Last updated: 26/06/2015

1 Implementation of Tracking Systems

1.1 Electricity Disclosure

Electricity disclosure in Estonia is implemented by the law "Elektrituruseadus – Electricity Market Act[1]" (into force 01.07.2003; amended by legal instruments regarding directives 2009/72/EC and 2009/28/EC on 8.7.2012 and again in 2014) and supplemented by the regulation "Võrgueeskiri[2] – Grid Code" (into force 01.07.2003) and the law "Mõõteseadus[3] - Metering law" (into force 01.05.2004). All versions in force are published in the State Gazette[4].

Electricity Market Act Chapter 7 "SALE" § 75 "Information to be submitted together with invoice" (entry into force 01.01.2013) states that

> "*A seller shall, together with the invoice and the information offered to the consumer, present the consumer with the following information:*
>
> *1) the distribution of energy sources which were used for the generation of electricity by the producer or which were purchased from the producer during the financial year preceding the period of the sale;*
>
> *2) the proportion of electricity purchased from a power exchange in the financial year preceding the period of the sale;*
>
> *3) a reference to a website which sets out information concerning the environmental impact caused by emissions of CO2 and SO2, the oil shale ash that must be deposited, and radioactive waste, which were released in the course of producing the electricity supplied by the seller during the financial year preceding the period of the sale;*
>
> *4) information concerning the rights of the consumer and the possible ways of resolving disputes.*".

The distribution of energy sources is done on more specific level than RES, NUC, FOS i.e. hydro, wind, natural gas, coal etc.

Legal obligation exists for TSO Elering to publish the residual mix, but the actual methodology is still under development. Most likely the RE-DISS methodology will be used.

Disclosure of renewable electricity origin is only possible through a cancelled guarantee of origin. (Electricity Market Act 58:1[4]). GOs for disclosure of year X electricity consumption must be cancelled by March 31st of year X+1.

More information is available in the Estonian EECS Domain Protocol: http://www.aib-net.org/portal/page/portal/AIB_HOME/FACTS/AIB%20Members/Domain_Protocols

1.1.1 Disclosure Figures

Suppliers are obligated to disclose their energy sources by attaching their energy source distribution to the sent invoice. Disclosure of renewable energy origin of electricity is only possible based on a cancelled guarantee of origin.

[1] https://www.riigiteataja.ee/en/eli/523012015001/

[2] https://www.riigiteataja.ee/akt/129122012061

[3] https://www.riigiteataja.ee/akt/131122010026

[4] www.riigiteataja.ee

Co-funded by the Intelligent Energy Europe Programme of the European Union

Statistics Estonia[5] publishes statistics about production mix (FE032: Capacity and production of power plants) on their website. There is no residual mix published yet for Estonia.

Table 1: Estonian production mix 2007 - 2012

	2007	2008	2009	2010	2011	2012
Oil shale	93.55%	91.02%	87.41%	85.19%	84.54%	81.05%
Peat	0.18%	0.14%	0.71%	0.94%	0.67%	0.82%
Wood	0.00%	0.00%	3.22%	5.45%	5.74%	7.96%
Heavy fuel oil	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Shale oil	0.24%	0.35%	0.44%	0.32%	0.33%	0.48%
Natural gas	2.87%	3.99%	1.22%	2.35%	1.93%	1.03%
Other renewable sources	0.30%	0.36%	0.35%	0.28%	0.33%	0.40%
Shale oil gas	1.93%	2.62%	4.06%	3.14%	3.37%	4.27%
Hydro	0.18%	0.26%	0.36%	0.21%	0.23%	0.35%
Wind	0.75%	1.26%	2.22%	2.14%	2.85%	3.63%

Source: Statistics Estonia[6]

Notes:

Other renewable sources are black liquor, biogas and animal waste.

	2013	2014
Other RES	0,00 %	0,00 %
Solar	0,00 %	0,00 %
Wind	4,65 %	5,28 %
Hydro & Marine	0,21 %	0,25 %
Geothermal	0,00 %	0,00 %
Biomass	4,78 %	6,49 %
Nuclear	0,00 %	0,00 %
Other FOS	90,36 %	87,98 %
Lignite	0,00 %	0,00 %
Hard Coal	0,00 %	0,00 %
Gas	0,00 %	0,00 %
Oil	0,00 %	0,00 %

1.1.2 Environmental Information

As stated in the Electricity Market Act Chapter 7 "SALE" § 75 the suppliers are obligated to submit a reference to a website with information "*concerning the environmental impact caused by emissions of CO2 and SO2, the oil shale ash that must be deposited, and radioactive waste, which were released in the course of producing the electricity supplied by the seller during the financial year preceding the period of the sale*" together with the invoice.

[5] http://www.stat.ee/en

[6] http://pub.stat.ee/px-web.2001/I_Databas/Economy/07Energy/02Energy_consumption_and_production/01Annual_statistics/01Annual_statistics.asp

1.1.3 Suppliers Fuel-Mix Calculations

Suppliers are required to disclose their energy source distribution as attached documentation to the sent invoice. Suppliers are required to use GOs to verify the origin of sold electricity from renewable energy sources (besides residual mix most likely).

No residual mix is calculated for Estonia, but a legal obligation to do so exists.

1.1.4 Acceptance of GOs

The Electricity Market Act Chapter 5 "GENERATION" § 58 (amended 08.07.2012) subsection (12) states that

> *"(12) In order to prove the origin of the electricity consumed, guarantees of origin issued in Estonia or in another member state of the European Union shall be used. A guarantee of origin can be bought separately from the electricity generated.*
>
> *[RT I, 28.06.2012, 1 - entry into force 08.07.2012]".*

According to subsection (12) GOs from another member state of EU are accepted as proof of origin of energy.

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

The Electricity Market Act Chapter 5 "GENERATION" § 58 "Generation from renewable energy sources and efficient cogeneration" (into force 01.07.2003) and the amendment to § 58 "Guarantees of origin" describe the use of guarantees of origin as proof of origin for produced/consumed energy.

The Authorised Issuing Body and Competent Authority in Estonia is Elering AS.

1.2.1 RE-GO System

Estonia has an operational RE-GO system based on EECS. Electricity Market Act Chapter 5 "GENERATION" § 58 sets premises for the RE-GO system. Information content of Estonian GOs complies with EECS and the relevant directives.

Estonia is a member of the AIB and is connected to the AIB Hub. The Competent Body of the Estonian GO system is the TSO Elering.

GOs are issued for renewable electricity production on a MWh basis and have a lifetime of 12 months. An EECS compatible registry has been implemented (http://elering.ee/paritolutunnistuse-taotlus/)

More information is available in the Estonian EECS Domain Protocol: http://www.aib-net.org/portal/page/portal/AIB_HOME/FACTS/AIB%20Members/Domain_Protocols

Table 2 GO Statistics

	Issue (prod.)	Transfer	Export	Import	Cancel	Expire
2014	186484				100 133	47 764
2015 (May)	95 394	117 842	42 763	21 123	72 452	79 352

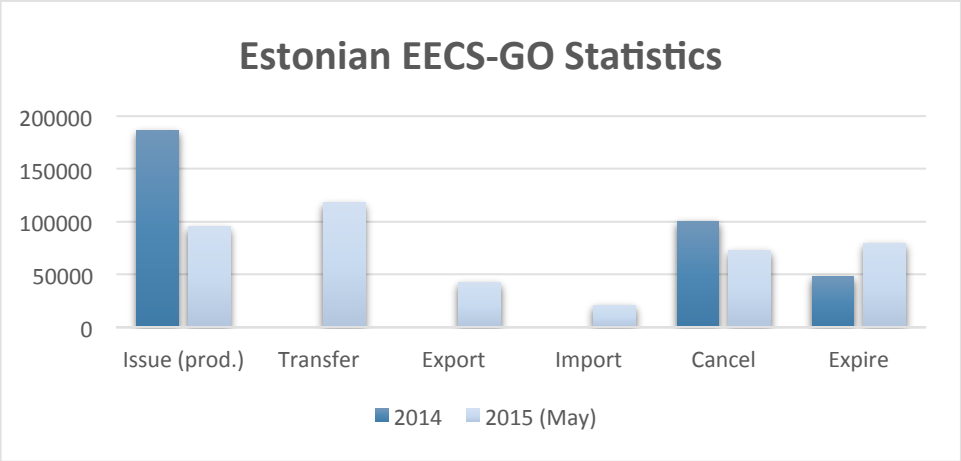

Figure 1 GO Statistics

1.2.2 CHP-GO system

Electricity Market Act Chapter 5 "Generation" § 58 amendment "Guarantees of origin" (into force 08.07.2012) states that

> *"(1) A guarantee of origin is an electronic document which is issued by the transmission network operator to a producer on the basis of the producer's application and which certifies that the electricity is generated from renewable energy sources or in an efficient cogeneration process.*
>
> *[RT I, 28.06.2012, 1 - entry into force 08.07.2012]".*

Thus the basic legislation for implementing CHP-GO system is identical to RE-GO system.

There has been no interest toward CHP-GOs yet but the functionalities required for robust CHP-GO system are developed by Elering AS as required by the Electricity Market Act.

1.3 RES-E Support Schemes

Electricity Market Act Chapter 5 "GENERATION" § 59 "Support" outlines the support schemes available for producers of energy.

The current legislation (subsection (1)) groups support-entitled production methods in a following manner

> *"1) for electricity if it is generated from a renewable energy source. Since 1 July 2010, for electricity if it is generated from a renewable energy source, except from biomass;*
>
> *2) since 1 July 2010, for electricity if it is generated from biomass in an efficient cogeneration process, except where electricity is generated from biomass in a condensation process, in which case no support is paid. Detailed guidelines for cogeneration shall be established in a regulation of Government of the Republic on the proposal from the Minister of Economic Affairs and Communications. The Minister of Economic Affairs and Communications shall formulate its proposal to the Government regarding detailed guidelines for cogeneration on the basis of a proposal of the Competition Authority;*
>
> *3) for electricity if it is generated in an efficient cogeneration regime from waste within the meaning of the Waste Act, from peat or carbonisation gas obtained as a result of oil shale processing;*
>
> *4) for electricity if it is generated in an efficient cogeneration process with a cogeneration installation which has the electric capacity not exceeding 10 MW;*
>
> *5) for the availability of the installed net capacity of an oil shale-based generating installation if the generating installation started operation in the period from 1 January 2013 to 1 January 2018."*

The above-mentioned groups are entitled to an amount of support set in subsection (2) of § 59 from the transmission network operator.

The support scheme type is feed in tariff (FIT).

According to subsection (3) the Competition Authority may however approve a rate of support deviating from amounts set in subsection (2) for a producer mentioned in subsection (1).

Amendments to § 59 “Conditions of support” and “Funding the support” supplement the original paragraph in named topics.

2 Proposals for Improvement of the Tracking System

2.1 Proposals regarding general regulation on tracking systems

- [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.
    - (Contractual tracking for NUC and FOS is allowed in Estonia), which also relates to BPRs 23, 24, 29 and 30, which are not separately listed here)

2.2 Proposals regarding Disclosure

- BPR [11c]: Competent bodies should consider to make the use of GOs mandatory for all electricity supplied to final consumers.
- 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.
- BPR [39b]: 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.

2.3 Proposals regarding RE-GO

- BPR [1a]: Metered production periods for issuing GOs should not be longer than a calendar month.
- BPR [1b]: Metered production periods for issuing GOs should not run across the start and end of disclosure periods.
- BPR [2]: If possible, issuing of GOs should be done DIRECTLY after the end of each production period
- BPR [4]: An extension to GO 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 the GO.
- BPR [8]: 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 [11a]: The GO system should be extended beyond RES & cogeneration to all types of electricity generation.
- BPR [11b]: GOs should be issued for all electricity production, unless an RTS applies for that production, e.g. for the disclosure of supported electricity
- BPR [15b]: Only one GO should be issued per unit of electricity. This GO should combine the functionalities of a RES-GO and a cogeneration GO.

2.4 Proposals regarding Acceptance of GO

- [BPR 20b]: The choice of one or the other option (for recognition) should be transparent for all market parties and clearly communicated.
- 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

- BPR [40]: There should be clear rules for the claims which suppliers of e.g. green power can make towards their consumers. There should be 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 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.

2.6 Matrix of disclosure related problems and country-specific proposals

Problem	Country-specific proposal
Possible double counting in different explicit tracking instruments	BPRs: [8], [11a], [17], [21], [23], [24], [29], [30]
Double counting of attributes in implicit tracking mechanisms	BPRs: [11a], [21], [23], [24], [29], [30]
Double counting within individual supplier's portfolio	BPRs: [39b], [42]
Loss of disclosure information	BPRs: [11a], [15b], [19]
Intransparency for consumers	BPRs: [11a], [11b], [11c], [23], [39b], [40], [41], [42]
Leakage of attributes and/or arbitrage	BPRs: [1a], [1b], [2], [19]
Unintended market barriers	BPRs: [4], [8], [11b], [11c], [20b], [21]