Certificates.

| | |
|---------------------------------------|--|
| Applicant/Account Holder Name: | |
| Account Number (if existing): | |
| Address: | |
| Primary contact details: | |
| Name: | |
| Telephone: | |
| Email: | |
| Effective date: | |
| Authorised personnel | |
| | |
| | |
| | |

The applicant/Account Holder requests:

- Open new Transferables Account
- Open new Redemption Account
- Amend authorised personnel on this account to only those shown above
- Amend Account Holder contact details
- Close account

The applicant agrees to abide by the regulations governing RECS including the provisions and requirements the Domain Protocol for South Africa and the Standard Terms and Conditions of participation.

Signed

In the position of

Date

Annex 6 – RECS Redemption Statement

This Redemption Statement acts as a receipt for the RECS Certificates listed below and for the purpose shown.

| | | | |
|---------------------------------------|--|--|--|
| Account Holder | <Electrabel> | Account Number | <04X0000B1> |
| Address of Account Holder | <Regentlaan 8> <B-1000 Brussels> <Belgium> | Registry Redeemed from | <Country Code> <IB Code> <IB name> |
| Total of Redeemed Certificates | <60 000> | Total number of MWh represented | <60 000> |
| Redemption Date | <2003-09-12> | Redemption category | <Disclosure> |
| | | Redemption purpose | <support of eco-label on behalf of customer in x Domain in year Z> |

| Production Device ID | Energy Source | Domain of Origin | Public Support | Additional Remarks by the Issuing Body | | |
|--------------------------------|--------------------------------|------------------|-----------------|--|------------|--|
| 70705230001000XXXX | <onshore wind> | <Norway> | <tax exemption> | <Free text> | | |
| From Certificate ID | To Certificate ID | Certificates | MWh | Production Period from / to | Issue Date | |
| 64206164132250081000XXXXXXXXXX | 64206164132250081000XXXXXXXXXX | 10 000 | 10 000 | yyyy-mm-dd - yyyy-mm-dd | yyyy-mm-dd | |
| 64206164132250081000XXXXXXXXXX | 64206164132250081000XXXXXXXXXX | 10 000 | 10 000 | yyyy-mm-dd - yyyy-mm-dd | yyyy-mm-dd | |
| 64206164132250081000XXXXXXXXXX | 64206164132250081000XXXXXXXXXX | 10 000 | 10 000 | yyyy-mm-dd - yyyy-mm-dd | yyyy-mm-dd | |

| Production Device ID | Energy Source | Domain of Origin | Public Support | Additional Remarks by the Issuing Body | | |
|--------------------------------|--------------------------------|------------------|----------------|--|------------|--|
| 707052300012000XXXX | <biomass> | <Austria> | <none> | <Free text> | | |
| From Certificate ID | To Certificate ID | Certificates | MWh | Production Period from / to | Issue Date | |
| 64206164132250081000XXXXXXXXXX | 64206164132250081000XXXXXXXXXX | 10 000 | 10 000 | yyyy-mm-dd - yyyy-mm-dd | yyyy-mm-dd | |
| 64206164132250081000XXXXXXXXXX | 64206164132250081000XXXXXXXXXX | 10 000 | 10 000 | yyyy-mm-dd - yyyy-mm-dd | yyyy-mm-dd | |
| 64206164132250081000XXXXXXXXXX | 64206164132250081000XXXXXXXXXX | 10 000 | 10 000 | yyyy-mm-dd - yyyy-mm-dd | yyyy-mm-dd | |