ntry: SWEDEN A	Author:		
	Actual implementation in the MS	Comments	Instructions for assessment/explanations
: (2017/01)			
IERAL			
Disclosure system implemented			NO: No legislation and no system in place Almost in line: have a legislation in place but does not consider all elements required by the directive e.g. no environmental legislation YES: legislation in place + all elements disclosed
- Legislation			Please name the relevant regulations and provide an internet reference (preferably a version in English)
- When did the regulation(s) regarding disclosure come into force?			Please name the date in which the regulation(s) came into force.
- Competent Body (who is and since when?)			Please specify and provide reference to legal nomination and the date since when the body was appointed
RE-GO system implemented			NO : no secondary legislation and no system in place Almost inline : secondary legislation in place but no registry YES : Secondary legislation in place + registry
- Legislation			Please name the relevant regulations and provide and internet reference
- Competent Body (who is and since when?)			Please specify and provide reference to legal nomination and the date since when the body was appointed
- Is the appointed Competent Body the only competent body in your domain for Gos (Who and When)?			Please specify
CHP-GO system implemented			NO: no secondary legislation and no system in place Almost inline: secondary legislation in place but no registry YES: Secondary legislation in place + registry
- Legislation			Please name the relevant regulations and provide and internet reference
- Competent Body (who is and since when?)			Please specify and provide reference to legal nomination and the date since when the body was appointed
- Is the appointed Competent Body the only competent body in your domain for Gos (Who and When)?			Please specify and provide reference to legal nomination and the date since when the body was appointed

ID	Implementation of the elements of the Directive Related to GOs	
Definit		
	The sole function of a GO is the usage for disclosure purposes for final customers.	YES: in the Domain GO is defined as such (electronic energy certificate that meets the requirement of the RES Directive for RE-GO)  NO: in the Domain GO is not defined as such  NA: No RE-GO system in place
Impler	nentation of Article 15 of the Directive	IVA. No RE do system in place
	Have you fully implemented the requirements of Art. 15 of the RES- Directive?  If not, please specify the ones which you have not implemented yet.	
ID	RE-DISS BPR	
IZIII N	Metered production periods for issuing GOs are not longer than a calendar month.	NO: metered periods for issuing GOs are longer than a calendar year YES: If true Nota Bene: in case only RES GOs implemented only assess RES-GO system
	Metered production periods for issuing GOs do not run across the start and end of disclosure periods.  Longer intervals up to one year are acceptable for very small plants, for example.	NO: Metered periods for issuing GO run across the start and end of disclosure periods.  YES: If true  Nota Bene: in case only RES GOs implemented only assess RES-GO system
	If possible, issuing of GOs is done DIRECTLY after the end of each production period (potential excemption PV)	NO: more than 6 months after the end of the production period  Almost in line: between 3 and 6 months after the PP  YES: within 3 months after the production period
	Lifetime of GO is limited to 12 months after the end of the production period.	NO: is not true YES: is true Nota Bene: in case only RES GOs implemented only assess RES-GO system In the description section, please identify if this is true for other GO systems in place as well
	GOs that have reached this lifetime (and haven't been used for disclosure) are collected into the Residual Mix	NO: is not true YES: is true Nota Bene: in case only RES GOs implemented only assess RES-GO system In the description section, please identify if this is true for other GO systems in place as well

Cancellations of GO relating to production periods in a given year X which take place until a given deadline in year X+1 count for disclosure in year X. Later cancellations count for disclosure in year X+1. (In case that disclosure periods differ from the calendar year, the deadline is defined accordingly.)  Deadline is set on 31 March X+1  The same allocation rule applies for expired GO: The date of expiry	Answer is YES or NO  Nota Bene: in case only RES GO is implemented only assess RES-GO system  Please provide details of the system in place in the Domain.  YES: Deadline is the stated one  NO: Different Deadline  If other, Please state the deadline in the description column.  Answer is YES or NO"
thus determines the disclosure period for which information from	Nota Bene : in case only RES GOs implemented only
expired GO will be used.	assess RES-GO system
Usage of EECS	
The implementation of GO in all countries in Europe is based on the European Energy Certificate System (EECS) operated by the Association of Issuing Bodies (AIB). In case that national GO systems are established outside the EECS, then EECS is at least used for transfers between registries.	NO : transfers of GOs between registries are not done through EECS YES : transfers of GOs between registries are done through EECS
Is the GO system in the country established exclusively according to EECS?	YES: If true Almost in Line: both national GO and EECS system NO: if not true
Does the domain utilise the AIB Hub for international transfers?	Yes: If true Almost in Line: also use other systems for transfer of GO besides the AIB Hub No: if not true
In case that not all European countries are members of EECS, appropriate connections between the EECS system and non-EECS members as well as between different non-EECS members are to be established. These include inter alia procedures for assessing the reliability and accuracy of the GO issued in a certain country and interfaces for the electronic transfer of GO.	NO : no procedure to assess reliability and accuracy of GO YES : procedures in place to assess reliability and accuracy of GO
Ex-domain cancellations of GO, where a GO is cancelled in one registry and a proof of cancellation is then transferred to another country in order to be used there for disclosure purposes, are only used if there is no possibility for a secure electronic transfer and if there is an agreement on such ex-domain cancellations between the competent bodies involved. Statistical information on all ex-domain cancellations are be made available in order to support Residual Mix calculations.	NO: none of the two statements are true Almost in line: one of the statements is true YES: Both statements are true Nota Bene: in case only RES GOs implemented only assess RES-GO system

of GOs for different energy sources and generation technologies	
GOs are issued only for the net generation of a power plant, i.e. gross generation minus the consumption of all auxiliaries related to the process of power production. For hydro power plants involving pumped storage this means that GOs are issued only for the net generation which can be attributed to natural inflow into the reservoir.	NO : If not true YES : If true
Verification mechanisms are implemented for ongoing control of registered data (e.g.reaudits, random checks, etc.).	NO : If not true YES : If true
Correct accounting of RES share of combustion plants is assured by adequate measures (EECS Rules)	NO : If not true YES : If true
The competent body can correct errors in GOs it has issued before they are exported, and is the only one with this competence.	NO : If not true YES : If true
The GO system is extended beyond RES & cogeneration to all types of electricity generation.	NO : no extension YES : extension in place
GOs are issued for all electricity production, unless an RTS applies for that production, e.g. for the disclosure of supported electricity	NO : If not true YES : If true
The Competent body has made the use of GOs mandatory for all electricity supplied to final consumers (full disclosure implemented).	NO : If not true YES : If true
All types of GO are handled in one comprehensive registry system per country. (For an exception see the coexistence of national GO systems and EECS )	Almost in line: if more than one registry, but close coordinated YES: one comprehensive registry NO: Different registries
Technical changes to plants are registered as soon as is reasonably practicable.	NO : If not true YES : If true

GOs have no function in terms of target compliance and should not be used as support instrument. All GOs are linked to disclosure.	YES : all GOs are linked to disclosure Almost in line : if at least RES GO system is linked with
	disclosure, but others not clearly  NO : no GO system is linked to disclosure
A GO is considered as being used only once it has been electronically cancelled.	NO : If not true YES : If true
After cancellation, no further cancellation, transfer or export of the given GO is possible	NO : If not true YES : If true
After expiry, no further cancellation, transfer or export of the given GO is possible	NO : If not true YES : If true
An exported GO is marked as removed from the exporting registry	NO : If not true YES : If true
Processes in the registry excludes duplication of GOs.	NO : If not true YES : If true
Registries are audited on a regular basis.	NO : If not true YES : If true
If multiple certificates are to be issued, e.g. a GO for disclosure and a	NO : not legally separated
support certificate for management of a support system, then these are legally separated.	YES: legally seperated NA: no multiple certifcates
This GO combines the functionalities of a RES-GO and a high efficiency cogeneration GO.	NO : the GO does not combine both informations (lost o one information). YES : the GO combines both RES and CHP in one GO
GO as the unique "tracking certificate"	
GO is the only "tracking certificate" used. Any other tracking systems of a similar purpose and function as GO are closely coordinated with GO and eventually converted to GO.	YES: GO is the only tracking certificate Almost in line: coordination between GO and other certificate NO: no coordination between the 2 systems
Besides GO, only Reliable Tracking Systems (which may include contract based tracking) and the Residual Mix is available for usage for disclosure. No other tracking mechanisms are accepted.	YES: GO + RM or GO + RM + RTS NO: GO + other tracking system which is not a RTS + (RN

Green power quality labels use GO as the unique tracking	eithter YES or NO or NA if no green power label
mechanism.	
Recognition of GO imported from other countries	
European countries choose one of the two following options and apply it consistently for all foreign GO:  Rejection of GOs only relates to the cancellation of GOs and subsequent use for disclosure purposes in the respective country and does not restrict the transfers of GOs between the registry of the considered country and the registries of their countries. This means that the decision about the recognition of a GO does not hinder its import into the considered country.  Rejection of GOs implies blocking their import to the national registry.	YES: If one of the options is applied NO: If none of the options is applied NA: no rejection of GO foreseen in the legislation
The choice of one or the other option is transparent for all market parties and clearly communicated.	YES : If true  NO : If not true  NA : no rejection of GO foreseen in the legislation
Within the rules set by the respective Directives, European countries consider their criteria for the acceptance of imported GOs for purposes of disclosure.	NO : no rejection of the registrion NO : no rejection criteria  YES : Rejection criteria have been listed  Almost in line : Rejection criteria being discussed
These criteria address imports at least from all EU member states, other members of the European Economic Area (EEA) and Switzerland. The parties to the Energy Community Treaty are considered as well, as soon as GO imports from these countries become relevant.	NO :criteria do not address imports of GO YES :criteria address imports of GO
The criteria specify the electronic interfaces, data format and contents of GOs to be imported, which the respective country accepts for imports of GOs (such as the EECS Hub).	NO : criteria do not specify electronic interface, data format and contents of GO to be imported YES :criteria do specify electronic interface, data form and contents of GO to be imported
Conditions for the recognition of GOs from other countries are that they were issued based on Art. 15 of Directive 2009/28/EC or compatible national legislation, and that they meet the explicit requirements set in Art. 15, for example, regarding the information content of the GOs.	NO : If not true YES : If true

The recognition of GOs from other countries is rejected if these	NO : If not true
countries have not implemented an electricity disclosure system.	YES : If true
The recognition of GOs from other countries is rejected if the	NO : If not true
	YES: If true
country which has issued the GOs or the country which is exporting	Almost in line: if part of the measures are implemented
the GOs have not implemented appropriate measures which	
effectively avoid double counting of the attributes represented by	
the GOs. Such appropriate measures ensure the exclusivity of the	
GOs for representing the attributes of the underlying electricity	
generation, implement clear rules for disclosure, establish a proper	
Residual Mix or equivalent measures, and ensure their actual use.	
Furthermore, the appropriate measures ensure that attributes of	
exported GOs are subtracted from the Residual Mix of the exporting	
country and cannot be used for disclosure at any time in the issuing	
or the exporting country by explicit mechanisms, unless the GOs are	
re-imported and cancelled there.	
Disclosure Schemes and other Reliable Tracking Systems	
Full disclosure schemes are implemented, including the disclosure of	YES or NO or Almost in line if only CO <sub>2</sub> or Nuclear waste of
CO <sub>2</sub> emissions and radioactive waste.	other restriction (e.g. only provided on website and not with bills and information material)
	In the description column please specify:
	- If the answer is almost in line, please describe the
	attribute that is missing (or any other restriction).
	- Please insert the energy sources (fuels) that have to the
	distinguished Also specify if certain attributes are allocated as
	"unknown" share in the fuel mix?
RTS (Reliable Tracking Systems) can comprise, where applicable:	NA NA
- Homogeneous disclosure mixes for regulated market segments	YES : if true
where no choice of supplier or different products exists,	Almost in line
- Support systems whose interaction with disclosure requires a	NO is not allowed
certain allocation of the attributes of supported generation (e.g. a	
pro-rata allocation to all consumers in a country where RES	
electricity is supported by a feed-in tariff),	
- Contract based tracking	
Calculations of Residual Mixes	

Where a full-disclosure system has not been implemented in the country, the countries provide a Residual Mix (RM) as a default set of data for disclosure of energy volumes for which no attributes are available based on cancelled GO or based on other Reliable Tracking Systems. The use of uncorrected generation statistics (e.g. on national or UCTE, Nordel etc. levels) are avoided.	YES: proper RM calculation, or fully explicit tracking system applied based on GO and RTS Almost in line: default set of data avoiding double counting of RES attributes; or fully explicit tracking system applies, but not fully based on GO and RTS NO: No RM
The calculation of the Residual Mix follows the methodology developed in the RE-DISS project and taken over by the AIB.	YES : use of RE-DISS European Residual mix or of RE-DISS national RM NO : no use of RE-DISS mixes
The Competent body from my country cooperates with AIB in order to adjust the Residual Mix in reflection of cross-border transfers of physical energy, GO and RTS.	YES: if true (including e.g. Data collection of RE-DISS) NO: if not true
For purposes of this cross-border adjustment, the competent body uses data provided by RE-DISS. The comptent body also supports the collection of input data for the related calculations by the AIB (and it's consultant).	The focus is on the first part of the sentence YES: use of AIB RM data (RE-DISS methodology) Almost in line: use of EAM data (in case of deficit domains) NO: no use of AIB data NA: fully explicit disclosure system (without unknown shares)
As a default, the Residual Mix is calculated on a national level.  However, in case that electricity markets of several countries are closely integrated (e.g. in the Nordic region), a regional approach to the Residual Mix may be taken. This should only be done after an agreement has been concluded amongst all countries in this region which ensures a coordinated usage of the regional Residual Mix.	YES: coordinated regional approach or national approach NO: uncoordinated regional approach or no RM NA
Contract based tracking	
If contract based tracking (CBT) is allowed in a country, it is regulated clearly and declared in the domain protocol.	YES: true or CBT accepted NO: not true Almost in line: CBT exists and efforts have been made to regulate it NA: CBT not allowed

Such regulations ensure that  - The rules of the tracking system are transparent and comprehensive and are clearly understood by all participants in the system.  - Double counting of attributes and loss of disclosure information is minimised within the contract based tracking scheme and also in the interaction of the contract based tracking scheme to GO and other RTS (if applicable). As a precondition for this, the contract based tracking scheme is able to provide comprehensive statistics about the volumes and types of electricity attributes which are tracked through it.  - The relevant information for disclosure purposes is available in time to meet the timing requirements	YES: true NO: not true Almost in line: CBT exists and efforts have been made to regulate it NA: when CBT is not allowed
Timing of Disclosure	
Electricity disclosure is based on calendar years.	YES or NO Almost in line: if calendar year + another period can be chosen (ex. Financial year) In the description column, if other period is used, please identify it: starting date-end date
The deadline for cancelling GO for purposes of disclosure in a given year X is 31 March of year X+1.	Yes: Deadline is the stated one No: Different Deadline If other, Please state the deadline in the description column.
Further Recommendations on Disclosure	
The relation between support schemes for RES & cogeneration on the one side and GO and disclosure schemes on the other side are clarified. Where necessary, the support schemes should be defined as RTS	YES: clear allocation of supported attributes NO: no clear allocation of supported attributes Almost in line: not allowed NA: No legislation In the description column please describe how supported energy is allocated to consumers in terms of disclosure.
If support schemes are using transferable certificates, then these certificates are separated from GO	NO : not legally separated YES : legally seperated NA: no multiple certifcates

All electricity products offered by suppliers with claims regarding the origin of the energy (e.g. green or low-carbon power) are based exclusively on cancelled GO. No other tracking systems are allowed, with the exception of mechanisms defined by law, e.g. a pro-rata allocation of generation attributes to all consumers which is related to a support scheme.	YES: only GOs accepted for green products NO: other TS accepted for green products NA: no green products on the market Almost in line: not allowed
As required by Art. 3 (9) of the IEM Directive 2009/72/EC annual disclosure of the supplier mix on or with the bill is mandatory. This also includes information on environmental impacts.	NO :annual disclosure of supplier mix is not mandatory on or with the energy bill and it does not include information on environmental parameters.  YES :annual disclosure of supplier mix is mandatory on or with the energy bill and it does include information on environmental parameters  Almost in line: annual disclosure of supplier mix is mandatory on or with the energy bill but it does not include information on environmental parameters  NA: no disclosure system in place
Suppliers offering two or more products which are differentiated regarding the origin of the energy are required to give product-related disclosure information to all their customers, including those which are buying the "default" remaining product of the supplier.	YES or NO NA: no green products on the market Almost in line: only product mix is disclosed, but not the (mandatory) supplier mix
There are clear rules for the claims which suppliers of e.g. green power can make towards their consumers. There are rules on how the "additionality" of such products can be measured (the effect which the product has on actually reducing the environmental impact of power generation), and suppliers are required to provide to consumers the rating of each product based on these rules.	YES : clear rules on green products NO : no clear rules NA : no green products on the market Almost in line : not allowed
Claims made by suppliers and consumers of green or other low-carbon energy relating to carbon emissions or carbon reductions are regulated clearly. These regulations avoid double counting of low-carbon energy in such claims. A decision is taken whether such claims should adequately reflect whether the energy purchased was "additional" or not.	YES: clear rules on green products NO: no clear rules NA: no green products on the market Almost in line: not allowed

rules are developed and im involved on whether the co	rving final consumers in several countries plemented consistently in the countries mpany disclosure mix of these suppliers only to those in a single country.	For most countries Not Known (NK) applies if information cannot be found  YES: clear rules on level of disclosure  NO: known practices of international disclosure by suppliers  Almost in line: some progress has been made  NA: not allowed
_	tions are followed with respect to the peration mechanisms (Art 6 - 11 of	
1 .	ner country agree on Joint Projects, such allocation of atributes (via GO, RTS or ne respective power plants	YES: If agreements for Joint Projects clarify the allocation of attributes  NO: If the proposal is not true  NA: No joint projects
I	Support Schemes, such agreements clarify via GO, RTS or Residual Mix) issued from l under these schemes	YES: If agreements for Joint Support Schemes clarify the allocation of attributes  NO: If the proposal is not true  NA: No joint projects

ation on the Recognition of GO  Extra questions on recognition of GO		Instructions for assessment/explanations
Does the Domain treat imported GO as national GO when it comes to disclosure? If so, please specify.	G ii Y	NO: It treats imported GO differently from national iss GO in disclosure (for example: has criteria for acceptin mported GO). /ES: treats them equally 'Almost in line" is not possible
Does the Domain have criteria in place for accepting foreign GO for disclosure?	N."	/ES : criteria in place NO : no criteria in place 'Almost in line" is not possible NA : no rejection of GO foreseen in the legislation

- If yes, please specify the criteria which are in place	Please state which crietria of Art. 15 (6) RES Directive are	
	implemented:	
	Electronic database in place	
	One competent body appointed by law	
	all GOs linked to disclosure ${\it CO}_2$ emissions and radioactive waste included in disclosure display	
		transparent publication of disclosure information
		others, please specify
	Since when do you have these criteria in place?	Please specify
	Are the criteria transparently published in your country?	Please specify and indicate where those are published. If
electronically please provide a link.		

## **Information on Environmental Parameters**

What are the data basis for disclosing CO<sub>2</sub> emissions and radioactive waste when using GOs or other Reliable Tracking Systems for disclosing specific supplier mixes?

Please describe how it is done in the Domain

## Information on Disclosure aspects

Extra questions regarding the provision of disclosure information	Instructions for assessment/explanations
on a disclosure statement towards end consumers	mistractions for assessment, explanations
Are there any regulations on graphical display of disclosure	
information by suppliers (requirements on how to display, fixed	Pls. Provide short explanation plus reference to
format of disclosure statement,)	website/regulation.
Is there a requirement to provide comparison values besides	
supplier- and product mix? If so, which one (e.g. national production	Pls. Provide short explanation plus reference to
mix)	website/regulation.
Is disclosure information somehow controlled by an official or	
independent institution? By whom? If so, is it audited or approved or	Pls. Provide short explanation plus reference to
calculated by that body?	website/regulation.
Is disclosure information of different suppliers centrally available	Pls. Provide short explanation plus reference to
(e.g. at the Competent Body, on a central website)?	website/regulation.
Is there an official regulation on communication of aspects related	
to additionality or ecological quality aspects together with	Pls. Provide short explanation plus reference to
disclosure? Please describe.	website/regulation.
Is there a specific regulation on disclosure of (high-efficient) CHP in	Pls. Provide short explanation plus reference to
your domain?	website/regulation.