1 Implementation of Tracking Systems

1.1 Electricity Disclosure


After paragraph 6, the following paragraphs 6a and 6b are inserted:

"6a. An electricity seller informs its customers about the structure of fuels used or other energy carriers used to produce electricity sold in the previous calendar year as well as provide reference to existing reference sources where information on the environmental impact, at least in terms of carbon dioxide emissions and radioactive waste, is publicly available.

6b. In the case of electricity purchased from an exchange or imported from the energy system of non EU-members, information about the structure of fuels used or other energy carriers used to produce electricity may be drawn up on the basis of aggregate data concerning the share of different types of electricity sources used for electricity generation in the previous calendar year."

In Poland, all electricity from renewable sources which is covered by the national support scheme is attributed to the final customers on a pro-rata basis. The share of electricity produced from renewable sources in the electricity volume supplied to the final customers may be calculated, for example, as the ratio of electricity with certificates of origin issued as per the data from the President of ERO to gross final energy consumption as per the data from PSE Operator S.A. In 2009 and 2010, this share amounted to 5.9% and 6.7% respectively.


The Ministry of economy is the Competent Authority for disclosure.

1.1.1 Disclosure Figures

No disclosure figures were available from URE. The table below describes the national production mix in terms of the share of energy sources.

Table 1: Compared composition of national mixes as calculated by RE-DISS for 2013

<table>
<thead>
<tr>
<th>Renewables</th>
<th>Production Mix</th>
<th>Final Residual Mix</th>
<th>Total Supplier Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9.59%</td>
<td>9.57%</td>
<td>9.99%</td>
</tr>
<tr>
<td>Unspecified</td>
<td>0.07%</td>
<td>0.07%</td>
<td>0.07%</td>
</tr>
<tr>
<td>Solar</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Wind</td>
<td>3.79%</td>
<td>3.76%</td>
<td>3.75%</td>
</tr>
<tr>
<td>Hydro&amp;Marine</td>
<td>1.49%</td>
<td>1.52%</td>
<td>1.69%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.28%</td>
</tr>
<tr>
<td>Biomass</td>
<td>4.24%</td>
<td>4.21%</td>
<td>4.19%</td>
</tr>
</tbody>
</table>
1.1.2 Environmental Information

Environmental information, meaning at least CO2 emissions and radioactive waste should be supplied to the end consumers, in the form of a reference where this information can be found. It is not specified whether this should be on the bill or not.

1.1.3 Suppliers Fuel-Mix Calculations

Suppliers should disclose the results of the quota system: the electricity that is supported through this support scheme should be attributed to end consumers on a pro-rata basis. Suppliers can also use power exchange mix for electricity bought on the power exchange or statistical aggregates for electricity coming from third countries. There are no other indications of methodology. No residual mix is calculated. It is know from informal discussions that suppliers also use bilateral contract information to provide information to their end consumers.

1.1.4 Acceptance of GOs

The Energy Law Act from July 2013 states that the President of the Energy Regulatory Office, at a written request, recognises the guarantees of origin issued in other EU Member States, the Swiss Confederation or a Member State of the European Free Trade Association (EFTA) – parties to the Agreement on the European Economic Area.

The President of the Energy Regulatory Office may refuse to recognise a guarantee of origin issued in another Member State only when it has well-founded doubts about its accuracy, reliability or veracity. In this case, the President of the Energy Regulatory Office immediately notifies the Commission of such a refusal and its justification.

There are no fixed recognition criteria.

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

1.2.1 RES-GO System

The amended Energy Law Act implements Guarantees of origin in Poland in Chapter 5. Mid 2014, the registry for GOs was not yet implemented but was being prepared by the Polish Power Exchange (Towarowa Giełda Energii S.A., PolPX). The following paragraphs sums up the contents of articles 119 to 124:

The guarantees are issued in the form of an electronic document in response to a written request from a generator of electricity from renewable energy sources, and specify:

- designation of the generator of electricity;
• location, type and capacity of the installation where the renewable energy was produced;
• amount of energy from renewable energy sources;
• the period of one or more consecutive calendar months of the calendar year in which the electricity from renewable sources was produced, along with the start and end dates of production;
• whether the renewable energy installation specified in the application has benefited from any scheme or instrument aimed at promoting electricity generation from renewable energy sources;
• the date on which the renewable energy installation became operational.

This application is submitted to the electricity distribution system operator or the electricity transmission system operator whose area of operation covers the location where the renewable energy source has been connected, within 7 days after the end date of production of a portion of electricity covered by the application. Under the new RES Law, which should be ready by beginning of 2015, this should be extended to 30 days.

The electricity distribution system operator or the electricity transmission system operator is required to verify the data included in the application for issue of guarantee of origin, and, within 14 days of receipt of the application, to submit it to the President of the Energy Regulatory Office, along with the proof of the amount of electricity generated from renewable sources, determined based on the readings of metering and billing equipment. Under the new RES Law, this should be extended to 30 days.

Guarantees of origin and other documents proving the issue of such guarantees are issued by the President of the Energy Regulatory Office within 30 days of submission of the relevant application by the electricity distribution system operator or the electricity transmission system operator.

Any use of a guarantee of origin takes place within 12 months of production of the corresponding energy unit. A guarantee of origin becomes invalid after the expiry of the above-mentioned period.

A guarantee of origin is labelled in MWh. Each guarantee of origin has a unique identification number and includes information on its date of expiry. Guarantees of origin expire on the date of transfer to the final customer.

The President of the Energy Regulatory Office has the right to refuse to issue a guarantee of origin if the application for issue of guarantee of origin has been submitted to the electricity distribution system operator or the electricity transmission system operator after the expiry of the 7-day deadline.

Any refusal to issue a guarantee is made in the form of a decision which may be appealed against.

To ensure transparency of the system of guarantees of origin, a register of guarantees of origin has been established, and will be operated by the Polish Power Exchange. The PolPX is required to keep the register of guarantees of origin in a manner which ensures the identification of:
1) the generators who received a guarantee of origin;
2) the entities holding the guarantees of origin issued in other EU Member States, the Swiss Confederation or a Member State of the European Free Trade Association (EFTA) – a party to the Agreement on the European Economic Area, which have been recognised by President of the Energy Regulatory Office;
3) available guarantees of origin and the amount of electricity corresponding to such guarantees.

The generator and the entity having an entry in the register of guarantees of origin are obliged to notify the President of the Energy Regulatory Office and the PPE of the transfer of guarantees of origin to the final customer within 7 days of the transfer. This information must be entered in the register of guarantees of origin. The transfer of guarantees of origin is effective as of the date of making the relevant entry in the register of guarantees of origin.

Expiration of a guarantee of origin due to it having been used or due to the expiry of the validity period results in it being removed from the register of guarantees of origin.

It has to be noted that certificates of origin carry what the Polish legislation describes as the “property rights”, which is not the case for GOs. This means that there is a large potential for double counting of supported electricity since GOs can be issued for electricity which gets certificates of origin.

The link between GO and disclosure is not explicitly made in any official documentation.
1.2.2 CHP-GO System
There are no CHP-GOs foreseen in the Polish legislation.

1.2.3 EECS
There is no EECS GO in place. From contacts with PolPX, it seems that they have the intention to get in touch with the AIB and study the possibilities of cooperation.

1.2.4 RECs Statistics
There is no RECS system in Poland.

1.3 RES-E Support Schemes
As stipulated in RES-LEGAL data base (www.res-legal.eu), in the Republic of Poland, electricity from renewable sources is promoted through a quota system, tax relief and subsidy and loan schemes. Heat generated from renewable energy sources is supported through three subsidy schemes and a loan scheme. Renewable energy in transport is promoted through a biofuels quota obligation.

Electricity suppliers are obliged to acquire a certain number of so-called "certificates of origin", which are issued to the producers of electricity from renewable sources. Furthermore, electricity from renewable sources is supported through a tax relief as well as loan and subsidy schemes from the National Fund for Environmental Protection and Water Management (NFOSiGW).

- **Quota system.** In Poland, the main incentive for renewable energy use is a quota system in terms of a quota obligation, which is combined with a certificate trading scheme. The Energy Law obliges electricity generators and suppliers that provide electricity to customers in Poland to fulfil a specified quota of certificates of origin/ green certificates. These certificates are awarded to the producers of electricity from renewable sources and CHP.
- **Tax incentives.** Producers of electricity from renewable sources are exempt from the tax on the sale and consumption of electricity.
- **Loan.** The National Fund for Environmental Protection and Water Management grants low interest loans to support the purchase and installation of RES installations.
- **Subsidy.** The National Fund for Environmental Protection and Water Management (NFOSiGW) grants low interests loans together with subsidies to support the purchase and installation of small and micro-RES installations for the needs of residential single-family or multi-family houses

Access of electricity from renewable energy sources to the grid shall be granted according to the principle of non-discrimination. Furthermore, grid operators must give electricity from renewable sources priority of transmission.

All RES technologies are eligible for support.

In the beginning of 2015, the new RES law should be finalised, which will change the support scheme: all new RES capacity will have to participate in auctions, while existing installations will have a choice of moving on to the auctions or staying with certificates of origin

2 Proposals for Improvement of the Tracking System

2.1 Proposals regarding general regulation on tracking systems

To improve the tracking system in place the following BPRs should be applied:

- BPR [23]: Other Reliable Tracking Systems (RTS) should be defined where appropriate based on criteria of added value, reliability and transparency
- BPR [24]: RTS can comprise, where applicable:
Homogeneous disclosure mixes for regulated market segments where no choice of supplier of different products exists,

- Support systems whose interaction with disclosure requires a 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

2.2 Proposals regarding Disclosure

Disclosure should be regulated more precisely and in the drafting of the regulation, the following BPRs should be implemented:

- BPR [25-28]: A residual mix should be introduced in order to account for untracked consumption and it should be calculated according to the RE-DISS methodology, following the RE-DISS schedule for RM calculations.

- BPR [31-33]: 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 (the same allocation rule should apply to expired GOs (BPR [6])).

- BPR [23,24]: Other Reliable Tracking Systems (RTS) should be defined where appropriate based on criteria of added value, reliability and transparency. RECS should not be allowed anymore.

- BPR [29]: if contract based tracking is allowed in a country, it should be regulated clearly.

- BPR [31]: In cases that suppliers of electricity intend to use contract based tracking in order to fulfil claims made towards consumers regarding the origin of a certain electricity product (e.g. a green energy product), GO should be used instead of contract based tracking (see also BPR [36]).

- BPR [32]: If a country implements a system where generation attributes are allocated to suppliers and consumers of electricity “ex post” based on the contracts concluded in the electricity market, then such a system should fulfil the requirements mentioned above in order to qualify as a Reliable Tracking System (see item [21]).

- BPR [34]: The deadline for cancelling GO for purposes of disclosure in a given year X should be 31 March of year X+1 (see BPR 5b).

- BPR [35]: 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 [36]: All countries should clarify the relation between their support schemes for RES & cogeneration on the one side and GO and disclosure schemes on the other side. Where necessary, the support schemes should be defined as RTS.

2.3 Proposals regarding GO

The following BPRs apply to the implementation of GOs in Poland:

- BPR [1, 2]: The metered production periods for purposes of issuing GO should not be longer than a calendar month. Longer intervals up to one year are acceptable only for very small plants. If possible, issuing should be done without delay after the end of each production period.
• BPR [3b]: GOs which have reached a 12 month lifetime should be collected in the residual mix.

• BPR [4]: 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 [5a, 5b]: Cancellations of GO relating to production periods in a given year X which take place until a given deadline in 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 [31]), the deadline should be defined accordingly.) Deadline is set on 31 March X+1 (BPR [5a, 5b]).

• BPR [6]: 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 [7, 8]: 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]). Reliable linkages should be established with countries which are not EECS members. (BPR [8]).

• BPR [9]: 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 [10]: GOs should generally be 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 should be issued only for the net generation which can be attributed to natural inflow into the reservoir.

• BPR [11]: The GO system should be extended beyond RES & cogeneration to all types of electricity generation, which should all be handled in one registry.

• BPR [12]: All types of GO should be handled in one comprehensive registry system per country. (For an exception from this recommendation see the coexistence of national GO systems and EECS)

• BPR [13]: All GOS should be linked to disclosure.

• BPR [14a]: There should be no issuing of more than one GO for the same unit of electricity. (this is from the Directive see paragraph 2 of the Directive)

• BPR [15a, 15b]: This also applies to CHP plants which are using RES as the energy source: Only one GO should be issued per unit of electricity. This GO should combine the functionalities of a RES-GO and a cogeneration GO.

• BPR [16]: 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 [17]: 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 [18]: Green power quality labels should use GO as the unique tracking mechanism.

• BPR [19]: European countries should clarify whether and under which conditions the use of GOS by end consumers is allowed. Such GO use should not be based on ex-domain cancellations performed in other countries. If consumers are allowed to use GOS themselves,
a correction should be implemented in the disclosure scheme which compensates for any "double disclosure" of energy consumed...

2.4 Proposals regarding Acceptance of GO

The following BPRs should lead to further reflection on the criteria on the basis of which to refuse GOs from other Member States or EFTA countries.

- BPR [20]: Any rejection 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 [21]: 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 adequate measures which avoid double counting, e.g. a proper determination of a Residual Mix for disclosure.

2.5 Further proposals regarding Disclosure

Disclosure could further be improved by the implementation of the following BPRs:

- BPR [36]: All countries should clarify the relation between their support schemes for RES & cogeneration on the one side and GO and disclosure schemes on the other side. Where necessary, the support schemes should be defined as RTS
- BPR [38]: All electricity products offered by suppliers with claims regarding the origin of the energy (e.g. green or low-carbon power) should be based exclusively on cancelled GO. No other tracking systems should be 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 (see BPR [22]).
- BPR [39]: 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 [40]: There should be clear rules for the claims which suppliers of e.g. green power can make to wards 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 [41]: 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 [42]: In case that suppliers are serving final consumers in several countries rules must be developed and implemented consistently in the countries involved on whether the company disclosure mix of these suppliers should relate to all consumers or only to those in a single country.
- BPR [43]: The following recommendations should be followed with respect to the relation of disclosure to cooperation mechanisms (Art 6 - 11 of Directive 1009/28/EC):
  a. If EU MS or MS or any other country agree on Joint Projects, such agreements should also clarify the allocation of attributes (via GO, RTS or Residual Mix) issued from the respective power plants.
  b. If EU MS agree on Joint Support Schemes, such agreements should also clarify the allocation of attributes (via GO, RTS or Residual Mix) issued from the power plants supported under these schemes.
## 2.6 Matrix of disclosure related problems and country-specific proposals

<table>
<thead>
<tr>
<th>Problem</th>
<th>Country-specific proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible double counting in different explicit tracking instruments</td>
<td>BPRs: [7a], [7b], [8] [9], [10] [11], [14a], [14b], [15a], [15b] [16], [17], [18], [23], [24], [29], [30], [31], [32], [38]</td>
</tr>
<tr>
<td>Double counting of attributes in implicit tracking mechanisms</td>
<td>BPRs: [5a], [5b], [6], [9], [11], [21], [23], [24], [25], [26a], [26b], [27], [28], [32], [36], [38]</td>
</tr>
<tr>
<td>Double counting within individual supplier's portfolio</td>
<td>BPRs: [39], [42]</td>
</tr>
<tr>
<td>Loss of disclosure information</td>
<td>BPRs: [3b], [11], [13], [15b], [19]</td>
</tr>
<tr>
<td>Intransparency for consumers</td>
<td>BPRs: [11], [13], [23], [39], [40], [41], [42]</td>
</tr>
<tr>
<td>Leakage of attributes and/or arbitrage</td>
<td>BPRs: [1a], [1b], [2], [3a], [5a], [5b], [6], [9], [13], [19], [28], [34], [35]</td>
</tr>
<tr>
<td>Unintended market barriers</td>
<td>BPRs: [4], [7a], [7b], [8], [9], [20]</td>
</tr>
</tbody>
</table>

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