

## Questionnaire

This questionnaire has been developed by the CA-RES Working Group 10 (on Guarantees of Origin)

It contains about 50 questions and its purpose is twofold:

To start with it contains 50 important questions to be asked when designing a coherent GO-system, connected in a proper way to electricity disclosure. We recommend basic implementers use these questions to make sure the design of their national system does not contain any loopholes.

Furthermore it is aimed at providing member states with an outline on how to assess the GO system and disclosure of *other* member states. Answers to this questionnaire should be provided before any import of Guarantee of Origin should be considered as full transparency must be provided about operations relating to GO and disclosure (c.f. Art. 15 RES Directive).

General Contact Information	Member state response
Country	<i>Iceland</i>
Name and type of the Competent Body for running the GO system (e.g. TSO, NRA, Market Operator, Government Agency)	<i>Landsnet hf., (the TSO) the Issuing body in Iceland, is responsible for running the GO system, in accordance to Act <a href="#">No 30/2008</a> (ART 3).</i>
<i>a. Geographic domain(country or region)</i>	<i>Iceland</i>
<i>b. Including offshore? (Y/N)</i>	<i>No (No production from offshore wind in Iceland)</i>
<i>c. Date this GO- registry became legally operational:</i>	<i>13.04.2012</i>
<i>d. Address</i>	<i>Gylfaflöt 9, 112 Reykjavík, Iceland</i>
<i>e. Contact person</i>	<i>Gardar Larusson: E-mail: gardarl@landsnet.is</i>

<p>If the competent body is not the issuing body, and did delegate or mandate the daily operational business to issue GO, please do specify the contact details of the issuing body and please <i>provide proof of appointment to issue these certificates</i></p> <p><i>(Reference to regulation or formal letter of appointment)</i></p>	<p><i>Landsnet, the TSO is the Issuing Body, in accordance to <a href="#">Act 30/2008</a>, Art. 3.</i> <a href="http://www.landsnet.is">www.landsnet.is</a></p> <p><i>Orkustofnun, the National Energy Authority, is the Competent Body, in accordance to <a href="#">Act 30/2008</a>, Art. 3 and 4.</i></p> <p><i>Orkustofnun</i> <a href="http://www.nea.is/">http://www.nea.is/</a> <i>Address: Grensasvegur 9, 108 Reykjavik, Iceland</i></p> <p><i>Contact person:</i> <i>Sigurdur H. Magnussun</i> <i>e-mail: <a href="mailto:sigurdur.h.magnusson@os.is">sigurdur.h.magnusson@os.is</a></i></p>
<p>Transfer to other registries since 04/2012 or planned to become operational by:</p>	<p><i>Transfer to other registries possible from 13.04.2012, via CMO.grexel</i></p>
<p>Previous Issuing Body(ies)</p>	<p><i>None</i></p>
<p><i>a. Operative from - to</i></p>	
<p>Responsible organisation for disclosure (to be filled out only if not identical to the Competent Body for GO above)</p>	
<p><i>b. Address</i></p>	
<p><i>c. Contact person</i></p>	
<p>Web link Internet pages (general info page) to the responsible bodies for issuing GO and disclosure.</p>	<p><i>Landsnet hf., the TSO is the Issuing Body, in accordance to Act <a href="#">30/2008</a>, Art. 3.</i> <a href="http://www.landsnet.is/english/">http://www.landsnet.is/english/</a> <a href="http://www.landsnet.is/raforkukerfid/raforkumarkadurinn/upprunaabyrgdir/">www.landsnet.is/raforkukerfid/raforkumarkadurinn/upprunaabyrgdir/</a></p> <p><i>Orkustofnun, the National Energy Authority is responsible for disclosure, in accordance to <a href="#">Regulation on disclosure No. 757/2012</a> ART. No 3, 4, 5, and 8.</i></p>

Criteria / Question	Member state response
<b>Implementation of Art. 9 of the Directive 2009/72/EC (on electricity disclosure) by the Member State</b>	
1) Are disclosure laws and procedures in place? (Y/N) <i>If not: please state, when it is intended to have the national framework in place and move to question 8) below?</i>	Yes
<i>What are the laws and regulations? Reference and detailed description, particularly including the linkage between GO and disclosure</i>	<a href="#">Act on the Guarantee of origin No 30/2008.</a>  With the Act, the Art. 15 of the RES directive is implemented in Icelandic laws. Disclosure is regulated by secondary legislation based on the Electricity Act: <a href="#">Regulation on disclosure NO 757/2012.</a>
a. <i>When did the regulation(s) regarding disclosure come into force? If not when will they become effective?</i>	<i>The Act on the Guarantees of Origin NO 30/2008, came into force on April 16, 2008            The Regulation No 75/2012 came into force on September 13, 2012.</i>
b. <i>Who is the responsible body for disclosure?</i>	<i>The National Energy Authority            Contact: Sigurdur H. Magnusson            e-mail: <a href="mailto:sigurdur.h.magnusson@os.is">sigurdur.h.magnusson@os.is</a></i>
2) How is electricity of renewable energy disclosed? Which tracking system(s) can be applied? <i>Describe</i>	<i>Explicitly and only through GOs.            Electricity of renewable origin can exist in the residual mix, but that can't be used for selling electricity products</i>

<p>3) Is the amount of energy corresponding to GOs transferred by an electricity supplier to a third party deducted from the share of energy in its energy mix for the purposes of disclosure? (Art. 15 (8) 2009/28/EC) <i>Description and Reference</i></p>	<p><i>Yes. This is implemented by the residual mix. GO cancellation is the only way to sell electricity from renewable sources (apart from implicitly through the residual mix) and thus if a supplier sells a GO it can't use it for its own energy mix or for a specified product.</i></p>
<p>4) In some countries domestic GOs or certificates different from EU 2009/28 GOs are being used. Does this concept exist within your country and do you treat them differently when it comes to disclosure – if so, how?</p>	<p><i>Not relevant</i></p>
<p>5) Do you apply the RE-DISS residual mix calculations for untracked electricity? If not how is electricity of unknown origin disclosed? <i>Describe; preferably use a written formula</i></p>	<p><i>Through an annual publication of the residual mix</i></p>
<p>6) Who is responsible to calculate the residual mix??</p>	<p><i>The National Energy Authority Contact: Sigurdur H. Magnusson e-mail: <a href="mailto:sigurdur.h.magnusson@os.is">sigurdur.h.magnusson@os.is</a></i></p>

<p>7) Do you apply the RE-DISS recommendations on deadlines within the disclosure process mentioned hereafter (Y/N) If not: What are the deadlines for this step in the disclosure process?</p>	<p>Yes</p>
<p>a. Deadline for cancellation of GOs</p>	<p>March 31</p>
<p>b. Date when the residual mix will be published</p>	<p>The National Energy Authority publishes the residual mix for the last calendar year on June 1 each year.</p>
<p>c. Publication of the fuel mix of the previous year by supplier.</p>	<p>The suppliers are to publish the fuel mix to their customers on July 1 each year.</p>
<p>The issuing member state has implemented Art. 15 of the Directive 2009/28/EC</p>	<p></p>

<p>8) On what legal basis is Art. 15 of the RES Directive implemented?</p> <p><i>What are the laws and regulations? Reference and detailed description:</i></p> <p><i>(Meaning web link or pdf.) of law AND applicable regulations or by-laws. Preferably also with guidance on which articles do apply.</i></p>	<p><i>With Act on the guarantee of origin of electricity produced from renewable energy sources, No 30/2008, Iceland implemented the Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal energy market.</i></p> <p><i>With amendments to the Act No 30/2008 by law nr. 81/2012, Iceland implemented ART 15. of the RES directive, where reference is now made to Directive 28/2009/EC.</i></p> <p><i>See: <a href="#">Act on the guarantee of origin of electricity produced from renewable energy sources, etc, with later amendments No. 30/2008.</a></i></p> <p><i><a href="#">Regulation on disclosure of information regarding guarantees of origin</a> was effective from September 13, 2012.</i></p> <p><i>The regulation is issued in accordance to paragraph 2 of Art. 5 and Art. 45 of the Electricity Act No. 65/2003 with later amendments.</i></p> <p><i>The regulation was set in accordance to the standards which are set forth in the RE-DISS project.</i></p> <p><i>(The Electricity Act is only available in Icelandic: <a href="http://www.althingi.is/lagas/nuna/2003065.html">http://www.althingi.is/lagas/nuna/2003065.html</a>)</i></p>
<p>a. From which production date did the national GO fulfil all criteria of Directive 2009/28? (Or when is it planned to have this framework in place?)</p>	<p><i>December 2011, in accordance to Directive 2001/77/EC, and from June 5<sup>th</sup> 2012 in accordance to the RES Directive.</i></p>
<p>b. If applicable: Which requirements have not yet been implemented?</p>	<p><i>Not applicable</i></p>

<p>9) What is the procedure for issuing a GO (Art. 15 (2) 2009/28/EC)</p> <p><i>Describe the process how a production device will be registered and in which way the production data will be collected. Please elaborate on the question in which way there is an independent check or audit on this information and by whom.</i></p>	<p><i>When the owner of a Production Device requests, Landsnet hf. will issue guarantees of origin for the production period the owner specifies.</i></p> <p><i>Only production starting from registration date of the PD can be issued, backward issuing is effectively limited by expiration rule</i></p>
<p>10) What is the regulation for the expiry and “use” of certificates as stated in article 15(3) of the RES Directive 2009/28/EC</p> <p><i>Describe and Specify (please elaborate especially on the definition of production period – month, calendar month, year, etc?)</i></p>	<p><i>A GO expires 12 months after the end of the production period to which the GO relates.</i></p>
<p>11) Is the appointed competent body the only competent body in your country? (Art. 15 (4) 2009/28/EC)</p>	<p>Yes</p>
<p>a. <i>If there is more than one, how are responsibilities separated from each other and/or how are geographic regions defined?</i></p>	<p>Not relevant</p>

<p>12) If the daily operations have been handed over to another body do you supervise the issuance, transfer and cancellation of GO? (Art. 15 (4) 2009/28/EC)</p> <p><i>Please explain: how is it done (what kind of measures have been taken) and by whom (competent body, regulator?)</i></p>	<p><i>Landsnet hf. is appointed to issue GOs through Act no. 30/2008, Art. 3 (and the National Energy Authority is the monitoring body for the issuances, in accordance to the same Act).</i></p>
<p>13) Ownership and type of organisation of the issuing body (e.g. private company, government department, energy regulator, TSO ...)</p>	<p><i>Landsnet is owned by the National power company, and three distribution companies. All the companies are publicly-owned.</i></p> <p><a href="http://landsnet.is/english/aboutlandsnet/">http://landsnet.is/english/aboutlandsnet/</a></p>
<p>a. <i>Is the company independent of production, trade or supply activities?</i> (Art. 15 (4) 2009/28/EC)</p>	<p><i>Yes.</i></p>
<p><b>The issuing member state ensures that no more than one GO is issued in respect of each unit of energy produced and that the same unit of energy from renewable sources is taken into account only once (Art. 15 (2) 2009/28/EC).</b></p>	<p style="background-color: #cccccc;"></p>
<p>14) What kind of GOs can be used for disclosure and in what way? <i>Describe; e.g. relationship between CHP-GO and RES-GO</i></p>	<p><i>GOs are only issued for renewable energy sources used in electricity production and CHP. Only GOs that are issued in accordance to the RES directive can be issued.</i></p>

<p>a. <i>If there are more than one, what kind of measures have you taken to prevent multiple issuance of GO for the same amount of energy? Please describe</i></p>	<p><i>Landsnet has issued a Domain Protocol for Iceland, which has been scrutinized and approved by the AIB. Iceland operates under the EECS rules which prevents multiple issuance of GO for the same amount of energy.</i></p>
<p>15) Can renewable energy be disclosed in any other way than using GOs (e.g. bilateral contracts or other types of certificates, like industry based schemes)?</p>	<p><i>NO</i></p>
<p>a. <i>If so, what kind of measures have you taken to ensure that the same unit of energy is taken into account only once?</i></p>	<p><i>Not relevant</i></p>
<p>16) Do other registry systems in your domain exist which can be used for disclosure purposes (e.g. private certificate schemes)?</p>	<p><i>NO</i></p>
<p>a. <i>If so, how do you align the databases?</i></p>	<p><i>Not relevant</i></p>
<p>17) What technical measures have you taken to prevent double counting of GOs ?</p>	<p><i>The disclosure regulation is based on the REDISS BPR, and the Grexel registration system prevents double counting of GOs. One single electrical registry. Cancellation of GOs after use.</i></p>

<p>18) When importing GOs: What measures have you taken to ensure that exported GO are not used anymore in the exporting or any other state? <i>Please specify</i></p>	<p><i>Regulation no 757/2012 and participation in the Grexel registration system. All GOs issued in Iceland are removed from the Icelandic residual mix, unless they expire in Iceland.</i></p>
<p>19) Have exported and cancelled quantities of electricity been deducted from the residual mix?</p>	<p><i>Yes, in the calculations performed by RE-DISS.</i></p>
<p><b>The issuing member state ensures the function of GO (Art. 15 (2) 2009/28/EC).</b></p>	
<p>20) Are GOs only being used for disclosure? (Y/N) <i>If no please specify some more by answering the questions below</i></p>	<p><i>Yes</i></p>
<p>a. <i>What type(s) of support scheme(s) are in place?</i> <i>Please describe the support schemes that have been notified to the commission and that can be applicable to producers of renewable energy.</i></p>	<p><i>There are no support schemes for RES in Iceland.</i></p>
<p>b. <i>Are GOs also used as a proof for national support schemes?</i></p>	<p><i>No</i></p>
<p>c. <i>Do GOs have any other function within the scope of the national support scheme?</i></p>	<p><i>NO</i></p>

d. How do these support and disclosure schemes inter-relate? Describe e.g. how supported electricity is disclosed.	<i>Not relevant</i>
<b>The Registry system is electronic, accurate, reliable and fraud-resistant (Art. 15 (5) 2009/28/EC).</b>	
21) Do you have an electronic registry?	Yes
Please identify the developer and operator	<i>Grexel OY, Helsinki Finland</i>
a. What technology is being used (e.g. database, spreadsheet ...)?	<i>Database</i>
22) Do you issue, transfer and cancel GOs for the standard size of 1 MWh? Please also specify if there are any exceptions to the general rule.	<i>Yes, without exception.</i>
23) Are the EECS-Rules implemented by the issuing body?	Yes
24) What measures have you taken to ensure sufficient IT-security? Describe and specify. Please elaborate especially on the way to get access to accounts (fraud resistance)	<i>The database ensures this as the access to registry accounts is only possible for official representatives of the account holder, and their identity is verified by electronic ID. See description of IT security on at <a href="http://Grexel.com">Grexel.com</a></i>

<p>25) What measures have you taken to ensure validity of the GO content? <i>Describe (e.g. electricity is only measured by gauged electric meter; audits of production data, on-site inspections)</i></p>	<p><i>Produced electricity is measured by the certified meters of the TSO.</i></p>
<p>26) What measures have you taken to ensure that only one GO is issued for each unit of energy produced?</p>	<p><i>There is only one registry, and it only issues one GO per MWh.</i></p>
<p>27) Do you have written procedures for operating your GO system? If so, please specify.</p>	<p><i>Landsnet hf is a member of AIB. The procedures are published in <a href="#">The Domain Protocol for Iceland</a>.</i></p>
<p>28) What measures have you taken (or would you be prepared to take):</p>	
<p><i>a. to limit financial risk to other issuing bodies as a result of (e.g.) trading disputes between accountholders?</i></p>	<p><i>Using AIB template for STC where the limitation of liability is defined as follows: “If [The Market Participant] suffers a loss due to a negligent action of a Scheme Member, [The Market Participant] must direct the claim for compensation against the negligent Scheme Member only. The AIB, other Members of AIB or their representatives are not liable for the actions of the negligent Scheme Member. [The Market Participant] has a duty to do everything possible to limit the extent of the damage. If [The Market Participant] does not implement adequate measures to limit the extent of the damage, compensation may be reduced.”</i></p>

<p><i>b. to limit fraudulent behaviour? (e.g. multiple issuing, transfer and cancellation – for example, inspection of plant)</i></p>	<p><i>Icelandic issuing body is the TSO, Landsnet which is also responsible of balance settlement. Issuing is done each month after the balance settlement using the same data. If an error in balance settlement is discovered later, the same correction is applied to guarantees of origin.</i></p> <p><i>All production devices are audited before GOs can be issued. Re-audit has to be conducted every 5 years.</i></p>
<p>29) Which parts of your operations are (or might be) outsourced, and to whom?</p>	<p><i>The maintenance of the certificate registry has been outsourced to Grexel. It is not foreseen that other parts of the operation will be outsourced.</i></p>
<p>30) Do you (plan to) issue separate GOs for domestic and international markets? If so, how are these related and how do you prevent double counting?</p>	<p><i>No</i></p>
<p>31) Can certificates be altered once they have been issued? If yes, how, and in what circumstances?</p>	<p><i>No, see <a href="#">Domain Protocol for Iceland</a> for error correction procedures.</i></p>

<p>32) Please describe the regulation for metering of electricity production for issuing of GO in your domain .</p> <p><i>Please describe, including information on the authorised measurement body, way of provision of meter readings, estimation and profiling, as well as measurement of input/output for combustion fuels</i></p>	<p><a href="#"><u>Regulation 1050/2004 on Electricity Trading and Metering.</u></a> (only in Icelandic). The regulation describes how TSO Landsnet is responsible for measuring electricity at in-feed and out-feed points of the National Grid.</p> <p>Landsnet's grid code on relations between Electricity Market Participants: <a href="http://landsnet.is/Uploads/document/marka%C3%B0ur/Netm%C3%A1li/Skilm%C3%A1lar%20B-6.pdf"><u>http://landsnet.is/Uploads/document/marka%C3%B0ur/Netm%C3%A1li/Skilm%C3%A1lar%20B-6.pdf</u></a> (only in Icelandic).</p> <p>Landsnets grid code on Metering Data: <a href="http://www.landsnet.is/Uploads/document/Netmali/Skilmálar%20B7%20Útg.%202%20dags.%201.3.10.pdf"><u>http://www.landsnet.is/Uploads/document/Netmali/Skilmálar%20B7%20Útg.%202%20dags.%201.3.10.pdf</u></a> (only in Icelandic).</p>
<p>c. Do you issue on any basis other than meter readings? <i>Please describe (if "yes")</i></p>	<p>No</p>
<p>d. Do you issue certificates for nett or gross output?</p>	<p>Nett</p>
<p>e. If you issue for gross output, how do you handle onsite demand, pumped storage and auxiliaries? <i>Please describe</i></p>	
<p>f. How do you handle the situation that only one meter provides production data for more than one plant? E.g. an accredited organisation to differentiate, a formula by the plant operator, a pro rata etc.</p>	<p>Not applicable.</p>

<p>33) How do you issue GO for biomass plants (100% biomass) <i>Please describe the approach and explain the reasoning behind it.</i></p>	<p><i>Not applicable in Iceland, no such plants.</i></p>
<p>34) How do you issue certificates for co firing plants and on what basis do you allocate biomass? <i>Please describe and explain (e.g. we use a formula to calculate biomass percentage, there will be an audit etc.)</i></p>	<p><i>Not applicable in Iceland, no such plants.</i></p>
<p>35) How do you issue certificates for waste incinerators and on what basis do you allocate waste (biomass)? <i>Describe and explain.</i></p>	<p><i>Not applicable in Iceland, no such plants.</i></p>
<p>36) <i>What are the production periods for production devices in your domain?, Are there any exceptions?</i> <i>Please specify (e.g. "monthly but for small scale PV which will be issued yearly")</i></p>	<p><i>A calendar month is a production period.</i></p>
<p>37) How often do you issue GOs?</p>	<p><i>Monthly issue, when requested by production device owner.</i></p>
<p>38) <i>What are the procedures regarding backward issuing?</i> <i>Please describe</i></p>	<p><i>Only production starting from registration date of the PD can be issued, backward issuing is effectively limited by expiration rule.</i></p>
<p>39) <i>How are production device registrations verified in your domain?</i> <i>Please specify, Including information on the general process, verified documents and list of registered parameters</i></p>	<p><i>Production devices are audited on site, and the data specified by owner is verified. This includes build date, installed effect etc., detailed description is in the Domain Protocol for Iceland, which is accessible on Landsnet's website and on the AIB website:</i> <a href="#"><u>Domain Protocol for Iceland</u></a></p>

<p>40) What is the frequency and process with which production devices are inspected in your domain? <i>Please describe, including information on conduct of any audits/ad-hoc audits, criteria for selection of auditor, scope of audit, process for addressing corrective action etc.</i></p>	<p><i>Initially, and then every 5 years</i></p>
<p>41) How do you handle errors within registered information and within GOs?  <i>Please describe and specify for the categories metering errors, resettlements and other errors.</i></p>	<p><i>In accordance to the Domain Protocol: See <a href="#">Domain Protocol for Iceland:</a></i></p>
<p>42) Within your domain, do certificates always expire within 12 months of the end of the production period? (Note that expired means something else than cancelled.)</p>	<p><i>Yes</i></p>
<p><i>a. If not, when do they expire? Please specify</i></p>	<p><i>Expired certificates are removed from the registry and no transactions can be made with them after the expiry. The corresponding amount and type of electricity generation attributes is added to the residual mix.</i></p>
<p><i>b. What happens with expired certificates?</i></p>	<p><i>Expired certificates are removed from the registry and no transactions can be made with them after the expiry. The corresponding amount and type of electricity generation attributes is added to the residual mix.</i></p>
<p><b>Issued GOs include the minimum content (Art. 15 (6) 2009/28/EC)</b></p>	
<p>43) Energy source from which the energy was produced</p>	<p><i>Yes</i></p>

44) The start and end dates of production	Yes
45) Electricity; heating or cooling	Yes (currently issued only for electricity)
46) Identification number, location, type and capacity of the installation	Yes
47) Investment support. <i>Yes/ no ,if yes please mention type and scope</i>	N/A (no support system)
48) Funding by any support scheme <i>Yes/ no ,if yes please mention type and scope</i>	N/A (no support system)
49) Date when installation became operational	Yes
50) Date of issue	Yes
51) Issuing State	Yes
52) Unique Identification number of GO	Yes
53) Do you use additional information on GOs like labels or additional info on the sustainability of biomass? What measures have you taken to ensure the reliability of the additional information and do you want this information to be transferred between national registries? <i>Please describe and be specific</i>	No additional information or labels are used.
<b>Additional Questions</b>	

54) Are you a member of AIB? Or do you plan a membership of AIB, or to use the Hub without AIB membership?

*Yes. Landsnet hf. is a member of AIB, since December 2011, and uses the AIB hub*