Country profile: Spain

RE-DISS
Reliable disclosure systems for Europe

Last update 14/10/12

1 Implementation of Tracking Systems

1.1 Electricity Disclosure

Disclosure was established by article 110 bis that was added in Real Decreto 1955/2000 on the 23/12/2005 and came into force the next day. This article introduced the obligation from Directive 2003/54 on suppliers to disclose their fuel mix of the previous year as well as the environmental impact in terms of CO2 emissions and radioactive waste. Sources for information on tracked attributes were listed as organised bilateral contract, purchase on markets or imports of physical electricity. On 12/05/2007, article 110 bis was modified to include the obligation to disclose the national supply mix next to the suppliers' mix. It was announced that CNE would published the detailed regulations for disclosure, which was done with Circular 1/2008, de 7 de febrero

Article 110 bis was completed also by provision 12 of article 1 of Order ITC /2914/2011 from the 27th October 2011 introducing the obligation to take GOs into account when calculating the suppliers mix (which was already the case in the procedures for calculations explained in Circular 1/2008). It also imposes on the suppliers to communicate to the clients the amount of GOs that have been cancelled on their account for the previous year.

CNE, the Spanish regulator, is in charged of the system.

Regulations of Circular 1/2008 from 7th February 2008 describe the procedure used to calculate information to disclose the supply mix of electricity.

Attributes of disclosure are the following :

- Renewable energies
- High efficiency cogeneration
- Cogeneration
- Natural gas combined cycle
- Coal
- Fuel / gas
- Nuclear
- Others

Disclosure is done on the basis of the calendar year. Information on year X should be displayed by suppliers from 1st April of year X+1 onwards and until 31st March of year X+2.

Disclosure calculations are centralised by CNE, even in relation to the suppliers' mix. CNE receives information from the TSO on the national production before the first of March in year X+1. All suppliers have to cancel their GOs before 31st of March of year X+1 for disclosure of year X. CNE calculates the different mixes and uploads them on their website from 1st April of year X+1.

Project supported by the European Commission through the „Intelligent Energy-Europe" Programme

INTELLIGENT ENERGY EUROPE

The format for disclosure is defined by law (Circular 1/2008 from 7th February) and is the following :

Graph 1: Disclosure template

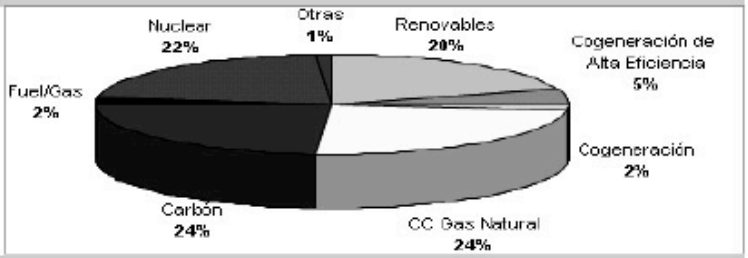
Información sobre su electricidad

Si bien la energía eléctrica que llega a nuestros hogares es indistinguible de la que consumen nuestros vecinos u otros consumidores conectados al mismo sistema eléctrico, ahora sí es posible garantizar el origen de la producción de energía eléctrica que usted consume .

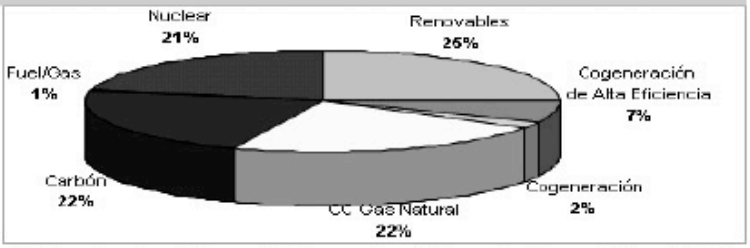
A estos efectos se proporciona el desglose de la mezcla de tecnologías de producción nacional para así comparar los porcentajes del promedio nacional con los correspondientes a la energía vendida por su Compañía Comercializadora.

Origen de la electricidad

Mezcla de Producción en el sistema eléctrico español



Mezcla "Comercializadora A"



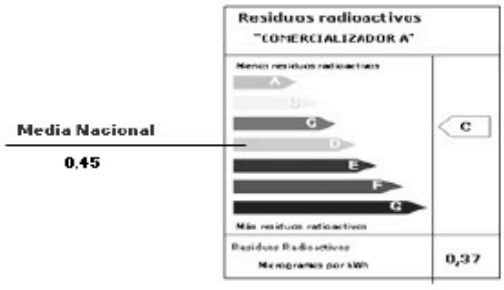
Origen	"Comercializ . A"	Mezcla de Producción sistema eléctrico español
Renovables	25%	20%
Cogeneración de Alta Eficiencia	7%	5%
Cogeneración	2%	2%
CC Gas Natural	22%	24%
Carbón	22%	24%
Fuel/Gas	1%	2%
Nuclear	21%	22%
Otras	0%	1%

Adicionalmente, el sistema eléctrico nacional ha importado/exportado un "X" % de producción neta total nacional.

Durante el 'año n' usted ha adquirido "X" **Garantías de Origen**, lo que se traduce en que:
El "X"% de su suministro procede de fuentes de energía renovables y de cogeneración de alta eficiencia

Impacto medioambiental

El impacto ambiental de su electricidad depende de las fuentes energéticas utilizadas para su generación.
En una escala de A a G donde A indica el mínimo impacto ambiental y G el máximo y que el valor medio nacional corresponde al nivel D, la energía comercializada por su "Comercializador A" tiene los siguientes niveles:



1.1.1 Disclosure Figures

Disclosure figures are available on CNE's website :

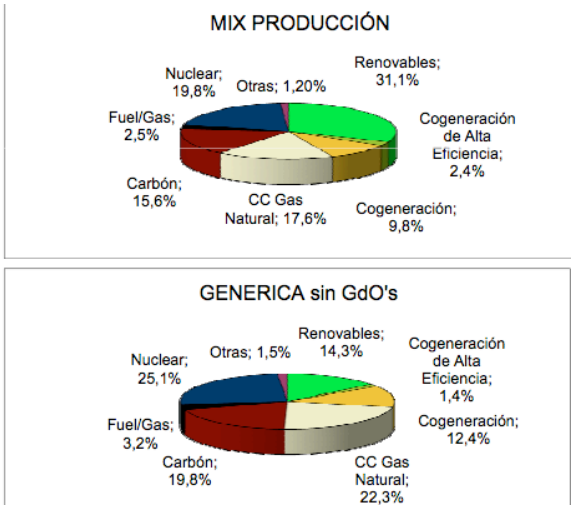
http://gdo.cne.es/CNE/resumenGdo.do?informe=garantias_etiquetado_electricidad

Figures are available for disclosure years from 2007 to 2011.

Table 2: Fuel Mix Disclosure Figures for 2011

AÑO 2011 (1)

MIX ENERGIA	MIX PRODUCCIÓN	MIX COMERCIALIZADORA GENÉRICA
	%	%
Renovables	31,1%	14,3%
Cogeneración de Alta Eficiencia	2,4%	1,4%
Cogeneración	9,8%	12,4%
CC Gas Natural	17,6%	22,3%
Carbón	15,6%	19,8%
Fuel/Gas	2,5%	3,2%
Nuclear	19,8%	25,1%
Otras	1,2%	1,5%
EMISIONES DE DIOXIDO DE CARBONO Kg de dióxido de carbono por kWh	0,29 D	0,36 E
RESIDUOS RADIACTIVOS AA Miligramos por KWh	0,55 D	0,70 E



1.1.2 Environmental Information

Environmental parameters are disclosed in kg per kWh for CO2 emissions and in mg per kWh for radioactive waste. Environmental information is disclosed at the same time as the supplier's mix.

1.1.3 Suppliers Fuel-Mix Calculations

CNE is in charge of the calculation of the supply mix of each supplier. The basic principle of the calculation is that CNE calculates a national supplier mix from the national production mix after substracting all issued GOs for the year considered. This mix is the one that has to be used by all suppliers that haven't done any operations with GOs issued for the same year. Suppliers which have either issued, imported or cancelled GOs get a specific mix calculated by CNE, which is based on their GOs and on the national mix for the volume of attributes not covered by GOs.

The calculation goes stepwise. First the TSO gives information on national production mix, this is then corrected by imports and exports of GOs. The mix thus obtained is either expanded or reduced to fit national consumption of electricity. Then to obtain the national supply mix, CNE substracts all issued GOs for the year considered. The balance of physical exports and imports is disclosed as such without being counted in total production mix. To calculate a supplier's supply mix, CNE takes into account GOs redeemed by the supplier before 31st March or that are sitting on the account of this supplier by the 31st March and applies national residual mix to the volumes of electricity sold for which no GOs are available.

1.2 Guarantees of Origin for Electricity from Renewable Energy Sources and High-Efficient Cogeneration

Order ITC/1522/2007, which was passed on 24th of May 2007 establishes the regulation for RE-GOs and CHP GOs. It was completed by a circular, number 2/2007 from 29th November 2007, which establishes

the procedures for issuing RE-GOs and CHP GOs. Order ITC/1522/2007 has been modified by Order ITC/2914/2011 from 27th October in order to transpose the provision of Directive 2009/28, article 15.

CNE is renewed as the issuing body and is responsible for maintaining the common GO and HE CHP-GO register. GOs are designed as electronic documents and relate to monthly production (two provisions introduced by Ordern ITC/2914/2011. Information that GO will contain is the following :

- Identification
- Situation
- Commissioning date
- Type of energy
- Capacity of production device
- Production period
- Support
- And any information detailed if deemed necessary by CNE by a further circular.

It has to be stated that GOs are in MWh with three decimals. So 1 GO does not equal 1 MWh.

A registry is established, that is not based on the EECS system, but manages transfers, exports and redemptions. Imports of GOs are theoretically accepted. In practice, no imports have taken place.

Market actors who wish to receive a GO have to make the request before the 31st January following the year in question. CNE has to issue them before 28th February. Then market players can only redeem them until 31st March. Afterwards, active GOs are expired when they reach their twelve-month lifetime.

According to CNE, RE-GOs issued for 2011 production represent 23,6% of national production of electricity and 54,5% of the Spanish production of electricity from RES and cogeneration.

GOs can be issued for supported production. Producers that get an additional benefit from the sales of supported GOs have an obligation to invest part of the benefits into environmental actions.

1.2.1 RE-GO System

Cf above

1.2.2 CHP-GO System

Cf above

1.2.3 EECS

GOs are not issued according to the EECS standard in Spain, but there is an EECS issuing body for EECS RECS certificates. The IB is the Green Certificate Company that has been chosen by the Spanish team of RECS International.

Table 2: EECS RECS activity in 2011 in Spain

Issued	Exported	Cancelled
2 888 978	1 637 513	1 108 593

Source : AIB

Activity is going along the same trends in 2012.

1.2.4 GO Statistics

58 TWh of GOs were issued for the Spanish production in 2011.

Table 3: GO activity for 2011 production of RES electricity (by 31/03/2012)

Issued	Exported	Transfered	Cancelled	Expired
58 901	1 676	54 829	10 540	2 396

Source : CNE

The breakdown of issued GOs the following :

Table 4: Issuing and exports of GOs for 2011 production of RES electricity according to technology (by 31/03/2012)

	Issued	Exported
Wind power	31 667	72
Small hydro (<10 MW)	1 714	0
PV	1 574	0
CSP	333	0
Small hydro (> 10 MW)	1 188	0
Biomass	564	0
Total Special regime (supported production)	**37 040**	**72**
Large Hydro	21 861	1 604
Total renewable	**58 901**	**1 676**

Source : CNE

Wind power is the first source of RES-E as far as issuing of GOs is concerned, with more than 50% of issued GOs.. Large hydro represents 37% of total RE-GO issuing for 2011. Only 2,8% of RES GOs for year 2011 have been exported.

Table 5: GO activity for 2011 production of HE cogeneration (by 31/03/2012)

Issued	Exported	Transfered	Cancelled	Expired
6 748	-	3 836	-	2 912

Source : CNE

GOs for HE cogeneration don't seem to be used : 2011 does not show any export nor cancellations.

Table 6: Issuing and exports of GOs for 2011 production of cogenerated electricity according to technology (by 31/03/2012)

HE cogénération GOs	Issued	Exported
from Natural Gas	3929	72
from Fueloil BIA1	104	0
From Natural Gas Combined Cycle	2251	0
from other sources	463	0
Total	**6747**	0

Source : CNE

1.3 Other RES-E Relevant Support Schemes

In Spain, the main support scheme (the "Regimen Especial"), feed-in tariffs, operated until the end of 2011 and was suspended at the beginning of 2012. As of now, no other support schemes for RES-E are in place. A tax regulation system for investments related to RES-E plants is in place.

2 Proposals for Improvement of the Tracking System

2.1 Proposals regarding general regulation on tracking systems

All following proposals are made in accordance with the RE-DISS Best Practice Recommendations,[1] which have been agreed by the Participating Domains of the RE-DISS Project.

The Spanish framework for disclosure is already quite advanced. Main recommendations deal with the fact that the Spanish system is not taking into account the European framework : account for imports of electricity in the RM calculation, allow for imports of GOs, collaborate with Portugal for the treatment of purchases on the joint market… For more detail see proposals made under sections 2.2.

Main recommendations regarding GOs deal with the connection of Spain to the EECS system. For more detail see proposals made under sections 2.3.

2.2 Proposals regarding Disclosure

1. Cancellations of GO relating to production periods in a given year X which take place until 31 March of year X+1 should count for disclosure in year X. Later cancellations should count for disclosure in year X+1. (In case that disclosure periods differ from the calendar year (see item [33]), the deadline should be defined accordingly. (BPR [5])
2. The same allocation rule should apply for expired GO (see item [3]): The date of expiry thus determines the disclosure period for which information from expired GO will be used. (BPR [6])
3. The GO system should be extended beyond RES & cogeneration to all types of electricity generation. (BPR [11])
4. In the medium to longer term, GO should be the only “tracking certificate” used. Any other tracking systems of a similar purpose and function as GO should be closely coordinated with GO and eventually converted to GO. (BPR [16])
5. Besides GO, only Reliable Tracking Systems (which may include contract based tracking) and the Residual Mix should be available for usage for disclosure. No other tracking mechanisms should be accepted. (BPR [17])
6. Green power quality labels should use GO as the unique tracking mechanism. (BPR [18])
7. Rejection of imported GOs should only relate to the actual use of cancelled GO for disclosure purposes in the respective country and should not restrict the transfers of GO between the registries of different countries. (BPR [20])
8. Within the rules set by the respective Directives, Member States should consider to reject the recognition of GO from other countries for disclosure in case that these countries have not implement ed adequate measures which avoid double counting, e.g. a proper determination of a Residual Mix for disclosure (BPR [21])
9. Spain should provide a Residual Mix 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) should be avoided. (BPR [25]). Also RECS certificates which are allowed for the moment, should be deducted from residual mix. Currently they are exported, but not deducted from residual mix.
10. The calculation of the Residual Mix should follow the methodology developed in the RE-DISS project. As part of this methodology, competent bodies from all countries in Europe should cooperate in order to adjust their Residual Mixes in reflection of cross border transfers of physical energy, GO and RTS. (BPR [26])

[1] Version 1.3, 27 June 2012

11. For purposes of this cross-border adjustment, competent bodies should use data provided by RE-DISS. They should also support the collection of input data for the related calculations by the RE-DISS project team. (BPR [27]).
12. As a default, the Residual Mix should be 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 between all countries in this region which ensures a coordinated usage of the regional Residual Mix. (BPR [28]). Spain and Portugal should collaborate with RE-DISS in order to agree on the treatment of regional mix.
13. The timing of the calculation of the Residual Mix should be coordinated across Europe:
    - By 30 April X+1 all countries should determine their preliminary domestic Residual Mix and whether they have a surplus or deficit of attributes.
    - By 15 May X+1, the European Attribute Mix should be determined.
    - By 31 May X+1, the final national Residual Mixes should be published.
    - As of 1 July X+1 the disclosure figures relating to year X can be published by suppliers. (BPR [35])
14. Suppliers offering two or more products which are differentiated regarding the origin of the energy should be required to give product-related disclosure information to all their customers, including those which are buying the "default" product of the supplier. (BPR [39])
15. There should be clear rules for the claims which suppliers of e.g. green power can make towards their consumers. There should be rules 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 should be required to provide to consumers the rating of each product based on these rules. (BPR [40])
16. Claims made by suppliers and consumers of green or other low-carbon energy relating to carbon emissions or carbon reductions should also be regulated clearly. These regulations should avoid double counting of low-carbon energy in such claims. A decision needs to be taken whether such claims should adequately reflect whether the energy purchased was "additional" or not. (BPR [41])

2.3 Proposals regarding GO

17. If possible, issuing of GOs should be done directly after the end of each production period (BPR [2]). Ideally this should be done within 3 months after the end of the production period, and not 10 months as is done in Spain.
18. Lifetime of GO should be limited to 12 months after the end of the production period. GOs that have reached this lifetime should be collected into the Residual Mix(BPR [3])
19. An extension to this lifetime can be granted if a GO could not be issued for more than [six] months after the end of the production period for reasons which were not fully under the control of the plant operator. In this case, the lifetime of the GO might be extended to [six] months after issuing of the GO. (BPR [4])
20. The implementation of GO in all countries in Europe should be 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 of EECS, then EECS should at least be used for transfers between registries. (BPR [7])
21. In case that not all European countries are members of EECS, appropriate connections between the EECS system and non-EECS members as well as in between different non-EECS members will need 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. (BPR [8])

22. So-called 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, should only be 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 should be made available in order to support Residual Mix calculations. (BPR [9])

Furthermore, it shall be noted that the participating domains of the RE-DISS project have decided that the Best Practice Recommendations should also include the following recommendations, which should generally be considered by all Competent Bodies in order to assess relevance for their individual domains:

- Member States should at least publish the set of criteria they apply in order to decide over recognition of GO from other Member States.
- Member States should clearly regulate the use of GO directly by end consumers.
- If using cooperation mechanisms, Member States should take care of regulating the attribution of GO concerning electricity concerned by these mechanisms.

2.4 Matrix of disclosure related problems and country-specific proposals

Problem	**Country-specific proposal**
Possible double counting in different explicit tracking instruments	20, 21, 22, 3, 4, 5, 6
Double counting of attributes in explicit and implicit tracking mechanisms	1, 2, 22; 8, 9, 10, 11, 12
Double counting within individual supplier's portfolio	14
Loss of disclosure information	3, 14, 40, 41
Intransparency for consumers	1, 2, 17, 18, 19, 20, 21, 22, 7, 8, 12, 13
Leakage of attributes and/or arbitrage	20, 21, 22, 7