



# Industry standard for electricity with Guarantees of Origin

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# 1. Executive summary

## Definitions of Guarantees of Origin

A Guarantee of Origin (GO) is proof that a certain amount of electricity, 1 MWh, is produced from a specified energy source, in a specified year. A GO contains information that characterizes the production. For example, GOs are specified by the name, age and technology (wind/hydro etc.) of the power plant. Electricity with GOs is an electricity contract backed by GOs.

## The benefits of electricity with GOs for customers

Electricity with GOs can provide several benefits for consumers and organizations:

- Consumers benefit from showing their support and preference for renewable power production. Furthermore, they may benefit from having documentation that an amount of renewable power, equivalent to their own consumption, has been produced.
- Organizations may get the same benefits of electricity with GOs as consumers. In addition, organizations may use information from electricity with GOs in a marketing context and/or in their environmental/climate reporting.

## The system of Guarantees of Origin and Electricity Fuel Mix Disclosure

The EU Electricity Market Directive<sup>1</sup> requires electricity suppliers to provide information on the origin of electricity to their customers in an understandable and comparable way. The EU Renewable Energy Directive<sup>2</sup> requires electricity suppliers in all Member States to use GOs to document the share of supplied electricity from renewable sources.

The Norwegian Water Resources and Energy Directorate (NVE) administers the system of Guarantees of Origin and Electricity Fuel Mix Disclosure in Norway. Statnett, the Norwegian Transmission System Operator is responsible for the Norwegian GO-registry and is thus responsible for the issuance of and transactions with GOs in Norway.

## Rules and guidelines for marketing the origin of electricity

The purpose of the industry standard is to contribute to correct and uniform marketing and communication of electricity with GOs. Organizations which confirm that they follow the industry standard, and/or market themselves with reference to the standard, must follow its guidelines.

The industry standard sets the same general requirement for marketing as the Norwegian Marketing Control Act<sup>3</sup>: Organizations must be able to document all claims used in marketing of electricity with GOs. In addition, the marketing must give the consumer a correct overall impression of the effects of buying the product.

This industry standard provides the guidelines for marketing different types of effects of electricity with GOs. For example:

- *Production effects*: Electricity suppliers can communicate that the purchase of electricity with GOs ensures that a volume of electricity of a certain type, corresponding to the customer's consumption, has been produced.
- *Financial effects*: Electricity suppliers can market that the purchase of electricity with GOs gives increased revenues to producers of renewable electricity.
- *Environmental effects*: When making environmental claims, reference shall be made to the calculation method used for estimating emissions and other environmental effects.

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<sup>1</sup> 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 and repealing Directive 2003/54/EC

<sup>2</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

<sup>3</sup> <https://www.forbrukertilsynet.no/english/the-marketing-control-act>

- *The effects of not buying electricity with GOs:* In general, electricity suppliers and other organizations shall refrain from making claims about the effects of not purchasing electricity with GOs. An exception to this rule is that suppliers of electricity which is not backed by GOs must refer their customers to the Electricity Fuel Mix Disclosure published by NVE for electricity purchases without GOs.

In addition, this industry standard sets some requirements for auditing and documentation. Organizations that refer to industry standard, shall show documentation and audit results of the relation between their sale of electricity with GOs and the amount of cancelled GOs.

## 2. Introduction to the industry standard

### **Purpose of the industry standard**

The purpose of the industry standard is to contribute to correct and uniform marketing and communication of electricity with GOs. This shall contribute to increase the confidence in electricity with GOs and to increase the value of electricity with GOs for customers.

### **Use**

The industry standard is a guide for electricity suppliers and other organizations marketing electricity with GOs. Organizations which confirm that they follow the industry standard, and/or market themselves with reference to the standard, must follow its guidelines. These organizations must ensure that they:

1. Follow the industry standard's guidelines for marketing and communication
2. Follow the industry standard's requirements for auditing and documentation

### **Development and administration of the industry standard**

The industry standard has been developed by the industry organization Energy Norway and representatives from the organizations LOS, Entelios, Statkraft, Kinect Energy, ECOHZ Becour, Skagerak Energi, Fjordkraft and Glitre Energi. Oslo Economics has contributed as a consultant.

The industry standard is administered by Energy Norway.

### **Content**

This industry standard is structured as follows: Chapter 3 introduces the system of electricity with GOs. Chapter 4 describes the standard's guidelines for the marketing and communication of electricity with GOs. Chapter 5 describes the industry standard's requirements for documentation and audit.

## 3. The system of electricity with GOs

This chapter introduces and explains the definitions of GOs, electricity with GOs and Electricity Fuel Mix Disclosures. Electricity suppliers and other organizations which confirm that they follow the standard can refer to these definitions and explanations.

### 3.1 Definitions

A *Guarantee of Origin* (GO) is proof that a certain amount of electricity, 1 MWh, is produced from a specified energy source, in a specified year. A GO contains information that characterizes the production. For example, GOs are marked with the name, age and technology (wind/hydro etc.) of the power plant.

*Electricity with GOs* is an electricity contract backed by GOs corresponding to the customer's electricity consumption.

Electricity suppliers shall provide their customers with an Electricity Fuel Mix Disclosure. The Electricity Fuel Mix Disclosure documents the origin of the purchased electricity.

### 3.2 The benefits of electricity with GOs for the customer

Customers who do not buy electricity with GOs must be referred to NVE's Electricity Fuel Mix Disclosure for electricity purchases without GOs<sup>4</sup>. Customers who buy electricity with GOs get an Electricity Fuel Mix Disclosure reflecting the sources of energy from which the supplier has bought GOs.

Electricity with GOs can have several benefits for consumers and organizations:

- Consumers benefit from electricity with GOs to be able to show their support and preference for renewable power production.
- Consumers may benefit from having documentation that an amount of renewable power, equivalent to their own consumption, has been produced.
- Organizations may get the same benefits of electricity with GOs as consumers. In addition, organizations may use information about electricity with GOs in a marketing context.
- Organizations can use electricity with GOs for their environmental and climate reporting. For instance, many organizations choose to use GOs to meet the requirements of climate reporting standards such as the GHG-protocol.<sup>5</sup>

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<sup>4</sup> <https://www.nve.no/energy-supply/electricity-disclosure/>

<sup>5</sup> See chapter 3.4. for more information.

### 3.3 Guarantees of Origin (GOs) and Electricity Fuel Mix Disclosure

#### EU / EEA law

The most important EU-directives concerning GOs and Electricity Fuel Mix Disclosure are:

- The EU Electricity Market Directive<sup>6</sup>, which requires electricity suppliers to provide information on the origin of electricity to their customers in an understandable and comparable way.
- The EU Renewable Energy Directive<sup>7</sup>, which requires electricity suppliers in all Member States to use GOs to document the share of electricity from renewable sources.

*The EU Electricity Market Directive* requires Member States to ensure that electricity suppliers, on a national level, discloses the origin of supplies of electricity to its customers in an understandable and comparable way. Customers must be given information about the environmental impact of electricity consumption. The minimum requirements are information on CO<sub>2</sub>-emissions and radioactive waste.

*The EU's First Renewables Directive* (2001) introduced a requirement for all Member States to establish a reliable system for tracing the origin of electricity produced from renewable sources. The requirement was implemented in Norwegian law in 2006. The requirement was continued in the EU's Second Renewables Directive (2009). In the EU's Revised Renewables Directive (2018), the requirement was made more specific. Before 2009, Member States could define how electricity suppliers should document the share of renewable energy in their electricity mix. After 2009 the Revised Renewables Directive requires that electricity suppliers in all Member States shall use Guarantees of Origin to document the share of electricity from renewable sources. The Directive requires Member States to comply with standard CEN-EN 16325. This is a technical standard for Guarantees of Origin applicable to all energy carriers (fuels), including electricity, district heating, biofuels, gas, etc.

The EU Directives do not provide detailed requirements for the design of GOs and Electricity Fuel Mix Disclosures. The Association of Issuing Bodies (AIB), an organization consisting of many European GO-registries, among them Statnett from Norway, have specified more detailed rules on the design of Electricity Fuel Mix Disclosures, GOs, GO registries etc. in the EECS<sup>8</sup> standard.

#### Norwegian law

The most important laws concerning GOs and Electricity Fuel Mix Disclosure in Norway are:

- The regulation of metering, billing, invoicing of grid services and electrical energy.<sup>9</sup> (Ministry of Petroleum and Energy).
- The regulation of Guarantees of Origin<sup>10</sup> (Ministry of Petroleum and Energy)

*The regulation of metering, billing, invoicing of grid services and electrical energy* states that electricity suppliers must either give their customers individual Electricity Fuel Mix Disclosures based on GOs or refer to NVE's Electricity Fuel Mix Disclosure for electricity purchases without GOs.

*The regulation of Guarantees of Origin* states that all producers of electrical energy on request can be issued guarantees confirming that a given amount of electrical energy has been produced

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<sup>6</sup> 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 and repealing Directive 2003/54/EC

<sup>7</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

<sup>8</sup> European Energy Certificate System

<sup>9</sup> <https://lovdata.no/dokument/SF/forskrift/1999-03-11-301>

<sup>10</sup> [https://lovdata.no/dokument/SF/forskrift/2007-12-14-1652#KAPITTEL\\_1](https://lovdata.no/dokument/SF/forskrift/2007-12-14-1652#KAPITTEL_1)

from a specified energy source at a specified time and place. The regulation also states that there should be a registry for GOs facilitating trade.

### Norwegian supervision and GO registry

The Norwegian Water Resources and Energy Directorate (NVE) administers the system of GOs and Electricity Fuel Mix Disclosure in Norway. NVE supervises relevant regulations and handles applications for approval of power plants to be issued GOs. Furthermore, NVE is responsible for the design and communication of the Electricity Fuel Mix Disclosure for electricity purchases without GOs.

Statnett, the Norwegian transmission system operator (TSO), has been appointed the task of maintaining a Norwegian GO registry, and is responsible for the issuance of and transactions with GOs. Statnett is a member of AIB and follows the EECS standard<sup>11</sup>.

## 3.4 Standards for environmental and climate reporting

Many organizations use GOs and individual Electricity Fuel Mix Disclosures to document and report the environmental and climate impacts of their electricity purchases. Electricity consumption does not cause direct greenhouse gas emissions, but electricity consumption can cause indirect emissions through its influence on electricity production. The requirements for environmental and climate reporting are not mainly governed by law but are rather determined by the reporting standards that organizations choose to follow.

The most important global standards for greenhouse gas reporting have been developed by The Greenhouse Gas Protocol, GHG-P. The reporting standard for businesses, " A Corporate Accounting and Reporting Standard ", divides emissions into three main categories:

- Scope 1: Direct emissions
- Scope 2: Indirect emissions from energy supply, i.e. electricity and heating/cooling
- Scope 3: Other indirect emissions

The standard states the following about indirect emissions from electricity:

*"To quantify scope 2 emissions, the GHG Protocol Corporate Standard recommends that companies obtain source / supplier specific emission factors for the electricity purchased. If these are not available, regional or grid emission factors should be used."*<sup>12</sup>

*"Organizations shall account and report scope 2 emissions in two ways and label each result according to the method: one based on the location-based method, and one based on the market-based method."*<sup>13</sup>

To be in accordance with these guidelines, organizations must mainly use GOs, or other market-based methods, for measuring emissions from their electricity purchases. In addition, organizations must report emissions in accordance with location-based methods.<sup>14</sup>

Other important initiatives, such as *RE100*<sup>15</sup> and *SBT* ("Science Based Targets")<sup>16</sup>, also recommend the use of GOs (market-based methods) to document indirect emissions from electricity consumption.

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<sup>11</sup> The requirements in the EECS standard are also relevant for NVE's design and communication of the Electricity Fuel Mix Disclosure for electricity purchases without GOs.

<sup>12</sup> <https://ghgprotocol.org/corporate-standard>

<sup>13</sup> [https://ghgprotocol.org/scope\\_2\\_guidance](https://ghgprotocol.org/scope_2_guidance)

<sup>14</sup> As a source of the location-based method in Norway, production mix is often used.

<sup>15</sup> <https://www.there100.org/technical-guidance>

<sup>16</sup> <https://sciencebasedtargets.org/>

## 4. Rules for marketing and communication

This chapter describes the Norwegian Marketing Control Act's general rules for marketing and communication, as well as the Norwegian Consumer Agency's guide on the use of sustainability claims in marketing. Finally, the industry standard's guidelines for the marketing of electricity with GOs and GOs are described.

### 4.1 Legal rules

The Marketing Control Act<sup>17</sup> is the most important law governing the marketing and communication of electricity with GOs in Norway. The Marketing Control Act incorporates several EU Directives, including the Unfair Commercial Practices Directive (Directive 2005/29/EC).

In addition to the Marketing Control Act, the Norwegian Consumer Agency has prepared a guide on the use of sustainability claims in marketing which is relevant for the marketing of electricity with GOs.<sup>18</sup> The guide expresses how the Consumer Agency will enforce The Marketing Control Act with regards to sustainability marketing aimed at consumers.

#### General legal rules

The Marketing Control Act contains rules concerning marketing, commercial practices and contractual terms in consumer relations, and sets requirements for good business practice between companies. Particularly relevant paragraphs for this industry standard are The Marketing Control Act's paragraphs 6, 7, and 8, which prohibits *unfair* and *misleading* commercial practices, and paragraph 3, section 2, which requires that companies must be *able to document* all claims about the actual properties of a product.

#### Prohibition of unfair commercial practice

A commercial practice is unfair if it is contrary to "good business practice" towards consumers, and at the same time is suitable for significantly changing consumers' behaviour, so that consumers make decisions they otherwise would not have made (see paragraph 6, section 2).

The Act specifies generalized examples of practices that will always be unfair and thus are prohibited<sup>19</sup> An example of a commercial practice that will always be considered unfair and prohibited is to present a certificate, quality mark or equivalent without having achieved the necessary permission.

#### Prohibition of misleading marketing and misleading statements

It follows from paragraph 6, section 4, of the Norwegian Marketing Control Act that a trading practice is always unfair if it is misleading pursuant to paragraph 7 or 8 of the Act.

The marketing is misleading if it contains incorrect information and thus is untrue, or otherwise apt to mislead consumers about properties such as the nature of the benefit or the main characteristics of the benefit (paragraph 7). In assessing whether the marketing is misleading, the overall impression that the marketing to an average consumer is considered. With regards to considerations of sustainability claims, both statements and other types of communication such as images, sounds, symbols, colour choices etc. will be considered.

The marketing must in both content and design give a correct and balanced overall impression of the product or business being marketed. Claims that in isolation are correct can be considered to be misleading in the context in which they are presented (Forbrukertilsynet, 2020).

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<sup>17</sup> <https://www.forbrukertilsynet.no/english/the-marketing-control-act>

<sup>18</sup> <https://www.forbrukertilsynet.no/lov-og-rett/veiledninger-og-retningslinjer/forbrukertilsynets-veiledning-om-bruk-av-baerekraftpastander-markedsforing>

<sup>19</sup> See Appendix 1 of the Directive of Unfair Commercial Practices.

Misleading omissions exist if the marketing omits or hides significant information that the consumer needs to make an informed decision, or if the marketing/communication presents the information in a vague, incomprehensible, ambiguous or inappropriate manner (paragraph 8, section 1). The Norwegian Consumer Agency's guide states that lack of information about the reasons for a sustainability claim can be considered a misleading omission.

### **Rules for documentation of claims used in marketing**

It follows from paragraph 3, section 2, of the Act, that the supplier must be able to document all marketing statements of actual properties of a product or service. Statements about environmental or ethical properties used in marketing that cannot be adequately documented will be considered misleading and unfair and are thus prohibited. The documentation must cover the specific claim used in the marketing. The requirements for the content and scope of the documentation must consider the specific claim and the product/service which is marketed.

The Norwegian Consumer Agency's guide to sustainability claims (2020) states that the documentation requirement will be more comprehensive for general claims, such as "*environmentally friendly*", "*green*" and "*climate positive*", than for claims consisting of sober and precise product information. The guide also gives some principles for using sustainability claims in marketing:

1. Sustainability claims must be true. The statements will be misleading if they contain incorrect and/or untrue information.
2. Marketing must give a precise and balanced impression of the products' environmental and ethical characteristics. General claims, such as "environmentally friendly" will as a general rule be misleading if the marketing/communication in the same context does not inform of the properties of the product/service which support the general claim.
3. The ethical or environmental properties of the product must not be exaggerated. The marketing should not point to insignificant aspects of the products environmental impact.
4. It is important to see the product in the context of the rest of the market. The marketing must not give consumers the impression that the product has better ethical and/or environmental properties than competing products if this cannot be documented.

## **4.2 The industry standard's guidelines**

### **General guidelines for marketing and communication**

This industry standard has the same general rules for marketing and communication as The Marketing Control Act. Firstly, companies which adhere to this standard must be able to document all claims used in the marketing of electricity with GOs. This means that they must be able to prove that all their statements concerning these products are correct. Secondly, the marketing shall give the recipient a correct overall impression. It is therefore not sufficient that all claims about the electricity with GOs are correct if the commercial practice is otherwise likely to mislead the consumer. This applies to the marketing of both the individual electricity contracts and the electricity supplier's brand in general.

The EU's latest Renewables Directive requires electricity suppliers to use GOs to document the proportion of renewable energy in their deliveries. Norwegian law and this industry standard require the same. Electricity suppliers which want to market renewable electricity shall use GOs. This applies to the marketing of both individual electricity contracts and the electricity supplier's brand in general.

*Overall requirement: Companies which adhere to this standard must be able to document all claims used in the marketing of the electricity with GOs. In addition, the marketing shall give the recipient a correct overall impression.*

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## Guidelines for the marketing of different types of effects

Purchasing electricity with GOs can give different types of effects/benefits. The following sections explain the industry standard's guidelines for marketing the following types of effects of electricity with GOs:

- Production effects
- Financial effects
- Environmental effects
- The effects of not buying electricity with GOs

### Production effects

The purpose of the GO-system is to document the origin of electricity. Based on the purchase of GOs, electricity suppliers can thus market to their customers that there has been produced an amount of renewable power of a certain type, equivalent to the consumption of the customer.<sup>20</sup> Such claims about production effects can be used without the need for more documentation than the GO itself. An example of a marketing statement which can be documented by the purchase of GOs alone might be:

*«Ensure a renewable power production equivalent to your electricity need»*

Other claims about production effects require additional documentation and/or explanation to be in line with the requirements of this industry standard. This will for instance apply to claims that the purchase of electricity with GOs will lead to increased production of a specific type. The marketing should not give the impression that the GO-system is meant to be a support scheme for renewable power production. For example, additional documentation will be needed to support the following statement:

*«Contribute to new local hydropower production»*

To use such a statement, the electricity supplier must give information about exactly how the purchase of GOs contributes to new investments. For instance, the supplier can document how parts of the electricity bill is earmarked for new investments or expansions of a specific power plant.

### Financial effects

Electricity suppliers can rightly claim that the purchase of electricity with GOs increases the revenues of producers of renewable electricity. An example of a marketing statement which can be documented by the purchase of GOs alone might be:

*«Support Norwegian hydropower production»*

One can also rightly make the following statement when purchasing GOs from local hydropower plants:

*«Support local hydropower production»*

To make claims about the cash flows related to the customer's total electricity bill, the electricity supplier must provide additional documentation for the cash flows related to the purchase of physical electricity. For instance, the following statement requires additional documentation:

*«All the money you pay goes to producers of renewable electricity»*

Such a claim must be documented by contracts for the purchase of physical electricity (power purchase agreement (PPA)), or similar, in addition to GOs. The reason is that the purchase of

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<sup>20</sup> In this industry standard, we assume that the GOs sold are GOs from renewable power production, as this is what is relevant in Norway per 2021.

GOs only affects cash flows related to the GOs themselves, not cash flows related to the trade of physical electricity.

### **Environmental effects**

Organizations which follow this industry standard should not make general claims that the electricity they sell is "climate-friendly", "environmentally friendly", "green" or similar, nor that the electricity the customer buys has special environmental advantages over the electricity bought from other electricity suppliers. Specific claims about the origin, such as "hydropower" or "wind power", can be used.

The marketing must give a clear and balanced impression of the electricity contract, the associated GOs, and their benefits. The consideration of a balanced impression not only depends on the content of the statements, but also of how they are presented (visually etc.).

Environmental claims must be explained and documented to be in line with the industry standard. Where relevant, reference must be made to which calculation method is used to calculate emission effects and other environmental effects. For example, the following statement can be used in the marketing of electricity with GOs:

*«With this electricity contract, the indirect emissions linked to your electricity consumption is X g / kWh, as calculated according to the standards of the scope 2 of the GHG Protocol.<sup>21</sup>»*

### **The effects of not buying electricity with GOs**

The organizations which refer to this industry standard shall, in principle, refrain from making claims about the effects of not buying origin-labelled-electricity. The reason is that such claims are difficult/ not possible to document.

For instance, organizations that refer to the industry standard should not make claims that payments from customers who buy electricity without GOs go to producers of fossil electricity, or that such customers cause more greenhouse gas emissions than customers buying electricity with GOs.

An exception to this rule is that suppliers of non-labelled electricity must refer their customers to the Electricity Fuel Mix Disclosure published by NVE for electricity purchases without GOs, as they are obliged to, in accordance with Norwegian regulation.

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<sup>21</sup> [https://ghgprotocol.org/scope\\_2\\_guidance](https://ghgprotocol.org/scope_2_guidance)

## 5. Requirements for documentation and audit

Different types of companies and organizations can choose to follow this industry standard. The requirements for documentation and audit, described below, are made specially for electricity suppliers, selling electricity contracts to consumers and businesses. These requirements can be adapted to fit other types of adherents to the standard.

As a general rule, organizations that follow this industry standard shall provide Energy Norway and customers (upon request) the following documentation:

1. *Letter of acceptance for the industry standard.* The acceptance letter must be addressed to Energy Norge and must contain a confirmation that the company complies with the current version of the industry standard. Further, the acceptance letter shall specify the period for which this applies. The letter must name the independent body (auditor) that will be used for auditing the annual accounts.
2. *Operating account for GOs* (at Statnett or at their account operator).
3. *Annual accounts for electricity with GOs.* The accounts must document that the company has cancelled GOs equivalent to their sales of different contracts for electricity with GOs. The annual account shall be ready within three months after the end of the previous calendar year. The account shall contain an overview of:
  - i. Total electricity sales during the period.
  - ii. Sales per electricity product/origin-labelled contract.
  - iii. Confirmation of corresponding quantities of different types of cancelled GOs at Statnett or at their account operator.
  - iv. Audited edition of last year's annual accounts for electricity with GOs.
4. *Auditor's statement* with confirmation of approved annual accounts for electricity with GOs. The auditor can be the supplier's regular auditor or another independent body.

All documentation must be made available to Energy Norge no later than June 30<sup>th</sup> each year.