



EECS

DOMAIN PROTOCOL

FOR

THE SWEDISH ENERGY AGENCY – SWEDEN

Document Reference	AIB-2023-DPSE- Swedish Energy Agency Sweden
Prepared by	The Swedish Energy Agency
Release	2
Date	01 December 2023
Based on EECS Rules	Release 8 v1.2

DOCUMENT CONTROL

Version	Date	Originator	Reviewers
1	2017-05-05	The Swedish Energy Agency	Liis Kilk, Katrien Verwimp, Liesbeth Switten
2	2019-06-14	The Swedish Energy Agency	Liis Kilk, Katrien Verwimp
3	2024-04-29	The Swedish Energy Agency	Christos Toufexis, Christian Herforth

Version	Date	Approver	Responsibility
1			
2			
3		ESG	

CHANGE HISTORY

Version	Description
1	
2	Insertion of cancellation statement example, clarifications, editorial changes
3	Information update, new template

TABLE OF CONTENTS	Document Control	- 2 -
	Change History	- 2 -
	Abbreviations	- 5 -
A	Introduction	- 7 -
B	General	- 8 -
B.1	Scope	- 8 -
B.2	Status and Interpretation	- 9 -
B.3	Roles and Responsibilities	- 9 -
B.4	Summary: Issuance scope	- 11 -
C	Overview of National Legal and Regulatory Framework	- 12 -
C.1	Energy Market context for electricity	- 12 -
C.2	The EECS Framework	- 12 -
C.3	National Energy Source Disclosure	- 14 -
C.4	National Public Support Schemes	- 16 -
C.5	EECS Product Rules	- 18 -
C.6	Non-EECS certificates in the Domain	- 18 -
C.7	Local Deviations from the EECS Rules	- 18 -
D	Registration	- 20 -
D.1	Registration of an Account Holder	- 20 -
D.2	Resignation of an Account Holder	- 21 -
D.3	Registration of a Production Device	- 22 -
D.4	De-Registration of a Production Device	- 26 -
D.5	Maintenance of Production Device Registration Data	- 26 -
D.6	Audit of Registered Production Devices	- 27 -
D.7	Registration Error/Exception Handling	- 28 -
E	Certificate Systems Administration	- 30 -
E.1	Issuing EECS Certificates	- 30 -
E.2	Processes	- 31 -
E.3	Measurement	- 32 -
E.4	Energy Storage	- 33 -
E.5	Energy Carrier Conversion	- 33 -
E.6	Combustion Fuel Input & Production Devices with multiple energy inputs	- 33 -



E.7	Format	- 34 -
E.8	Transferring EECS Certificates	- 34 -
E.9	Administration of Malfunctions, Corrections and Errors	- 36 -
E.10	End of Life of EECS Certificates – Cancellation	- 36 -
E.11	End of Life of EECS Certificates – Expiry	- 37 -
E.12	End of Life of EECS Certificates – Withdrawal	- 38 -
F	Activity Reporting	- 39 -
F.1	Public Reports.....	- 39 -
F.2	Record Retention.....	- 39 -
F.3	Orderly Market Reporting	- 39 -
G	Association of Issuing Bodies	- 40 -
G.1	Membership	- 40 -
G.2	Complaints to the AIB.....	- 40 -
H	Change Control.....	- 41 -
H.1	Complaints to the Swedish Energy Agency	- 41 -
H.2	Disputes	- 41 -
H.3	Change Requests	- 41 -
Annex 1	Contacts List	- 42 -
Annex 2	Account Application/Amendment Form	- 44 -
Annex 3	Device Registration Form	- 45 -
Annex 4	Production Declarations	- 46 -
Annex 5	EECS GO Cancellation Statement	- 48 -

ABBREVIATIONS

This section is a compilation of all abbreviations in this document.

AIB	-	Association of Issuing Bodies
CHP	-	Combined Heat and Power (High efficient Cogeneration)
DSO	-	Distribution system operator
EDIEL	-	Electronic Data Interchange for Electricity.
EECS	-	European Energy Certificate System
EECS-GO	-	EECS Guarantee of Origin
EIFS	-	Energy market Inspectorates regulations
EU	-	European Union
EU-ETS	-	EU Emissions Trading Scheme
GO	-	Guarantee of Origin
GSRN	-	Global Service Relation Number
HPA	-	Hub Participation Agreement
ID	-	Identity
IKN	-	non-concession network
KWh	-	Kilowatt hour
KYC	-	Know your customer
MWh	-	Mega-watt hour
RE-DISS	-	Reliable Disclosure. Disclosure organisation.
RES	-	Renewable Energy Sources
SE-GO	-	Swedish national Guarantees of origin
TSO	-	Transmission system operator
TWh	-	Terawatt-hour



VAT - Value Added Tax

A INTRODUCTION

The framework specified in the EECS Rules, and the detailed procedures and conditions specified in this Domain Protocol have the main objective of ensuring robustness and transparency in the facilitation of EECS Schemes for all EECS Participants. The Domain Protocol further describes how the EECS Standard has been implemented in a certain Domain (country/region), for a certain type of energy certificate and it indicates where that system deviates from that standard. The aim is also to ensure robustness and transparency for all involved parties.

A Domain Protocol promotes quality and clarity, as it:

- explains local rules,
- provides clear information to all stakeholders (consumers, market parties, other members, governments, the EU Commission etc),
- facilitates assessment of compliance and permissible variance from the EECS Rules,
- facilitates audit, and
- translates local rules into a single format and language, supporting each of the above.

Important contact information is provided in Annex 1.

B GENERAL

B.1 Scope

B.1.1 Purpose of the Domain protocol

This Domain Protocol sets out the procedures, rights and obligations, which apply to the Domain of Sweden and relate to the EECS Electricity Scheme as defined in the EECS Rules.

B.1.2 Production device qualification

Production Device qualification for this Domain will be determined by whether the Production Device is effectively located in Sweden.

B.1.3 Domain geographical area

The borders of the Domain are determined by the Swedish border. There are no islands or countries in other continents that are a part of the legislative boundaries of the Swedish domain.

B.1.4 Authorized body for EECS-GO issuance

The Swedish Energy Agency is authorised to Issue EECS Certificates relating to the following EECS Product(s):

- EECS Guarantees of Origin (EECS-GO), with relation to the fuel type of the Originating Production Device.

B.1.5 EECS certificates for EECS product types

The Swedish Energy Agency is authorised to issue EECS Certificates relating to energy carrier *electricity* for the energy sources:

- Renewable energy sources including biomass.
- Nuclear energy sources
- Fossil fuels
- The Swedish Energy Agency has the mandate to issue GOs for High-Efficiency Cogeneration in accordance with EU Directive 2009/27 (EU) or other.

B.1.6 National energy certificates

The Swedish Energy Agency is authorised to issue national Guarantees of Origin (National GOs) for electricity outside of the EECS Framework.

The following parts of this Domain Protocol do not apply for these non-EECS certificates.

B.1.7 Terms and definitions

In this Domain Protocol, the capitalised word Account refers to EECS-accounts, while the non-capitalised word 'account' refers to both types of accounts in the registry – EECS and non-EECS accounts.

B.2 Status and Interpretation

B.2.1 Base for the Domain Protocol

This document refers to EECS Rules 8.1.2 It is based on the Domain Protocol template release from June 2022.

B.2.2 Legal status of EECS-rules

The EECS Rules are subsidiary and supplementary to national legislation.

B.2.3 EECS-rules implementation

The EECS Rules and its subsidiary documents are implemented in Sweden in the manner described in this Domain Protocol. Any deviations from the provisions of the EECS Rules that may have material effect are set out in section C.7 of this document.

B.2.4 Terms and definitions

The capitalised terms used in this Domain Protocol shall have the meanings ascribed to them in the [EECS Rules](#) except as stated in section C.5 of this document.

B.2.5 Contractual terms

The Account holders commit themselves to the provisions of this Domain protocol and Standard Terms and Conditions by signing an Account opening application.

B.2.6 Interpretation of the Domain Protocol

In the event of a dispute, the approved English version of this Domain Protocol will take precedence over a local language version.

B.3 Roles and Responsibilities

B.3.1 The Authorized Issuing Body

The Authorised Issuing Body for EECS-GOs in Sweden is the Swedish Energy Agency. Its role is to administer the EECS Registration Database and its interface with the EECS Transfer System. There are no other issuing bodies exist in Domain of Sweden.

The Swedish Energy Agency falls under the Ministry of Climate and Enterprise and is regulated through an instruction and annual appropriations directives. The Swedish Parliament and the Government decide on the assignments and budget for the Swedish Energy Agency.

In Sweden only Governmental Certificates are issued.

B.3.2 The Competent Authority

The Competent Authority for EECS-GOs in Sweden, under the legislative framework, is the Swedish Energy Agency. Its role is defined by legislation to be responsible for the operation of EECS-GO in Sweden.

B.3.3 The Authorized Measurement Body

The Authorised Measurement Bodies are the Grid Operators or independent measurement consultants (see E.3). All Authorised Measurement Bodies must be authorized by the Swedish TSO (Svenska Kraftnät) to use the electronic information exchange system EDIEL for sending measurement data. All market actors in the Swedish electricity market uses the EDIEL-system to communicate with each other. The system is used to send measurement data to the Swedish Energy Agency for issuance of Guarantees of Origin.

To be able to use the EDIEL-system the authorised measurement body first need to send a signed agreement to the TSO. After that, the applicant needs to perform tests of their system with the EDIEL-system. To be approved to use EDIEL, the applicants test needs to be verified and approved by the TSO. The EDIEL-agreement is sent back to the applicant when tests have been approved.

List of Authorised Measurement Bodies can be found here:

- <https://www.ediel.se/Portal/PartyList/PartyList/ViewElMarketParties>

All market actors can be found in the list above by searching for actors with the role "nätägare" (grid owner) or "ombud" (agent). Actors that are not included in any of the two categories mentioned above are not accepted as measurement bodies for EECS-GO issuing.

B.3.4 EECS Registration Database access

The EECS Registration Database, CESAR, operated by the Swedish Energy Agency, can be accessed through the website.

- <https://cesar.energimyndigheten.se/sv/public/home>

B.3.5 Production Registrar

The Competent Authority for Production registry is the Swedish Energy Agency. The agency verifies that plant information given in the production device registration application is complete and provides sufficient data to calculate in a correct manner the net amount of generation eligible for EECS-GOs.

B.3.6 The Production Auditor

The Swedish Energy Agency is the Production Auditor and monitors the fulfilment of the legal framework for Guarantees of origin. In some cases, external consultants are used in the monitoring process to assess technical requirements for Production Devices and facilities.

B.3.7 Account Holder

Scheme Participant is an Account Holder in the EECS registration database.

B.3.8 Contact details

Contact details for the principal roles and Issuing Body agents are given in Annex 1.

B.4 Summary: Issuance scope

B.4.1 Energy certificate types

In summary, the Swedish Energy Agency is authorised to Issue energy certificates for:

	Issuing Body issues certificates for Electricity		Electricity – Product Type	
	Energy Source	Source	Technology (= High-Efficiency Cogeneration)	
EECS GO	Hydro	X		
	Solar	X		
	Wind	X		
	Biomass	X	X ¹	
	Geothermal	X		
	Landfill & Sewage treatment plants gas	X		
	Tidal/wave/Other Ocean energy	X		
	Ambient energy	X		
	Fossil	X		
	Nuclear	X		

¹ There is legislation enabling HEC-GOs, although, to be able to issue GOs the Swedish Energy Agency needs to develop the functionality for this in the Swedish registry.

	Other	X	
National GO (non-EECS*)	Same as for EECS-GO	X	X
National certificate other than GO (non-EECS*)	<i>Electricity certificates (Elcertifikat) for facilities taken into operation before the end of 2021</i>	X	

C OVERVIEW OF NATIONAL LEGAL AND REGULATORY FRAMEWORK

C.1 Energy Market context for electricity

The electricity market in Sweden was deregulated in 1996 and is a part of the European electricity market. The electricity that is used in Sweden is produced both domestically and abroad. All electricity is transported throughout the country in a common electricity network. It is Svenska Kraftnät, the Transmission System Operator (TSO), that is responsible for the maintaining and development of the Swedish national grid for electricity. The national grid power lines transport electricity from power plants to regional and local electricity networks, which in turn transmit electricity to the end consumers.

Sale of electricity is made on a competitive market, and customers may choose among approximately 120 suppliers for the supply of electricity. The distribution of electricity is handled by local grid operators with a natural monopoly. In total, there are approximately 170 electricity grid operators in Sweden.

Electricity generation in Sweden mainly comes from hydropower and nuclear power. This has been the case since the 1980s. However, wind power has increased significantly over the last ten years. Electricity generation in 2022 was 170 TWh. It consisted of 29 per cent nuclear power, 41 per cent hydropower, 20 per cent wind power and 1 per cent solar power. Combustion-based power provided the majority of the remaining 9 per cent, primarily from combined heat and power plants and industrial processes.²

Solar power is on the rise in Sweden. Between 2020 and 2022, the number of grid-connected PV (photovoltaic) systems increased by 124 per cent. By the end of 2022, the total number of systems in Sweden amounted to 147 690 with a total installed power of 2 375 MW.

C.2 The EECS Framework

C.2.1 National legal framework

²https://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START_EN_EN0108_EN0108A/EIEO/table/tableViewLayout1/, 2023-12-08, SCB

The national legislation is based on Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

In the Swedish domain GOs can be issued for any energy source. The relevant national legislation for GOs is as follows:

Issuing of GOs for electricity production from all energy sources is regulated by law in the Act on guarantees of origin for electricity (Lag om ursprungsgarantier för el SFS 2010:601):

- https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/rubriken-upphor-att-galla-uden-dag-som_sfs-2010-601/

Regulation is also in secondary legislation, Decree on guarantees of origin for electricity (Förordning om ursprungsgarantier för el SFS 2010:853).

- https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-2010853-om-ursprungsgarantier-for-el_sfs-2010-853

C.2.2 Appointed Issuing Body

The Swedish Energy Agency has been properly appointed as the Authorised Issuing Body for EECS-GO under secondary legislation (SFS 2010:853), through 2 § in amendment 2014:1090 regarding guarantees of origin for electricity.

- https://www.lagboken.se/Lagboken/start/sfs/sfs/2014/1000-1099/d_2159441-sfs-2014_1090-forordning-om-andring-i-forordningen-2010_853-om-ursprungsgarantier-for-el

C.2.3 National and EECS GOs

Not all Guarantees of Origin issued in Sweden are EECS-GOs. All certificates are issued as either National GOs or EECS-GOs. Swedish national GOs are issued for account holders who are not EECS Account Holders. The two systems are kept logically separate through different GO accounts. A National GO can never be converted into an EECS-GO and vice versa. The purpose of both national GOs and EECS GOs is disclosure. National GOs are only transferable within the Swedish domain and cannot be exported to other domains.

A prerequisite for issuance of EECS-GOs is that the Account Holder has a unique EECS Account Holder for those GOs.

Table 1 Description of the permissions of both types of Account Holders in relation to national- and EECS GOs.

Permissions	National account Holder	EECS Account Holder
-------------	-------------------------	---------------------

Register Production device for National GO system	Yes	Yes
Register Production device for EECS-GO	No	Yes
Hold national GOs	Yes	Yes
Hold EECS-GOs	No	Yes
Export national GOs	No	No
Export EECS-GOs	No	Yes
Import national GOs	Not applicable	Not applicable
Import EECS-GOs	No	Yes
Cancel national GOs	Yes	Yes
Cancel EECS GOs	No	Yes

Table 2 Description of the differences between national GOs (SE-GO) and EECS-GO

Process	SE-GO	EECS-GO
Re-registration of Production Device	Not needed unless permit withdrawn	Every five years
Metering	Gross or net	Net
Import	Not possible	Possible
Export	Not possible	Possible
Inspections	Where appropriate	Necessary for biomass Production Device, see D.3.3

C.3 National Energy Source Disclosure

C.3.1 The authorised body for Disclosure

For this Domain, the authorised body for supervision of Disclosure of the origin of energy towards consumers is the Energy Market Inspectorate (Energimarknadsinspektionen). This body is responsible for supervision of disclosure of the origin of the following Energy Carriers: Electricity.

C.3.2 Legislation and regulation

The legislation and regulation for disclosure is in Chapter 9, 28 § of the Electricity Act (Ellagen (1997:857)), which in turn is an implementation of article 3.9 of the Directive 2009/72/EC, and,

- https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/ellag-1997857_sfs-1997-857/

in the Energy Market Inspectorate (Ei) issued secondary legislation and guidelines regarding electricity disclosure (EIFS 2013:6).

- <https://ei.se/download/18.5b0e2a2a176843ef8f5b66/1615302978868/EIFS-om-ursprungsm%C3%A4rkning-av-el-EIFS-2013-6.pdf>

C.3.3 Disclosure methodology

In relation to electricity sold, electricity suppliers are obliged to disclose in bills and promotional material the contribution of each energy source as well as the environmental impact in unit of CO₂ emitted (g/kWh) and radioactive waste produced (g/kWh).

In the electricity bill, energy sources should be disclosed at least at the accuracy of Renewables, Nuclear, Fossil, but a more detailed categorization is recommended (Oil, Natural Gas, Coal, Peat, Other fossil, Nuclear, Hydro, Wind, Solar, Waste, Biomass and other renewables) (EIFS 2013:6). The information should be presented in a circle diagram.

The two mechanisms usable for electricity disclosure are guarantees of origin (both EECS and national) and the residual mix. The Energy Market Inspectorate provides the calculation of the residual mix. The residual mix consists of the environmental value that remains when the electricity sold with guaranteed origin has been deducted. The residual mix is divided into renewable, nuclear and fossil. To sell electricity products and/or to deviate from the residual mix in its supplier mix, a company must cancel guarantees of origin. Electricity produced from **any specific source** in the energy mix of the electricity supply can be changed (increased) by the supplier only by Cancelling GOs of electricity **in respect of that source**. Deadline for cancellations of Guarantees of Origin for previous year consumption is 31st of March of the following year.

Only information regarding the supplier's energy mix is mandatory to disclose in Sweden. Information about the impact of the electricity sold on the environment through carbon dioxide emissions and nuclear fuel waste must refer to the environmental impact at the time of production.

The Energy Market Inspectorate is responsible for the supervision of disclosure information and for the provision of the residual mix.

C.3.4 Residual Mix methodology

The base for the residual mix calculation is best practice recommendations of RE-DISS (Shifted-Transaction Based Method), with the exception that it is calculated for the Nordic region rather than for the Swedish domain solely. The residual mix is based on a Nordic base because there was a vision to work towards a Nordic end customer market which would be an opportunity for the four Nordic countries to more easily form a domain for trade and exchange with guarantees of origin with the rest of Europe. This assumed that all four Nordic countries use a Nordic base for their residual mix calculations. The Energy Market Inspectorate's assessment was therefore that the residual mix calculation should be done in accordance with the existing calculation method that is used today and that the calculations are done on a Nordic basis. But since there are no ambitions for a common Nordic end customer market and no other Nordic country uses the Nordic basis, The Energy Market Inspectorate is currently doing an investigation about this matter. The methodology for the calculation is laid out in Chapter 4, 3 § in secondary legislation and guidelines (Ei 2011:10) regarding disclosure of electricity. The methodology is explained in more detail in section 4.2 in the Energy market Inspectorates report on disclosure of electricity (Ei R2011:10), which forms the basis for the disclosure regulation.

- <https://www.ei.se/download/18.d4c49f01764cbd6062189d0/1608302879601/Ursprungsm%C3%A4rkning-av-el-Ei-R2011-10.pdf#page=29&zoom=100,148,202>

The residual mix and information regarding the supervision of disclosure can be found at the Energy Market Inspectorates website.

- <https://www.ei.se/sv/for-energiforetag/el/ursprungsmarkning-av-el/>

C.3.5 Ex Domain Cancellations

Cancellations for usage in another Domain, Ex domain cancellations, are not allowed. In order to verify the authenticity and correctness of a GO, it needs to be issued electronically. In the event that a company buys GOs from a country other than Sweden, it can only be transferred to the Swedish register CESAR if the issuing country is a member of AIB and connected to AIB's hub.

C.4 National Public Support Schemes

C.4.1 The Electricity certificate system (El Certificates)

The electricity certificate system is a national public support scheme in Sweden. It's a market-based support system with the aim of increasing the production of renewable electricity in a cost-effective manner. For each megawatt hour (MWh) of renewable electricity produced, a producer can receive an electricity certificate from the state. The Producer can then sell the electricity certificate on an open market where the price is determined between seller and buyer. The consumers, or electricity suppliers on their behalf, must buy and cancel a certain amount of electricity certificates to meet their obligation and fulfil the quota which is set to consumers excluding electricity intensive industries that is registered with the Swedish Energy Agency. The amount is a yearly changing share of their total electricity consumption or sales.

Electricity certificates are freely tradable instruments used to allocate economic support. They cannot be used as a proof of origin of the electricity but can be issued for the same energy unit for which guarantee of origin has been issued. Statistics and price information of the Electricity certificates system can be found at:

- <https://cesar.energimyndigheten.se/sv/public/home>

Electricity certificates system is a joint renewable energy support scheme between Sweden and Norway. The certificates can be freely exchanged between the two countries and used for quota compliance in both countries.

The overall goal within the electricity certificate system was 46,4 TWh of new renewable electricity production by 2030 and that goal was already achieved in March 2021.

During the fall of 2020, the Swedish Parliament decided to establish a stop rule and to end the electricity certificate system at the end of 2035 (previously 2045). The decision means that production device that are put into operation after 2021 will not be approved for the allocation of electricity certificates. Production device put into operation before the end of 2021 but approved in the same year will have an allocation period of less than 15 years.

- <https://www.energimyndigheten.se/fornybart/elcertifikatsystemet/>

C.4.2 Tax reduction support scheme

There is a support scheme that offers tax reductions to private individuals for the cost of work and materials when installing green technology. The tax reduction is 20 percent for installation of net connected solar systems, 50 percent for installation of systems for storing self-produced electrical energy and 50 percent for the installation of charging point for electric vehicles. The maximum tax reduction is 50 000 SEK per individual and year.

- <https://www.skatteverket.se/privat/fastigheterochbostad/gronteknik.4.676f4884175c97df4192860.html>

C.5 EECS Product Rules

C.5.1 Applied EECS-rules

The EECS Product Rules as applied in Sweden are set out within sections D, Registration, and section E, Certificate Systems Administration, of this document.

C.6 Non-EECS certificates in the Domain

C.6.1 National energy certificates

The Swedish Energy Agency is authorised to issue National Guarantees of Origin (National GOs) outside of the EECS Framework. This Domain Protocol does not apply for these non-EECS certificates.

C.7 Local Deviations from the EECS Rules

C.7.1 Use of correction factors

Production Devices connected to the public grid (TSO or DSO) are always net measured. This is done either by measuring what is fed into the public grid, or in some cases where energy production is measured in a private grid (IKN), through the use of correction factors (see D.3.1, point 1 & 2).

Deviation from EECS-rule: N6.4.3

C.7.2 GO issuance through Power Exchange

If a GO is issued for electricity that has been sold via a Power Exchange, there is technically room for double disclosure through the following option in the secondary legislation for disclosure of electricity (EFS 2013:6: chapter 4, 1-3 §, 1 last sentence) which states that:

“if the supplier has bought electricity on a power exchange or imported electricity from a country outside of the EU the information may be based on information provided by the exchange or the information that the companies have provided”.

This part of Swedish legislation is an implementation of Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity. Annex I, section 5 of that directive states: “with respect to electricity obtained via an electricity

exchange or imported from an undertaking situated outside the Union, aggregate figures provided by the exchange or the undertaking in question over the preceding year may be used". The last part of the legislation above shall be understood so that the power exchange must be located outside of the EU for this exception to be valid.

Deviation from ECCS-rule: C3.3.1

C.7.3 Special conditions to the Hub Participation Agreement

The Swedish Energy Agency is not allowed to take out insurance in relation to Market Participant. The Swedish Energy Agency is a public authority and is prohibited by law from limiting its liability in the exercise of public authority, which includes any action taken towards Market participant. There for the Hub Participation Agreement (HPA) includes a separate document with Special Conditions regulating to the HPA for Sweden.

Deviation from ECCS-rule: E7.1.1

C.7.4 Correction of issued GOs.

The Swedish Energy Agency is required by law (2010:601, 15 §) to correct information in the electronic registry for guarantees of origin if it is manifestly inaccurate, due to someone's typing error, calculation error or other oversights or due to a technical error. The person who is registered as the holder of a guarantee of origin in the registry is given the opportunity to comment before the information is corrected. This practice implies that Cancellations can be rolled back and that the GO is transferred from the Cancellation Account back to the Transferable Account. It also implies that the GO is changed after it has been issued.

Deviation from ECCS-rule: C5.2.3

C.7.5 Nordic Residual Mix

The disclosure of electricity in the Swedish domain is based on GOs and the Nordic residual mix as opposed to a national residual mix.

Deviation from ECCS-rule: E.3.3.14

D REGISTRATION

D.1 Registration of an Account Holder

D.1.1 Process for registration

Any legal person who is *not* a member of the Association of Issuing Bodies or such member's affiliate or agent can be an EECS Market Participant. Instructions for opening an account and the application to become an account Holder can be found from:

- <https://www.energimyndigheten.se/fornybart/certifikatregistret-cesar/cesar---vanliga-fragor-och-svar/>

The application includes basic information of the company and personal information of the account responsible and contact person. The application is to be signed by an authorized signatory of the company and sent to the Swedish Energy Agency. Sample of application form can be found in Annex 2 or as a hole at the link below.

- <https://www.energimyndigheten.se/fornybart/ursprungsgarantier/om-eeecs/ansokan-om-eeecs/>

If the applicant is not an owner of a production device and only wants to trade with EECS-GO, it must also fill in and attach a Know-Your-Customer questionnaire prepared by the AIB (Annex 6). The purpose of this document is to protect the EECS markets from VAT frauds.

For direct access to the Registry, the Account Holders need to commit to the Conditions for direct access.

- <https://www.energimyndigheten.se/fornybart/certifikatregistret-cesar/cesar---vanliga-fragor-och-svar/>

After receiving all documentation of the applicant, the Swedish Energy Agency evaluates, as soon as reasonably practicable but within 15 working days, whether the application can be accepted.

Reasons for rejection may be:

- a. Required documents are missing or not properly filled/signed,
- b. Rejection recommended by local tax authorities or the AIB.

If the application is accepted, the Swedish Energy Agency creates an account in the Cesar registry for the applicant organization and associates the applicant with EECS-GO. Account Holders can get secure access to the registry by signing in with either:

- a. Nexus-EM client certificate,
- b. Personal Bank-ID

If the applicant is already an Account Holder in the system for national guarantees of origin (SE-GO), the Swedish Energy Agency just associates the account holder with EECS-GO, enabling the Account Holder to hold and perform transactions with EECS certificates.

The applicant organization then become an Account Holder of CESAR and can start operating the account. One account holder organisation can have several certificate accounts as well as multiple users, which can be created by the root user of that account holder. The role(s) of the user determines their rights to perform actions in the registry.

The decision to accept an application to open an Account is connected with certain Standard Terms and Conditions, see Annex 7.

D.2 Resignation of an Account Holder

D.2.1 Process for closing an account

The account Holder must notify its intent to close its account in written form to the Swedish Energy Agency. When closing an account, the account holder is responsible for paying any outstanding payments to the Swedish Energy Agency. The agency is not responsible for refunding any already paid fees of the account Holder such as the yearly fee for account Holders.

The Swedish Energy Agency will amend the EECS Registration database to close that Account as of the effective date on the request or later.

The certificates that reside on a closed account will stay in the account until they expire, but the user will not have access to the account. After the expiry of the last certificate, the account will be deleted.

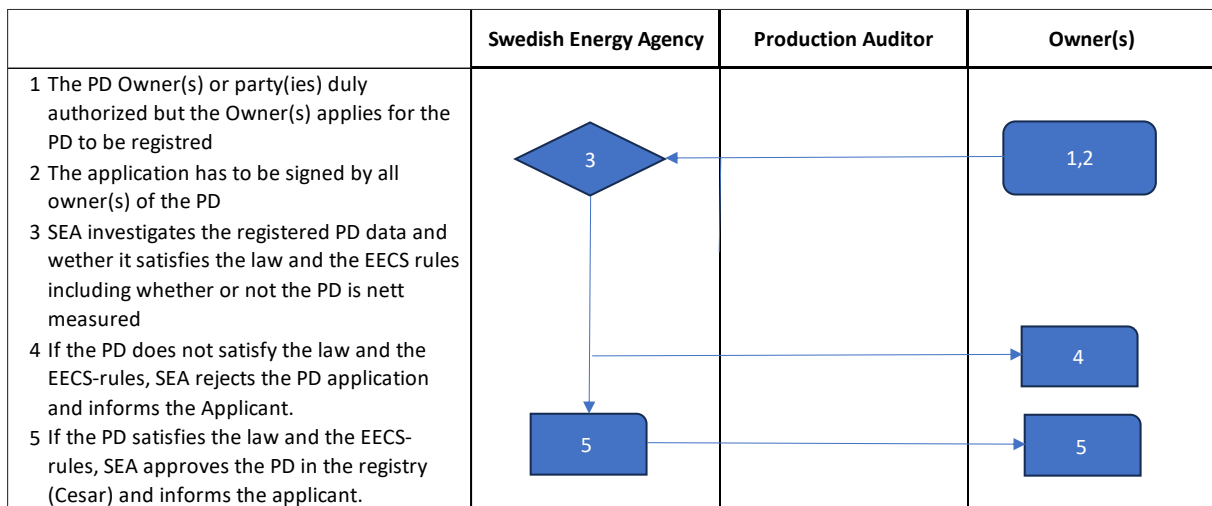
In case the resigning Account Holder remains an Account Holder for national guarantees of origin (SE-GO), the Account holder is asked to remove the EECS-GOs from the accounts. After EECS-GOs have been removed or have expired, the EECS-GO association is removed from the Account Holder, after which it is no longer possible to hold or commit transactions with EECS-GOs. The EECS-GO association will be removed without further delay, but at the latest within 5 working days.

D.3 Registration of a Production Device

D.3.1 Process for registration of production device

The following section refers to the registration of a Production Device for EECS-GOs to an EECS-Account. Any Production Device can be registered to issue EECS-GOs or national GOs (but never both), as described in C.2.3. A PD owner first needs to apply for registering a production device for national GOs before it can apply for EECS. The EECS application is an add on to the application for national GOs. The applications can be done simultaneously. When a PD owner applies for national GOs for the first time, an account for national GOs is opened. When a PD owner applies for EECS GOs for the first time, they also need to apply for an EECS-account, and an EECS-account is opened. The account for national GOs remains even though no national GOs are issued to the PD owner. The PD owner can have several PDs and for example one PD that receives national GOs and one that receives EECS-GOs, thus both accounts are needed. It is solely the discretion of the production device owner to decide if a production device is to be registered to an EECS-Account and receive EECS-GOs or if it should be registered to a national account and receive national-GOs. A sample of a registration form for a Production device can be found in Annex 3.

Figure 1 Process for registration of Production Device



1. To be able to register production devices for the purpose of EECS, owner(s), or parties authorized by the owner(s) through Power of Attorney, must have an Account in the EECS registration database CESAR.

Production Devices can only be registered if they meet the qualification criteria for EECS. To be qualified the Production Devices must:

- be approved and registered for national GO
- be situated in Sweden,

- be capable of producing electricity.

Instructions on how to register a Production Device can be found at:

- <https://www.energimyndigheten.se/fornybart/ursprungsgarantier/ansokan-och-utfardande>

Production Device owner(s) must fill in and sign a registration form to register their production device into Cesar.

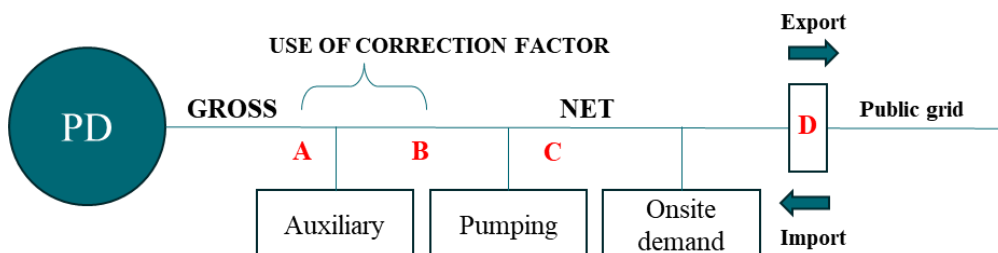
- <https://www.energimyndigheten.se/4b12a4/globalassets/fornybart/ursprungsgarantier/ansokan-om-ug-inkl-bilaga.pdf>

The registration form must be signed by a properly authorized representative of (all) owner(s). In the registration form the owner(s) identifies the Production Devices to be registered for the purpose of EECS and provides general details of the device, unique meter identification number, support information and the identity of the grid operator. The registration is either sent via the Swedish Energy Agency’s Eugen portal through My pages (Mina sidor) or to the Agency directly.

- minasidor.energimyndigheten.se

When registering a Production Device, the owner(s) must make a legally binding statement where they confirm whether the Production Device is net measured or not. The registration form also contains a single-line diagram where the owner must indicate at which point of the Production Device output is measured. If the output of the Production Device is not net measured (metering point A and B in Figure 2), a correction factor will be assigned (see step 2 below).

Figure 2 Line diagram for indication of where the PD is measured



All meters have a unique identifier consisting of 18 numeric characters that also identifies the Domain of origin. GS1/GSRN (Global Service Relation Number) coding is used. Metering values that are reported to the Swedish Energy Agency need to follow the EDIEL-standard. This standard is only available to Authorized Measurement Bodies. It is therefore not possible

for the owner(s) of a Production Device to report their own measurements directly to the Swedish Energy Agency. Hourly metering is required for the issuing of EECS-GOs.³

All meters that report in EDIEL-standard must fulfil the high standards of accuracy and reliability required by the Swedish national accreditation body (SWEDAC). They carry out periodic and random audits of grid operators and others who report metering values from any electric metering system. As the Production Device is registered into Cesar, it is assigned a unique identifier that consists of a number with 18 numeric characters that also identifies the Domain of origin. GS1/GSRN coding is used.

The application must be signed by all owner(s) of the Production Device unless another party is authorized to do so through a Power of Attorney

- <https://www.energimyndigheten.se/4a4a14/globalassets/mina-sidor/behorighet/elcert-fullmakt.pdf>

The person signing the application must be an official signatory of the company, which is checked by the Swedish Energy Agency from the Company Registration Office (Bolagsverket).

- <http://www.bolagsverket.se/en>

2. Once the Swedish Energy Agency has received a complete production device registration application, it reviews the information. If the Production Device measurement is not net of production auxiliaries, a correction factor is necessary. Correction factor signifies that a certain percentage of the measurement value of such a Production Device is deducted for the purpose of defining the amount of output eligible for EECS-GOs. The value will be determined so that it is ensured that the issued volume will never be greater than net generation.

The correction factors for gross measurement are assigned by default according to the following principles, unless more specific factors are derived from an onsite inspection:

- in case of solar, wind, hydro (excluding pumped storage), marine, and nuclear technologies 3 %
- in case of other technologies 10 %

³ From 2025-01-01, 15-minute metering is required. As from November 1st 2023 to the end of 2024 a transition rule allows for hourly metering but reporting of 15-minute values.

The total correction factor is registered as part of the registration data in the registration database.

In case a more specific factor is to be determined an onsite inspection of the Production Device will be performed by an independent third party. Such an independent party can be assigned by the Swedish Energy Agency or by the Owner of the Production Device. In the latter case, the results of the inspection can be accepted if the independent party has sufficient technical skills and has been approved by the Swedish Energy Agency.

The Swedish Energy Agency will ask the applicant for more information in the application, if appropriate, where:

- the information provided on a Production Device does not accord with the experience and prior information about that Production Device
- the information provided on a Production Device does not accord with the experience of the Swedish Energy Agency regarding the relevant type of Production Device,
- the Production Device is technologically novel or more complex than generic Production Devices,
- the application relates to a Production Device which is, or has previously been, registered and specifies significant changes to the Production Device, or
- input for the Production Device is in whole or in part comprised of biomass.

In these situations, an initial inquiry will be performed, requiring the Owner to give a more detailed description of specific aspects of the Production Device than what is required in the registration form. If an inquiry is not sufficient to assure that the provided information is accurate the application will be rejected.

Additional inquiries, inspections and Production Audits can be required by the Swedish Energy Agency in situations other than the ones described.

3. An application is rejected or accepted as soon as possible. How quickly an application is approved depends on the workload which vary during the year. If the Production Device does not comply with Swedish law or the EECS Rules, the application is rejected, and the owner(s) is informed. The rejection notice includes the reasons for the decision which might be:
 - the applicant has failed to comply with any requirement of the Domain Protocol,

- the qualification criteria are not satisfied in respect to that Production Device, or
 - the Production Registrar or an Auditor on its behalf is prevented from satisfactorily verifying the application by the applicant or the owner(s) or operator of the relevant Production Device.
4. If the Production Device fulfils both the Swedish law and the EECS Rules, the Production Device will be approved for EECS GO issuance. When the Production Device has been approved, the Swedish Energy Agency informs the owner(s) and the Authorised Measurement Body accordingly. Output of the Production Device is qualified for EECS-GOs from the date of approval by the Swedish Energy Agency. Public information on all Production Devices consists of Device Name, Production Device ID and Fuel and Technology.

D.4 De-Registration of a Production Device

D.4.1 Deregistration in writing

The owner(s) must notify the Swedish Energy Agency within 14 days in writing of the intent to de-register a Production Device. The de-registration will be performed on the date specified by the owner or as soon as possible. After deregistration, EECS-GOs will no longer be issued for the Production Device.

D.5 Maintenance of Production Device Registration Data

D.5.1 Period and validity and re-registration of Production Device

The registration of a Production Device expires after five years. The Owner(s) must re-apply for registration for the Production Device before expiry, or issuing of EECS-GOs will cease.

Re-registration of a Production Device is made by re-submitting applications as described in D.3.1. The Swedish Energy Agency may deem a review and/or inspections, described in D.3.3, not be necessary if the submitted information corresponds to previously given information and that there doesn't seem to be any reason to question the accuracy of the information. Re-registration can be done through form or digitally. Re-registration takes place automatically if it is digital and if all requirements are fulfilled. In case the owner of Production devices does not extend EECS when the 5-year period has expired, the issuance of EECS ends automatically and the owner receives a national GO instead.

D.5.2 Notification of planned changes

The Owner(s) of a Production Device must notify the Swedish Energy Agency of any planned or unplanned changes that will or have resulted in:

- the information recorded in the EECS Registration Database in relation to the Production Device becoming inaccurate; or

- the qualification criteria for the EECS Scheme ceasing to be satisfied with respect to that Production Device.

The Owner(s) or party authorised by the owner(s) shall notify the Swedish Energy Agency about such changes by making the necessary corrections to the Production Device information in the Eugen portal, or by sending the changes to the Swedish Energy Agency directly. Failure to notify may lead to suspension of issuance of EECS-GOs for the Production Device.

On receipt of a change of details notification (following an inspection or otherwise), the change request will be evaluated and its impact on the Qualifying Criteria. A decision, on approval or rejection, is sent to the owner(s) as soon as reasonably practicable, or at least within 14 working days. If approved, the new information will be sent from Eugen to Cesar and read automatically.

D.5.3 Increased capacity for Production Device

Where the Capacity of an existing Production Device increases for any reason, including refurbishment or enhancement of the Production Device, the additional capacity is registered in the relevant EECS Registration Database as a separate element of that Production Device (wind, solar) or as increased capacity and production for the existing Production Device.

D.5.4 Corrupt measurement values

If a Production Device increases its capacity and have not reported it to the Swedish Energy Agency, the Swedish Energy Agency receives an error message that the Production Device measured value exceeds the installed power that has been specified in the application. Measured values cannot be read when it is higher than the installed power registered for the Production Device and the Production device owner therefore receives less allocation. The Production Device owner is contacted to verify and correct information so that the allocation become correct.

D.6 Audit of Registered Production Devices

D.6.1 Desk and field audits

The Swedish Energy Agency may find that an onsite audit isn't necessary if, in cooperation with the Authorised Measurement Body, is satisfied that the information in the registration application is accurate. The audits will take place according to requirements and opportunity. Production devices that will be audited must reflect the allocation of energy types that are registered in the system.

If the Swedish Energy Agency suspects that information is incorrect the owner(s) is contacted to find out if the discrepancy can be solved. If not, the Swedish Energy Agency starts an investigation, which may include an onsite inspection.

An onsite inspection of a combustion plant can also be replaced by a comparison of fuel declarations with records from onsite inspections performed for the purposes of the EU Emissions Trading Scheme.

D.6.2 Inspection periods

Inspections are made continuously through planned audits of Production Devices and through audits that are event driven. The later can be started for example if someone reports any suspected wrongdoing, if there seems to be recurring measurement errors or errors in production declarations. Selection of Production Devices for planned audit are made through random selection. There is no time period set for every Production Device to be inspected (see section C.7.4).

A Production Audit can be initiated at any time by the Swedish Energy Agency and can consist of an onsite inspection of any Production Device including, but not limited to, inspection of metering.

For Production Devices where Input for the Production Device is in whole or in part comprised of biomass, the Swedish Energy Agency will make inspections regarding fuel declarations (E 6.1) to verify that the reported amount of biomass used for Input is correct. Inspections of Production devices using biomass is carried out more often than for other types of PDs.

D.6.3 Access to Production Device

The Owner(s) of the Production Device, must permit the Swedish Energy Agency, or a Production Auditor as its agent, to access the Production Device or records associated with it, its energy output and sources of energy.

D.6.4 Reporting of changes to standing data

Owner(s) must report any changes to registered information of a Production Device under D.5 at the latest 14 days after such changes take effect, but deviations from registered data are also sought in the Production Device audit. This is especially important regarding changes in ownership structures and metering.

D.6.5 Deviations from information in EECS Registration database

If an inspection identifies material differences from the details recorded on the EECS Registration Database, the Registrant must correct the differences before the next issuance. If this is not possible, the PD can be deregistered. Deregistration means that the PD owner needs to re-apply for registration of the Production Device. Alternatively, the Issuing may be put on hold until the standing information is corrected. Certificates will not be issued before corrective actions have been performed.

D.7 Registration Error/Exception Handling

D.7.1 Error handling

Any errors in EECS Certificates resulting from an error in the registered data of a Production Device will be handled in accordance with section E.9.

D.7.2 Unfulfilled qualification criteria

When a Production Device no longer fulfils, or will no longer fulfil, the qualification criteria, information on the Production Device is updated in the EECS Registration Database that the Production Device no longer qualifies for EECS-GO. Information is also registered for when the decision goes into effect from:

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

E CERTIFICATE SYSTEMS ADMINISTRATION

E.1 Issuing EECS Certificates

E.1.1 EECS Certificate issuance

The EECS-GO Certificates shall be issued in the format specified by the EECS Rules (which may be updated over time). EECS Certificates can be issued:

- in respect of the qualifying energy output in accordance with E.3 of such a Production Device during any period in which it was registered for the purpose of EECS according to D.3. The qualifying energy output comes from metering point A and B with the use of a correction factor, and metering point C and D; and
- to an Account Holder who does not have any outstanding fees payable to the Swedish Energy Agency or its agents in conjunction with EECS Certificates.

E.1.2 EECS issuance for electricity

The Swedish Energy Agency issues EECS Certificates for electricity produced from Production Devices located in the Swedish domain. EECS-GOs are issued for Production Devices located at domain borders as long as the Production devices is located within the Swedish domain.

E.1.3 Issuance of National electricity certificates

National electricity certificates (Elcertificates) with the purpose of support for renewable energy production may be issued for the same MWh as for EECS-GO. Electricity certificates are only usable for quota compliance and cannot be used for energy disclosure.

E.1.4 Production period to the issuing date

EECS certificates are issued according to the process described in section E.2.4.

E.1.5 Unit and lifespan

Every single EECS-GO is issued for 1 MWh and has a lifespan of a maximum of 12 months. Only one Guarantee of Origin may be issued for one MWh.

E.1.6 Separation of National GOs with EECS-GO

Only one Guarantee of Origin may be issued for one MWh. Issued GOs are either an EECS-GO or a National GO. An EECS-GO is not issued for the same production period as a National GO. Where the originating Production Device is validly registered for EECS and the Account Holder is an EECS Account Holder, then and only then can GOs be issued for such Production Device. Otherwise, National GOs are issued. National GOs cannot be converted into EECS-GOs or vice versa.

E.2 Processes

E.2.1 Owner of the EECS Certificates

The Account Holder of a Transferable Account is the owner of the EECS Certificates on that account.

E.2.2 Audits of Transactions

The Swedish Energy Agency system CESAR supports audit of all transactions with respect to EECS Certificates held on its EECS Registration Database or transferred to or from such EECS Registration Database.

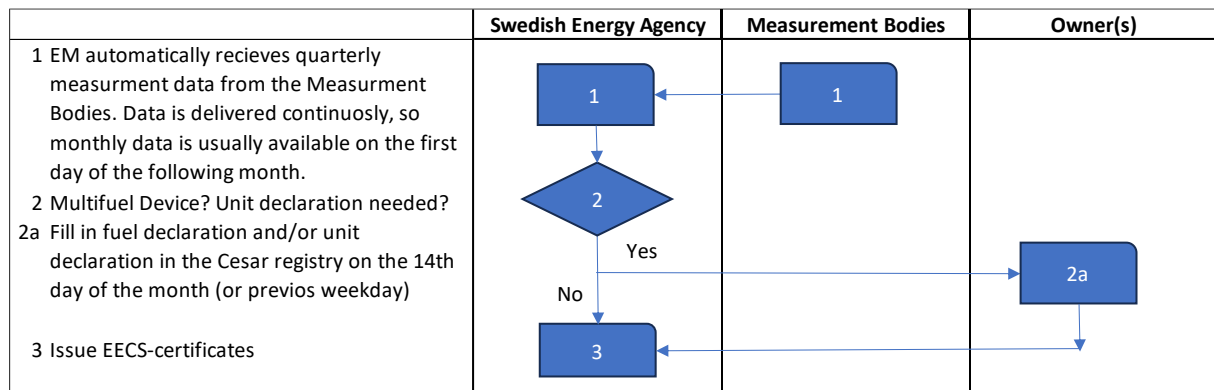
E.2.3 EECS Registration Database

The Swedish Energy Agency system CESAR is connected to AIBs EECS Registration Database with approved links for the purposes of that EECS Scheme.

E.2.4 Metering and Fuel declaration

The process from when the Swedish Energy Agency receives measurement data from electricity producers to the time EECS-GOs are issued and tradable are described below.

Figure 1 Process for issuing EECS-GOs



1. The Swedish Energy Agency receives valid measurement values automatically from Authorised Measurement Bodies through EDIEL message. Values for the previous month are typically available on the 1st day of the following month.
2. EECS-GOs are automatically issued for monthly generation of all EECS registered Production Devices on the 15th day (or following weekday) of each month following the production month. Production periods are never longer than one calendar month except for carried-over production (point 5 below). In the Swedish domain, registering a Production Device is considered as a continuous request for issuing. If 15th day of the month is a Monday, issuing is usually done on the 16th day. Issuing dates are always announced by the Swedish Energy Agency in advance.

3. In case of multifuel plant or if unit declaration is needed, Production Device Owner(s) declare the percentage of each fuel in the Cesar registry by the 14th day (or the previous weekday) of the month following production. In case of multifuel plant with several owners, the declarations can be made by any of the owners (or body authorised by an owner) who is also an Account Holder in the registry. Declarations are verified around three times per year.
4. In case of any doubts about the accuracy of meter readings and/or fuel declarations and/or cogeneration declarations, the Swedish Energy Agency will contact Production Device owners to solve the issues. EECS-GOs may be retrospectively issued for a production of a given month the end date of which is no more than 6 months ago. Checks are in these cases done after issuance of EECS-GOs.
5. EECS-GOs are issued to the Account(s) nominated by the owner(s) of the Production Device. When issued, the Account holder is informed about the issuance. One certificate is issued for one MWh of net generation. For description of net measurement, see E.3. Any residual MWh is carried over to the next issuing period. Leftovers would not be carried forward for more than 13 months from commencement of production.

E.3 Measurement

E.3.1 Electricity production metering

The Swedish Energy agency issues EECS-GOs for source and technology according to directive 2009/28/EC and Act on guarantees of origin for electricity (SFS 2010:601). Measurement of electricity generation is often measured at the point of connection to the public grid.

In cases where the measurement point is located in a non-concession network, the Production Device owner(s) may appoint an independent measurement consultant to be responsible for metering of the production output and to report measurement data to the Swedish Energy Agency. If such owner(s) chooses not to use a consultant, the grid operator will be the default Authorised Measurement Body. Measurement will then be done from metering point D at the connection to the public grid..

After the Production Device registration process, the Swedish Energy Agency informs the Authorized Measurement Body that the Production Device is approved and that the production data for the device should be sent to the Swedish Energy Agency. The relevant regulation for measurement requirements includes the following regulation and standards:

- a. Energimarknadsinspektionens föreskrifter och allmänna råd om mätning, beräkning och rapportering av överförd el (EIFS 2023:1)
 - <https://www.ei.se/om-oss/publikationer/publikationer/foreskrifter-el/2023/foreskrift-eifs-20231>

-
- b. Styrelsens för ackreditering och teknisk kontroll (SWEDAC) föreskrifter och allmänna råd om återkommande kontroll av mätare för aktiv elenergi (STAFS 2009:8)
- https://www.swedac.se/wp-content/uploads/2019/09/STAFS-2009_8-konsoliderad.pdf
- c. Statens energimyndighets föreskrifter om ursprungsgarantier för el (STEMFS 2017:2)
- <https://energimyndigheten.a-w2m.se/Home.mvc?ResourceId=104823>

The Swedish Energy Agency receives hourly values from Authorised Measurement Bodies through EDIEL messages, a system for electronic information exchange in the electricity market.

E.4 Energy Storage

E.4.1 Handling of pumped storage

In case of hydro plants with pumped storage, the Production Device owner must declare the amount of pumping prior to issuing of certificates. EECS-GOs can only be issued for electricity produced by the natural inflow of water. An example of a production declaration can be found in Annex 4.

E.5 Energy Carrier Conversion

E.5.1 Conversion is not allowed

No Conversion Issuance is allowed in the Swedish domain. EECS-GO and national GOs are only issued for one energy carrier: electricity. GOs for other energy carriers is not allowed in the registry nor can GOs be cancelled for Conversion Issuance in another domain.

E.6 Combustion Fuel Input & Production Devices with multiple energy inputs

E.6.1 Fuel declarations

For all Production Devices that can be operated with multiple fuels, the Production Device owner(s) must declare the fuel usage to the Swedish Energy Agency in the Cesar registry manually before any GOs are issued. An example of a fuel declaration can be found in Annex 4.

E.6.2 Unit declaration

For production devices with multiple energy inputs, the Production Device owner(s) must declare the percentage of each energy input to the Swedish Energy Agency, in the Cesar registry, manually before any GOs are issued. Unit declarations are also required for hydro plants with pumped storage, to declare the amount of pumping and the amount produced by the natural inflow of water. Unit declarations are also required if the production units have different allocation factors for EI certificates. An example of a unit declaration can be found in Annex 4.

E.7 Format

E.7.1 Format for EECS-GO

EECS Certificates are Issued in such a format as may be determined by AIB.

E.7.2 Fossil fuel generation

For fossil fuelled generation (or other types of generation), greenhouse gas emissions are not recorded on the certificate.

E.7.3 Dissemination level of output

During 2024 information on dissemination level of output will be implemented as added information on issued EECS-GOs. Dissemination level for each metering point is presented below.

Metering point	Dissemination level	Information
A	1	Consumed by the operator of the production device
B	1	Consumed by the operator of the production device
C	1	Consumed by the operator of the production device
D	2	Transferred over a Distribution or Transmission System

E.7.4 Radioactive waste

In the case of nuclear generation (or other types of generation) radioactive waste is not recorded on the EECS-GO.

E.8 Transferring EECS Certificates

E.8.1 Account holder transfers

The Account Holder can get secure electronic access to the Account to make transfers of EECS Certificates to another Account in the same EECS Registration Database or to another EECS Registration Database in another Domain through the website:

- <https://cesar.energimyndigheten.se/sv/public/home>

Only persons duly authorized by the Account Holder may request the transfer of EECS Certificates out of that Account Holder's Account. Authorized persons must be identified on the Account application form. Authorized persons can also later be added by the root user(s) of that Account Holder by adding new users and assigning appropriate rights.

E.8.2 The need for an EECS-account

Both National GOs and EECS-GOs reside in the Swedish EECS Registration Database Cesar. National GOs are separated from EECS-GOs using a database association called Trading Scheme. National GOs

have Trading Scheme “SE-GO”, whereas EECS-GOs have Trading Scheme “EECS-GO”. The Trading Schemes are issued per Production Device licences. Production Devices get EECS-GO licences as described in D.3 above. Account Holders get EECS-GO Trading Scheme as described in D.1 above. It is technically not possible to transfer certificates with Trading Scheme “EECS-GO” to Account holders without such Trading Scheme. As a result, only EECS-Account Holders may hold and transfer EECS-GOs.

E.8.3 Only GOs are allowed

Only EECS Guarantees of Origin may be transferred into the Swedish EECS Registration Database. Non-Governmental Certificates may not be transferred to Sweden.

Only EECS-GOs that are issued for 1 MWh are allowed to be transferred to the Swedish domain.

E.8.4 Authentication for transfer

The initiation of transfers is done from the Account holder in the Cesar registry who sells the GO. Each transfer needs to be authenticated with personal bank ID or Nexus-EM certificate.

E.8.5 The process for transfer

The transfer of Certificates and the confirmation of that transfer are automated. The Account Holder can choose to transfer one GO or bundles.

After the Account Holder has initiated the transfer, the system instantly displays a message whether the transfer has been successful.

In transfers between two accounts in the Swedish EECS domain the certificates are automatically transferred to the receiving account in case the initiation of the transfer is successful. If the initiation of the transfer is not successful, the certificates do not leave the account of the original Account Holder.

In international transfers, the success of the transfer is subject to the verification process of the AIB HUB and the receiving registry. If the transfer is not successful (a Negative Acknowledgement is received), the certificates are returned to the Account of the original Account Holder. The Account Holder is informed of the success or failure of the transaction by checking the transaction status in the registry. In international transfers, a transfer usually takes some hours to finalize.

In international transfers, the Swedish Energy Agency will cooperate when needed with other Members of the EECS scheme to amend its own, or the other Members’ Account Holder information.

Certificates which have been transferred out of the transferor’s account are removed from the account of the Transferor. Where the transfer is successful, the certificates are included in the account of the transferee. In case the transfer is failed the certificates are returned to the account of the Transferor.

E.9 Administration of Malfunctions, Corrections and Errors

E.9.1 EECS-GO are immutable

Once issued, the details of an EECS Certificate cannot be altered or deleted except to correct an error. Splitting of an EECS Certificate in a Transferable Account by deleting it and replacing it with EECS Certificates identical with that EECS Certificate is not allowed (EECS-rule C.8.1.1)

E.9.2 Correction of errors due to mistakes

If an EECS-GO is found to be erroneous as the result of a clear mistake of administrative or technical nature, either by the Swedish Energy Agency, a Market Participant or another party, the erroneous EECS-GO will be corrected if possible or otherwise withdrawn.

E.9.3 Correction of errors due other reasons

If an EECS-GO is found to be erroneous for other reasons than a mistake of administrative or technical nature, the EECS-GO will be corrected or withdrawn. If it has not been transferred from the Account to which it was issued, and a correction or withdrawal is legally possible.

E.9.4 Account holders notice of withdrawal

Before any correction or withdrawal is performed, the Account Holder of the Account where the EECS-GO is held will be informed in writing and given the opportunity to respond.

E.9.5 Correction of errors for traded GOs

If an EECS-GO is found to be erroneous and it is no longer in the Swedish domain, the Swedish Energy Agency will cooperate with other Issuing Bodies to withdraw the erroneous EECS-GO.

E.9.6 Prevention of enrichment of errors

The Swedish Energy Agency will make all effort to prevent undue enrichment of any Account Holder as a result of erroneous EECS-GOs or the correction of erroneous EECS-GOs.

E.10 End of Life of EECS Certificates – Cancellation

E.10.1 Cancellation of EECS-GO

Cancellation is removing a Certificate from circulation. Once Cancelled, an EECS-GO cannot be moved to any other account, and so is no longer tradable.

E.10.2 Cancellation by Account holder

Account holders possessing Certificates in the CESAR registry, can perform cancellations by executing the transaction in the registry. The Account Holder must specify the Certificates to be cancelled as well as the cancellation purpose, usage category, name, type, and location of beneficiary and related consumption period. The Account Holder may choose to cancel part or all of a given certificate bundle or several bundles.

E.10.3 Authentication

Each Cancellation needs to be authenticated with personal bank ID or Nexus-EM signing certificate.

E.10.4 GO cancellation status

Certificates can only be cancelled once. Cancelled Certificates are removed from the account by changing their status to “cancelled” so they do not appear in any account of the registry after the Cancellation. The Account holder performing the cancellation has full access to see the details of the cancellation, which are printable in CESAR. The Account Holder can also print out a cancellation statement (See annex 6 for sample cancellation statement).

Cancellations can be rolled back by the Swedish Energy Agency if it is clearly incorrect because of someone’s typing error, calculation error or similar oversight, or if the company's intention was different and that no one else has had time to conform to the error. The Swedish Energy Agency must also immediately be informed by the company that something is wrong, or at the latest within five working days from when the error was registered. Cancellations can also be rolled back if the fault is due to the Swedish Energy Agency. The person who is recorded as owner in the register must be given the opportunity to comment before the information is corrected unless it is clearly unnecessary. Rolling back cancellations can only be performed by Grexel.

E.10.5 Cancellation confirmation

Having performed a cancellation, the Account holder receives a confirmation of the success or failure of the cancellation instantly in the CESAR registry. An example of a cancellation statement can be found in Annex 5.

E.10.6 Domain cancellation of EECS-GO

EECS-GOs may be Cancelled for disclosure of electricity consumption in Sweden.

E.10.7 Cancellation statements to AIB

The Swedish Energy Agency will each month provide the Secretary General with a statement of the number of EECS-GOs cancelled under the provisions E.9.7 and E.9.8.

E.11 End of Life of EECS Certificates – Expiry

E.11.1 Expiry of EECS-GO

According to the Act on Guarantees of Origin (2010:601), Guarantees of Origin expire 12 months after the end of the related production period.

E.11.2 Expired EECS-GOs validity

EECS Certificates which have expired are no longer valid for transfer nor cancellation.

E.12 End of Life of EECS Certificates – Withdrawal

E.12.1 End of validity

EECS Certificates which have been withdrawn are no longer valid for transfer.

E.12.2 Withdrawal of EECS-GOs

EECS Certificates held in an Account in the EECS Registration Database may be withdrawn at the request of the Account Holder, or otherwise in accordance with the provisions of the EECS scheme as described in E.8.

F ACTIVITY REPORTING

F.1 Public Reports

F.1.1 Publish of statistics

For each technology, statistical information is published regarding:

- a. certificates issued, transferred internally intra-domain, imported, exported, cancelled, expired during each month prior to the current month,
- b. certificates issued, transferred internally intra-domain, imported, exported, cancelled, expired in relation with the energy produced during each month prior to the current month,
- c. certificates imported through a bilateral connection.

The information is published on the following website:

- <https://cesar.energimyndigheten.se/Lists/PublicPages/Statistics.aspx>

F.2 Record Retention

F.2.1 Time period for record retention

The Swedish Energy Agency retain the operational and standing data at minimum as follows:

Data	Time	Medium
Account information	5 years	Electronic Archive
Production Device	5 years	Electronic Archive
Meter reading data	2 years	Database backups
Transaction data	10 years	Database backups

F.3 Orderly Market Reporting

F.3.1 Enforcement of rules and reporting

The Swedish Energy Agency will enforce the rules in relation to any act of non-compliance with the applicable legislation. The Swedish Energy Agency will provide all required information to AIB of such non-compliance.

The Swedish Energy Agency will enforce the rules in relation to this Domain Protocol, the Standard Terms and Conditions, and the EECS Rules. The Swedish Energy Agency will inform the AIB of non-compliance where such breach could affect the transfers of EECS certificates with other domains.

In case of non-compliance, The Swedish Energy Agency has the right to withdraw an Account Holder from the Scheme.

G ASSOCIATION OF ISSUING BODIES

G.1 Membership

G.1.1 The Association of Issuing Bodies

The Association of Issuing Bodies brings together the issuing bodies of European energy certificate schemes. The AIB promotes the use of a standardised system, based on a harmonised environment, structures and procedures in order to ensure the reliable operation of European energy certificate systems. With its independent and peer reviews, and its periodic audits, the AIB provides a robust framework for reliable and fraud-resistant GO systems. Among others, it can also act by suspending transfers through the Hub. Membership of AIB facilitates mutual recognition of GOs across Europe.

G.1.2 If the Scheme Member stops being an AIB-member

In case the Swedish Energy Agency ceases to be a Scheme Member of an EECS Scheme, it will revise its EECS Registration Database so that every Production Device registered therein ceases to be registered for the purposes of EECS. Certificate issuing under EECS would stop, and EECS GOs would remain tradable only until Expiry.

G.1.3 If the Scheme member stops being the Authorised Issuing Body

In case the Swedish Energy Agency ceases to be the Authorised Issuing Body for EECS Certificates, it shall revise its EECS Registration Database so that each Production Device in the Domain ceases to be registered for the purposes of EECS Certificates, it shall stop issuing EECS GOs and after a transitional period the registry shall be taken offline.

G.2 Complaints to the AIB

G.2.1 Handling of complaints

An Account Holder is allowed to notify the Secretary General of AIB in writing in case:

- a) the Authorised Issuing Body in relation to an EECS Certificate is in breach of any of the provisions of Product Rules in relation to EECS Certificate; or
- b) any Product Rules do not comply with the relevant provisions of the EECS Rules, and evidence is provided substantiating such allegation, and that the Authorised Issuing Body has been given adequate opportunity to respond to such allegation.

The Secretary General of AIB shall invite the relevant Authorised Issuing Body to respond to the allegation.

H CHANGE CONTROL

H.1 Complaints to the Swedish Energy Agency

H.1.1 Filing a complaint

An Account Holder may file complaints against the Swedish Energy Agency. If the complaint regards a decision made and if the complaint is justified, then the Swedish Energy Agency will make every effort to correct the mistake as soon as possible. Provided that all necessary information in the case has been received, a correcting action will take no longer than two weeks.

H.2 Disputes

H.2.1 Handling of disputes

Disputes between two market parties where the reason for the dispute is a mistake or technical error on the Swedish Energy Agency's part, shall be notified as soon as possible to cesar@energimyndigheten.se. Disputes between market parties related to delayed or incomplete payment or other issues relating to contractual agreements between the parties will not be handled nor resolved by the Swedish Energy Agency.

If the Swedish Energy Agency and the Account Holder are unable to solve a dispute, the matter shall be resolved according to Swedish Law, Swedish jurisdiction and by the Swedish Administrative Court in Linköping.

H.3 Change Requests

H.3.1 Modification of domain protocol

An Account Holder may propose a modification to this Domain Protocol. Such proposal shall include a detailed description, including an exact specification of any proposed modification of this Domain Protocol and be passed in writing to the Swedish Energy Agency.

When receiving such a request, the Swedish Energy Agency will respond, describing the procedures to be followed with an estimate when a reply can be expected, consult with other EECS Account Holders within Sweden, and decide whether the request and its consequences are reasonable.

The Swedish Energy Agency may make modifications to this Domain Protocol that are necessary to the effective and efficient operation of the market.

Any modification to this Domain Protocol is subject to approval by the AIB, to secure that changes do not conflict with the EECS-Rules.

If the proposal leads to the modification of the Domain Protocol, or if it's otherwise seen important to disseminate, inform the EECS Account Holders of the outcome of this decision.

The latest Swedish Domain Protocol is published on the AIB website, www.aib-net.org

ANNEX 1 CONTACTS LIST

AUTHORISED ISSUING BODY / COMPETENS AUTHORITY / REGISTRY OPERATOR

Company name	The Swedish Energy Agency (Statens Energimyndighet)
Contact person	
Department	Klimatavdelningen, enheten Styrmedel förnybar energi
Address	P O Box 310, 631 04 Eskilstuna
Phone number	+46 16-544 20 00
E-mail address	ursprungsgarantier@energimyndigheten.se
Website	https://www.energimyndigheten.se/

REGISTRY SUPPORT

Company name	The Swedish Energy Agency (Statens Energimyndighet)
Contact person	
Department	Klimatavdelningen, enheten Ursprungsgarantier och elcertifikat
Address	P O Box 310, 631 04 Eskilstuna
Phone number	+46 16-544 20 00
E-mail address	ursprungsgarantier@energimyndigheten.se
Website	https://www.energimyndigheten.se/

PRODUCTION REGISTRARS

Company name	The Swedish Energy Agency (Statens Energimyndighet)
Contact person	
Department	Klimatavdelningen, enheten Ursprungsgarantier och elcertifikat
Address	P O Box 310, 631 04 Eskilstuna
Phone number	+46 16-544 20 00
E-mail address	ursprungsgarantier@energimyndigheten.se
Website	https://www.energimyndigheten.se/

PRODUCTION AUDITORS

Company name	The Swedish Energy Agency (Statens Energimyndighet)
Contact person	
Department	Klimatavdelningen, enheten Styrmedel förnybar energi
Address	P O Box 310, 631 04 Eskilstuna
Phone number	+46 16-544 20 00
E-mail address	ursprungsgarantier@energimyndigheten.se
Website	https://www.energimyndigheten.se/



MEASUREMENT BODIES

Company name	See respective Grid Operator at the website below
Contact person	N/A
Department	N/A
Address	N/A
Phone number	N/A
E-mail address	N/A
Website	https://www.ediel.se/Portal/PartyList/PartyList/ViewGridOwners

ANNEX 2 ACCOUNT APPLICATION/AMENDMENT FORM



INTERNATIONAL GO - EECS

1 (3)

The conditions for obtaining guarantees of origin are regulated in the Act on Guarantees of Origin for Electricity (2010:601) and the Ordinance on Guarantees of Origin for Electricity (2010:853) and in the Swedish Energy Agency's regulations and general guidelines regarding electricity certificates (STEMFS 2010:3).

Swedish Energy Agency
PO Box 310
SE-631 04 ESKILSTUNA, Sweden

Application for issuing of guarantees of origin that can be transferred to another EU Member State

All information in the form is compulsory

In order to register a production device for the issue of guarantees of origin that can be transferred to another EU Member State, so-called EECS guarantees of origin, the holder is required to have applied for and the production device must have been registered for the issue of guarantees of origin according to the Act on Guarantees of Origin for Electricity. With regard to your production device:

- the production device is already registered and allocated guarantees of origin according to the Act on Guarantees of Origin for Electricity (SFS 2010:601)
- an application for the issuing of guarantees of origin according to the Act on Guarantees of Origin for Electricity (SFS 2010:601) is to be sent in to the Swedish Energy Agency in connection with this application.

1 Production device information

Production device name	Production device ID
Property designation	


2 Holder

Company/name	Corp./personal ID number	Holding %
c/o Address		
Address		
Postal code and city	Country	

3 Contact person for application

Name	
Phone number	E-mail address

ANNEX 3 DEVICE REGISTRATION FORM

	APPENDIX PE GO <small>Ref. no. (to be completed by the Agency) Appendix 2</small>	1 (1)
<p>Production units behind the production device’s metering point</p> <p>All production units shall be presented below. If the production device consists of more than two production units behind the metering point several PU GO forms must be sent with the application.</p>		
<p>Production unit</p>		
<small>Biofuel/peat/fossil. State type</small> <input type="checkbox"/> Industrial back pressure <input type="checkbox"/> CHP <input type="checkbox"/> Condensing power <input type="checkbox"/> Gas engine <input type="checkbox"/> Other:	<small>Wind: State type</small> <input type="checkbox"/> Land based <input type="checkbox"/> Ocean based	<small>Other energy source</small> <input type="checkbox"/> Water <input type="checkbox"/> Geothermal <input type="checkbox"/> Sun <input type="checkbox"/> Wave <input type="checkbox"/> Other ocean energy <input type="checkbox"/> Nuclear power <input type="checkbox"/> Other:
<small>Unit name</small>	<small>Commissioning date</small>	<small>Installed capacity (kW)</small>
<small>Other information</small>		
<p>Production unit</p>		
<small>Biofuel/peat/fossil. State type</small> <input type="checkbox"/> Industrial back pressure <input type="checkbox"/> CHP <input type="checkbox"/> Condensing power <input type="checkbox"/> Gas engine <input type="checkbox"/> Other:	<small>Wind: State type</small> <input type="checkbox"/> Land based <input type="checkbox"/> Ocean based	<small>Other energy source</small> <input type="checkbox"/> Water <input type="checkbox"/> Geothermal <input type="checkbox"/> Sun <input type="checkbox"/> Wave <input type="checkbox"/> Other ocean energy <input type="checkbox"/> Nuclear power <input type="checkbox"/> Other:
<small>Unit name</small>	<small>Commissioning date</small>	<small>Installed capacity (kW)</small>
<small>Other information</small>		

ANNEX 4 PRODUCTION DECLARATIONS

Fuel declaration, example from Cesar.

Production device name: heat and power plant, ID: xxxxxxxx		
Fuel declaration		
Period	1 - 31 okt, 2022	
Volume MWh	13 340,40	
Declaration	Percent:	Specification of type of fuel
<i>Fasta biobränslen som inte omfattas av HBL - biomassa från jordbruk t ex energiskog, energigrödor, spannmål, olivkärnor, nötskal, halm och vass</i>	0	
<i>Fasta biobränslen som omfattas av HBL - biomassa från jordbruk t ex energiskog, energigrödor, spannmål, olivkärnor, nötskal, halm och vass</i>	0,04	Biogent jordbruksavfall till förbränning (förstörd halm)
<i>Flytande biobränslen som omfattas av HBL - vegetabiliska oljor, kommunalt avfall, returlut</i>	0	
<i>Flytande biobränslen som inte omfattas av HBL - vegetabiliska oljor, kommunalt avfall, returlut</i>	0	
<i>Fasta biobränslen som inte omfattas av HBL - träd, träddelar, avverkningsrester, samt andra rest- och biprodukter från skogsbruk och skogsindustri</i>	0	
<i>Fasta biobränslen som omfattas av HBL - träd, träddelar, avverkningsrester, samt andra rest- och biprodukter från skogsbruk och skogsindustri</i>	0	
<i>Fasta biobränslen som inte omfattas av HBL - industriellt- och kommersiellt avfall t ex svartlut, källsorterat träavfall och träavfall som är utsorterat från blandade avfall</i>	0	
<i>Fasta biobränslen som omfattas av HBL - industriellt- och kommersiellt avfall t ex svartlut, källsorterat träavfall och träavfall som är utsorterat från blandade avfall</i>	1,22	källsorterat träavfall
<i>Fasta biobränslen som omfattas av HBL - kommunalt avfall - t ex källsorterat träavfall och träavfall som är utsorterat från blandade avfall</i>	0	
<i>Fasta biobränslen som inte omfattas av HBL - kommunalt avfall - t ex källsorterat träavfall och träavfall som är utsorterat från blandade avfall</i>	0	
<i>Fasta biobränslen som omfattas av HBL men har inte fått Hållbarhetsbesked - berättigar inte till tilldelning av Elcertifikat</i>	0	
<i>Flytande biobränslen som omfattas av HBL men har inte fått Hållbarhetsbesked - berättigar inte till tilldelning av Elcertifikat</i>	0	
<i>Gasformiga biobränslen som omfattas av HBL men har inte fått Hållbarhetsbesked - berättigar inte till tilldelning av Elcertifikat</i>	0	
<i>Deponigas som inte omfattas av HBL</i>	0	
<i>Deponigas som omfattas av HBL</i>	0	
<i>Gas från avloppsreningsverk som inte omfattas av HBL</i>	0	
<i>Gas från avloppsreningsverk som omfattas av HBL</i>	0	
<i>Biogas som inte omfattas av HBL - Ospecificerad</i>	0	
<i>Biogas som omfattas av HBL - Ospecificerad</i>	0	
<i>Fasta biobränslen som inte omfattas av HBL - Ospecificerad</i>	0	
<i>Fasta biobränslen som omfattas av HBL - Ospecificerad</i>	3,31	ABP, "grönt" avfall
<i>Fast, flytande och gasformiga biobränslen - berättigar inte till tilldelning av Elcertifikat</i>	52,04	Avfall
<i>Torv</i>	0	
<i>Flytande fossila bränslen - t ex olja, LNG, petroleumprodukter - berättigar inte till tilldelning av Elcertifikat</i>	0	
<i>Fasta fossila bränslen - t ex kol, kommunalt avfall, industriavfall - berättigar inte till tilldelning av Elcertifikat</i>	43,37	Industriavfall
<i>Gasformiga fossila bränslen - t ex naturgas, petroleumprodukter, processgas - berättigar inte till tilldelning av Elcertifikat</i>	0,02	Naturgas
<i>Fossila bränslen - Ospecificerad - berättigar inte till tilldelning av Elcertifikat</i>	0	
Certificates issued based on this declaration		
Elcertificates:	0	
National GOs:	0	
EECS-GOs:	11 206,00	

Unit declaration, in this example from Cesar the production units have different allocation factors for elcertificates.

Production facility name: Wind Farm 1, ID: XXXXXXXXXXXX			
PD Version: 2022-02-01; till ;			
Period	1 - 31 augusti, 2023 - Volume: 22993,844 MWh		
Type of declaration	Unit declaration		
<i>Production Unit Name</i>	<i>Allocation factor elcertificates, %</i>	<i>Type</i>	<i>Production, %</i>
PD 1	0		6,7
PD 2	0		0,9
PD 3	0		2,5
PD 4	0		6,9
PD 5	0		7
PD 6	0		7,5
PD 7	0		8
PD 8	100		8,1
PD 9	100		8,2
PD 10	100		8,5
PD 11	100		8,9
PD 12	100		8
PD 13	100		8,5
PD 14	100		6,4
PD 15	100		3,9
			<i>Sum: 100</i>
Certifikates issued based on this declaration			
Elcertificates:	9082		
National GOs:	0		
EECS-GOs:	22994		

ANNEX 5 EECS GO CANCELLATION STATEMENT

Transaction Type:	EECS-GO cancellation									
Transaction date:	2021-04-29 10:45:48									
Transaction number:	2021042900009									
Transaction status:	Completed									
Information:	This document certifies that the specified Guarantees of Origin have been cancelled for the benefit of the specified receiver and for the period and purpose specified herein. Cancelled Guarantees of Origin cannot be transferred to other account holders. The cancellation of these Guarantees of Origin cannot, by transfer or otherwise, be assigned to any other party than the specified receiver and cannot apply to any period or purpose other than those specified herein. The environmental qualities of the associated energy in this document have been consumed due to the cancellation.									
From					To					
Account holder:					Cancel for following company:					
Account:					Cancellation purpose:					
Domain:					Consumption period:					
Street:					Country of consumption:					
Postal code and city:					Department, unit, division or geographical branch:					
Country:					Usage category:					
					Type of beneficiary:					
Total EECS-GO:										
Total MWh:										
Certificate number (From - To)	Volume	Domain	Energy source, Technology	Issuing date	Production period	Production device (GSRN, installed capacity, name)	Trading schemes	Support schemes	Date of commissioning	Location of production device