

**TÜV SÜD Standard**



Industrie Service

# **Qualified Electricity Disclosure**

## **Abbreviated as: QED**



**Version 07/2015**



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## Change history

- 09/2011    Large number of updates throughout the standard based on changes in the applicable laws.  
            Large number of clarifications throughout the standard.  
            Detailed accounting regulations.  
            Introduction of the term "region".  
            Integration of general certification principles, including risk management, significance, confidence level.



## Terms and definitions

Renewable energy	Hydropower (pumped storage plants minus energy input for pumping operation), wind power, biomass, biogas, landfill gas, solar power/photovoltaics, geothermal power, biogenic content of household refuse and industrial waste.
Biomass	Energy carrier in accordance with the German Biomass Ordinance as amended at the time of certification.
Biogas	Gas defined as biogas in the currently applicable legislation: Biomethane, gas from biomass, landfill gas, sewage gas and hydrogen derived from the electrolysis of water and synthetically produced methane, where the major part of the electricity used for electrolysis and the major part of the carbon dioxide or carbon monoxide used for methanisation is established as coming from renewable sources as defined in Directive 2009/28/EC. <sup>1</sup>
Biomethane	Biogas purified to natural-gas quality and injected into the natural gas grid.
Region	A continuous territory in a first-level NUTS region <sup>2</sup> defined by the certificate holder. Deviation from the boundaries of the first-level NUTS regions is acceptable with the Certification Body's approval.

## Abbreviations

CMS	TÜV SÜD Industrie Service GmbH, Carbon Management Service
EE	Renewable energy
EEG	Act on the Revision of the Renewable Energy Sources Legislation in the Field of Electricity in the Federal Republic of Germany (Renewable Energy Act)
EnWG	German Law on Electricity and Gas Supply (Energy Industry Act — EnWG)
EIWOG	Elektrizitätswirtschafts- und -organisationsgesetz 2010 (Österreich – AT) (Electricity Management and Organisation Act, 2010 (Austria – AT))
EnV	Energy Regulation, Switzerland – CH
EVU	Energy supply company
GoO	Guarantee of Origin
UBA	German Federal Environmental Agency

<b>References</b>	Emission inventory of renewable energy carriers, UBA, December 2012
	VdTÜV Code of Practice 1304 (10/2014)
	ISO/IEC 17065:2012: Conformity assessment – Requirements for bodies certifying products, processes and services.

<sup>1</sup> Energy Management Act

<sup>2</sup> First-level regions of the official EU nomenclature of territorial units for statistics (NUTS) (first-level regions in Germany are the German states (*Länder*))



## Foreword

Liberalisation of the electricity markets and increasing competition have led to stricter requirements for transparency and consumer information. In this context, the European Union has declared that the fuel mix disclosure of electricity (electricity disclosure) is important for improved consumer protection and has made the introduction and implementation of electricity disclosure mandatory for EU Member States through its 2nd Directive on common rules for the internal market in electricity. While certification of electricity disclosure is not required by law, it guarantees that electricity producers or suppliers certified in accordance with this standard apply a system certified as offering consumer-friendly, correct and traceable electricity disclosure. Certification is particularly recommended as legal requirements can be challenging and the method of calculation complex and, to a certain degree, error-prone, depending on the application. Certification by an independent third party provides assurance for inspections by regulatory bodies. Qualified electricity disclosure paves the way for certification of special product compositions.

## 1. Scope and fundamentals

### 1.1 Scope

This standard defines the requirements for electricity disclosure by energy suppliers delivering electricity to final customers and the requirements concerning the information on the electricity-mix that electricity producers and traders must supply to their trade partners hereinafter called "electricity declaration".

### 1.2 Sources and legal basis

- a. Directive 2009/28/EC of the European Parliament and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources (Renewable Energy Directive);
- b. Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the

- internal market in electricity (Internal Electricity Market (IEM) Directive)
- c. Germany: Act on the Revision of the Renewable Energy Sources Legislation in the Field of Electricity in the Federal Republic of Germany (EEG), as amended.
- d. Germany: HkNV, German regulation on guarantees of origin (GoOs) of 28 November 2011 (Federal Law Gazette I, page 2447), last amended by Article 19 of the law of 21 July 2014 (Federal Law Gazette I, page 1066);
- e. HkNDV, German regulation implementing the guarantees of origin (GoOs) scheme of 15 October 2012 (Federal Law Gazette I, page 2147), last amended by Article 20 of the law of 21 July 2014 (Federal Law Gazette I, page 1066);
- f. Germany: German Law on Electricity and Gas Supply, Energy Industry Act (EnWG), as amended;
- g. Germany: BDEW "Electricity Disclosure" Guidelines, as amended, published by the German Association of Energy and Water Industries, BDEW
- h. Austria: EIWOG 2010, Act on Electricity Management and Organisation, as amended
- i. Austria: E-Control Regulation governing the rules of electricity labelling and guarantee of origin by primary energy carriers (Electricity Labelling Regulation), as amended
- j. Austria: Federal Act on the support of the production of electricity from renewable energy carriers (Eco-Power Act, ÖSG), as amended
- k. Switzerland: Energy Regulation (EnV), as amended
- l. Switzerland: Federal Office of Energy: Guidelines on Electricity Disclosure, as amended
- m. Switzerland: Swiss Regulation on Guarantees of Origin (HKNV) of 24 November 2006, as amended

**1.3 Coming into effect**

This standard (*Version 07/2015*) will come into effect on 1 July 2015 without a period of transition.

**1.4 Communication and use in advertising**

Use of the certification in advertising statements must be in compliance with the Testing and Certification Regulations of the TÜV SÜD Group. Certification marks may only be used by the certificate holder.

**2 Requirements for certificate holders****2.1 Certification scope**

The certification scope is determined by the legal requirement for electricity disclosure and/or electricity declaration.

Power-generation units in which the certificate holder owns 100 % or part of the shares and/or from which the certificate holder purchases power under long-term delivery contracts and which are not governed by a national guarantee of origin (GoO) system must be included in the scope of the certification.

Service providers taking over functions relevant for certification must also be included in the scope of certification. To do so, these service providers must have a contractual relationship with the certificate holder and accept the relevant obligations of the certification.

**2.2 Organisation**

The certificate holder has appointed an Audit Representative. The Audit Representative submits all information needed for certification and is responsible for communicating the certification requirements within the organisation.

The organisation has established and documented the procedures, roles and responsibilities for the determination and presentation of electricity disclosure.

**2.3 Electricity disclosure**

The information and presentation provided for electricity disclosure is in line with the law and

consumer-friendly. In particular, in the case of electricity products with a pre-defined ratio of energy carriers, attention must be paid to the fact that an additional residual mix may have to be disclosed.

**3 Basic accounting requirements****3.1 National requirements**

The requirements defined by national law must be complied with. Further guidelines or directives issued by national bodies or associations must be taken into account. Deviations from the provisions and regulations set forth therein are only permitted in justified cases.

**3.2 Accounting period**

The accounting period is the calendar year.

**3.3 Maintenance of qualities**

The maintenance of energy-carrier qualities complies with the legal requirements.

**3.4 Best available information**

The determination of the quantity ratios of energy carriers is based on the best available, most up-to-date information.

**3.5 Transparency and traceability**

The determination of the data and the method of calculation ("Electricity Accounting") must be traceable and plausible. The sources must be quoted.

**3.6 Categorisation by energy carrier for final customers**

The categorisation of electricity by energy carriers in order to assign them to certain final customers or groups of final customers is only permitted for tariff customers of pre-defined electricity products and special-contract customers for whom a mixture with a specified quantity ratio of energy carriers was defined by contract prior to delivery.

**3.7 Residual mix**

In as far as differentiated electricity products or deliveries of electricity are on offer and in as far as they both deviate from the organisation's standard electricity mix and are identified, the residual mix must also be determined and displayed in electricity disclosure.

**3.8 Electricity accounting****3.8.1 General**

Production and/or purchases and deliveries of energy must be documented in electricity accounting. Entries are based on either bills (e.g. trade) or meter readings (e.g. consumption). The differentiation between various energy carriers and their environmental impacts must be included in electricity accounting.

**3.8.2 Credit entries**

Renewable energy credit entries in the certificate holder's electricity accounting system are effected on receipt of the energy and/or the relevant documentation within the boundaries of the accounting system.

**3.8.3 Debit entries**

Renewable energy debit entries from the certificate holder's electricity accounting system are effected upon transition from the accounting system, i.e. withdrawal of the energy and/or the relevant documentation from the boundaries of the accounting system.

**3.8.4 Netting**

Electricity purchases and deliveries between identical trading are netted against each other in the accounting period.

**3.8.5 Electricity of unknown origin**

a. Within reasonable cost limits, electricity accounting must keep the percentage of electricity of unknown origin as small as possible. A proactive approach to obtaining electricity-related fuel mix information and sending of the own

electricity declaration are taken for granted. If there is a national platform for the publishing of electricity declarations (e.g. the BDEW platform), the ratios of the energy carriers in the electricity mix must be published there.

b. The application of the European or national ENTSO-E mix as an auxiliary mix is permitted for electricity of unknown origin (e.g. purchased from an energy exchange). The ENTSO-E mix must be adjusted by the amounts of subsidised renewable energy.

**4 Presentation and information****4.1 Presentation**

Electricity disclosure must be presented in a consumer-friendly form displayed as a graphic. Outside Germany, presentation in the form of a table or chart is sufficient.

The electricity information must give the individual percentages of the energy carrier ratios to one digit after the decimal point. For electricity disclosure, full figures of the percentages are sufficient.

**4.2 Identification of energy carriers**

The energy carriers that must be identified differ from country to country. Identification of the legally required energy carriers must be ensured as a minimum requirement.

**4.3 Information and publication**

The electricity declaration must be distributed and published in a timely manner, taking into account the customary national deadlines, to ensure trade partners can fulfil their duties of electricity disclosure and declaration as required. In Germany, the deadline for publication of electricity disclosure is 1st November of the year following the data baseline of electricity disclosure.

Electricity disclosure must be published on the company's website and included in product brochures and in the invoices sent to final customers. The deadlines required by law must be observed.



## 5. Evidence of energy carriers

### 5.1 Evidence of renewable energy

#### 5.1.1 Generation of RE guarantees of origin

From the time at which a national register of guarantees of origin as defined in Directive 2009/28/EC has been placed into service, proof that the delivered electricity originates from renewable sources of energy must be provided through a guarantee of origin from the respective national register.

If there is no national register of guarantees of origin in the country of electricity generation, verification must be conducted on the basis of the TÜV SÜD Generation EE standard. In these cases, the documentation of verified generation from renewable energy carriers must be generated and managed in the BlueRegistry<sup>3</sup> database.

#### 5.1.2 Cancellation of guarantees of origin

Guarantees of origin must always be transferred to the certificate holder's national register of guarantees of origin and cancelled there.

For the cancellation of guarantees of origin, information must be provided on the purpose of the guarantees of origin for electricity disclosure and the specific electricity product for which the guarantees of origin are used.

If the transfer of guarantees of origin is impossible for technical reasons, cancellation in the register of guarantees of origin or in BlueRegistry can be accepted, provided compliance with the legal regulations and the prohibition of double counting is ensured.

### 5.2 Guarantees of origin of non-renewable energy carriers

From the time at which a national register of non-renewable energy carriers is taken into service, the guarantees of origin for a delivery of electricity from non-renewable energy carriers must also be provided from the respective national register.

If there is no guarantee of origin for non-renewable energy carriers and if the electricity delivered does not originate from a power unit in

which the certificate holder owns all or some of the shares, the guarantee of origin and/or electricity disclosure can be effected by self-declaration of the respective supplier.

### 5.3 Disclosure of subsidised energy from renewable energy carriers

Guarantees of origin for energy from renewable energy carriers subsidised by law are recognised, but must be indicated and identified as subsidised in electricity disclosure. This requirement applies to both German and international subsidies and irrespective of whether those subsidies were paid to promote the feed-in of, or investment in, renewable energy.

Quantities of subsidised electricity which, on the basis of legal regulations, can be physically assigned to the EVUs or final customers can be recognised.

### 5.4 No double counting

The accounting system must be suitable to exclude double counting of renewable energy as a general principle.

#### 5.4.1 Double counting at the supplier

As a matter of principle, guarantees of origin that are obtained separately from the delivery of electricity are only accepted from countries of origin where electricity disclosure is mandatory. Guarantees of origin from countries where electricity disclosure is not mandatory will only be recognised if the supplier can furnish proof of valid qualified electricity declaration certified by a recognised independent third party. The method of electricity disclosure must take into account feedback on the certificate holder's electricity mix (without guarantee of origin).

<sup>3</sup> See [www.bluregistry.de](http://www.bluregistry.de)



## 6 Optional modules

The following modules are optional. Compliance with these modules is identified separately in the certificate.

### 6.1 Regionality module

At least 50% of the energy used in the accounting period in a certain identified electricity product is produced in the same region in which it is also consumed.

- a) Availability and quality of an internal quality management system
- b) Number, scope and complexity of the products included in certification
- c) Number and characteristics of energy carriers
- d) Non-conformities identified in previous audits
- e) Number of sub-contractors

## 7 Requirements for the certification scheme

The quantity and the level of thoroughness of the audit must be defined based on the results obtained in risk assessment. This concerns, as minimum requirements:

### 7.1 Certification process

The certification process comprises certification audits and surveillance audits. While the certification audit focuses on the assessment of systems, processes, tools etc., the surveillance audit verifies compliance with the requirements of the standard in the past accounting period and reviews possible changes in the system compared to the certification audit. The certification cycle comprises a certification audit, a first surveillance audit (depending on the risk involved, at least one audit within 12 months of the certification audit) and a second surveillance audit (depending on the risk involved, at least once within 12 months of the first surveillance audit). The second surveillance audit will be followed by either a re-certification process that is analogous to the certification process or a closure audit (depending on the risk, within 12 months of the 2nd surveillance audit at the latest).

- a) Audit type
- b) Review of the measured data and original documentation
- c) Review of business transactions (purchase / sale)

In addition, when establishing the audit intervals the Certification Body must define whether additional interim checks will be required in the 12-month period.

### 7.3 Materiality

The materiality of data is defined as follows: information is significant if the omission or incorrect statement or reporting of said information could lead to a different result of the evaluation. In light of the above, this standard defines the materiality level at 5% of the quantity of energy sold or purchased.

### 7.2 Risk assessment

Certification bodies must maintain a risk management system for auditing, evaluation and decision-making. The risk management system must analyse the risk of the certificate holder's non-conformity with the requirements of this standard. Risk assessment must take into account the following indicators as a minimum requirement:

### 7.4 Confidence level

Certification is based on a decision made with reasonable assurance in accordance with ISEA 3000. Certifications that are based on a decision with limited assurance are not accepted within the scope of this standard.