

Swedish Energy Agency regulations on guarantees of origin for energy;

The Swedish Energy Agency stipulates¹ the following pursuant to section 24 of the Ordinance on Guarantees of Origin for Energy (2025:000).

Introduction

Section 1 -The regulations contain provisions on the following:

1. metering and reporting in accordance with sections 10 and 12 to 15 of the Ordinance on Guarantees of Origin for Energy,
2. the issuance, transfer and cancellation of guarantees of origin;
3. the information to be included in a guarantee of origin; and
4. the enforcement of the Act on Guarantees of Origin for Energy (2010:601) and the Ordinance on Guarantees of Origin for Energy.

Definitions

Section 2 -Words and expressions used in the regulations have the same meaning as in the Act and the Ordinance on Guarantees of Origin for Energy. The following terms are used in the way specified here:

fuel declaration: specifies the type and distribution of energy sources supplied to the plant during the declaration period, *distribution of energy*: the physical delivery of energy from the plant, *own use of electricity*: electricity consumed without being transmitted to the network subject to licensing and which is not auxiliary energy, *own use of gas, heating or cooling*: energy used within the plant and which is not auxiliary energy, *energy source*: energy used to produce electricity, gas, heating or cooling. Always denoted by a specific fuel code, *energy storage*: unit used to store energy where the energy entering the storage unit is of the same type as the energy leaving, *unit declaration*: specifies the allocation for the production of electricity from different energy sources during the declaration period if the plant has different technology codes, *auxiliary power*: electricity used for the production of electricity within a plant, *auxiliary energy*: energy used for the production of gas, heating or cooling within a plant, *licence declaration*: specifies the distribution of energy for the plant in the production of gas during the declaration period,

natural water flow: differences in the potential energy of water naturally occurring in rivers, streams and creeks, *waste heat/cooling*: unavoidable heat or cold that is generated as a by-product and would dissipate unused if there were no access to a district heating or cooling system, *standard*

¹ See Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services

pressure and standard temperature for gas: a pressure of 101.325 kPa and 0 degrees Celsius in temperature.

Net production of electricity, gas, heating and cooling

Section 3 -Net electricity production is electricity produced and measured at a point located after the withdrawal of auxiliary power and losses in transformers.

If electricity reported in accordance with the regulations does not constitute net electricity production in accordance with the first paragraph, net electricity production shall mean reported electricity adjusted by the Swedish Energy Agency with a correction factor. How the correction factor is to be determined is set out in section 6.

Section 4 - Net gas production is the gross production of gas less auxiliary energy and losses within the plant.

Net gas production is calculated from the volume or mass of the gas, at standard pressure and temperature, and then multiplying it by the higher calorific value to convert it to energy.

Section 5 -Net heat production and net cooling production are the gross production of heat and cooling, respectively, less auxiliary energy, own use and losses within the plant.

Handling of auxiliary power through an electricity correction factor

Section 6 The correction factor for net electricity production shall be calculated taking into account consumption in the plant's auxiliary system and losses in the plant's transformers. The calculation shall be carried out by an operator independent of and separate from the producer. The correction factor shall be expressed as the percentage of reported electricity corresponding to net electricity generation.

Where a correction factor has been calculated, the producer shall attach to the application a verification report stating the following: a) the technical competence of the independent party that carried out or verified the calculation; b) how the final correction factor was derived; and c) the measurements, meter readings and assumptions, if any, used to derive the correction factor.

For a plant with a production capacity of less than 10 MW, a producer may choose not to carry out the calculation referred to in the first paragraph. The correction factor is then set at 97 per cent of reported electricity produced from wind, solar or hydro power, or 90 per cent of reported electricity for other electricity production.

Auxiliary energy for gas

Section 7 -When calculating net gas production, it is possible to grant an exemption from the requirement to deduct auxiliary energy if one of the following criteria is met:

- a) The auxiliary energy is renewable and of a different type from the energy produced and has been produced within the plant, and no guarantees of origin have been issued for this energy.
- b) The auxiliary energy is renewable and of a different type from the energy produced and has been purchased from a supplier that has cancelled guarantees of origin, as evidenced by contracts.
- c) The auxiliary energy is necessary for waste treatment.
- d) The auxiliary energy is used in the production of gas through the digestion of biogenic material.
- e) The auxiliary energy is used to compress or liquefy gas for transport.

Auxiliary energy for heating and cooling

Section 8 -When calculating net production for heating and cooling, it is possible to grant an exemption from the requirement to deduct auxiliary energy if the auxiliary energy is of a different type from that produced in the plant and one of the following criteria is met:

- a) The auxiliary energy is renewable and has been produced within the plant, and no guarantees of origin have been issued for this energy.
- b) The auxiliary energy is renewable and has been purchased from a supplier that has cancelled guarantees of origin, as evidenced by contracts.
- c) The auxiliary energy is necessary for waste treatment.
- d) the total auxiliary energy does not exceed two per cent of the net heat production or net cooling production.

Information when applying for guarantees of origin for energy

Information to be included in the application

Section 9 -An application for the issuance of guarantees of origin for electricity, gas, heating or cooling shall be submitted to the Swedish Energy Agency and signed by an authorised representative of the producer.

Section 10 -If a plant is able to produce several types of energy, an application must be made for each type of energy for which the producer wishes to have guarantees of origin issued.

Section 11 -When applying for the issuance of guarantees of origin for electricity, the producer shall, upon request, submit one or more of the following items of information about the plant to the Swedish Energy Agency in a flow diagram, for example:

- a) information on flows of other types of energy;
- b) transformer substations;

- c) point of connection to the network subject to licensing;
- d) auxiliary power;
- e) electricity import and export meters;
- f) energy storage; or
- g) own use of electricity within the production plant.

Section 12 - When applying for the issuance of guarantees of origin for gas, the following information on the plant, if available, shall be attached to the application and marked in a flow diagram:

- a) information on flows of other types of energy;
- b) the point of connection to the gas network or where the gas becomes available for trade;
- c) auxiliary energy;
- d) gas import and export meters;
- e) energy storage; and
- f) own use of gas within the plant.

If hydrogen is produced at the plant, the flow diagram shall also be marked to show any compression system, purification system and liquefaction system.

A report by an independent operator who has carried out an on-site inspection of the plant shall be attached to the application for the issuance of guarantees of origin for gas. The report shall be no more than four years old.

The report does not need to be attached if the producer instead attaches one of the following to the application:

- a) an environmental permit from the county administrative board in accordance with Chapter 21, Section 2, 4 or 5 of the Swedish Environmental Assessment Ordinance (2013:251); or
- b) notification to the municipality under Chapter 21, Section 3 or 6 of the Swedish Environmental Assessment Ordinance if plants are not subject to environmental permit requirements.

Section 13 - When applying for the issuance of guarantees of origin for heating or cooling, the following information on the plant, if available, shall be attached to the application and marked in a flow diagram:

- a) information on flows of other types of energy;
- b) connection point to heating or cooling networks;
- c) auxiliary energy;
- d) import and export meters for heating or cooling;
- e) energy storage; and
- f) own use of heating or cooling within the plant.

The producer shall state in the application that measurement and/or calculation of net heat production or net cooling production is carried out in

accordance with section 5 and refer to measurement and/or calculation points in the flow diagram.

Section 14 The application shall contain the following information about the producer: a) name or company name; b) personal identity number or company registration number; c) the proportion of the plant to which the application relates that the producer holds by ownership or right of use;

d) country if the producer has an address outside Sweden; and e) contact details of the appointed contact person.

Section 15 -The application shall contain the following information about the plant to which the application relates: a) the name of the plant; b) the property designation and the postcode and town of the property where the plant is located. If this information is missing, coordinates may be given instead. Coordinates may be specified in SWEREF 99 TM or as latitude and longitude in SWEREF 99/WGS 84. c) production capacity expressed in kilowatts; d) the estimated normal annual production; e) the commissioning date; f) network owner or other company reporting meter readings; g) whether the plant has received investment support and the type of support; and h) whether the plant receives production support, and the type of support.

Section 16 -An application for the issuance of guarantees of origin for electricity shall contain the following information in addition to that set out in sections 11, 14 and 15:

- a) the network area ID;
- b) plant ID for electricity generation;
- c) the EDIEL ID of the meter reading reporting company;
- d) specification as to whether generation is measured every 15 minutes;
- e) the location of the measurement point;
- f) whether energy storage facilities are located within the same network not subject to licensing as the plant and whether the energy storage facilities can be charged with electricity from the network subject to licensing;
- g) whether there is own use of electricity and, if so, to what extent; and
- h) all types of energy that the production plant can produce.

For plants reporting generation from a measurement point into a network not subject to licensing, the abbreviation 'IKN' shall be indicated instead of the network area ID referred to in point a) of the first paragraph.

Electricity production capacity is the intended maximum output under ideal conditions.

Section 17 -An application for the issuance of guarantees of origin for gas shall contain the following information in addition to that specified in sections 12, 14 and 15:

- a) whether the plant is connected to a network, and the name of that network;
- b) if there is an upgrading plant, the commissioning date in accordance with section 15e) shall be the date on which the upgrading plant was commissioned; and
- c) production capacity in accordance with section 15c) is the estimated normal annual production divided by 8,760 hours.

If the plant produces hydrogen, the purity of the hydrogen produced can also be specified.

Section 18 -An application for the issuance of guarantees of origin for heating or cooling shall contain the following information in addition to that specified in sections 13 to 15:

- a) whether the plant is connected to a network, and the name of that network;
- b) the medium used to convey heat or cold: water, thermal oil, air or residual gases, salt, refrigerant or unspecified. Unspecified shall be used if there is more than one medium;
- c) production capacity in accordance with section 15c) is the estimated normal annual production divided by 8,760 hours.

Section 19 -In addition to what is stated in sections 11 and 14 to 16, an application for the issuance of guarantees of origin for electricity shall contain information on the energy source and type of plant with reference to the relevant technology code for electricity specified in the EECS Rules Fact Sheet 5 published by the Association of Issuing Bodies, indicated as one or more of the following options:

- a) water; b) onshore wind; c) offshore wind; d) solar; e) industrial backpressure from biofuel/peat/fossil fuel; f) combined heat and power from biofuel/peat/fossil fuel; g) condensing power from biofuel/peat/fossil fuel; h) gas engine from biofuel/peat/fossil fuel; i) geothermal; j) wave; k) nuclear; or l) other if none of the options a to k apply.

If the application concerns a plant capable of producing electricity from several different energy sources, the energy source and type referred to in the first paragraph and the commissioning date and production capacity shall be specified for each of the production units.

Section 20 -An application for the issuance of guarantees of origin for gas shall, in addition to the information set out in sections 12, 14, 15 and 17, contain information on which gas is produced specified as one of the following options:

- a) methane;
- b) ethane;
- c) propane;

- d) butane;
- e) ammonia;
- f) dimethyl ether;
- g) hydrogen; or
- h) gas mixture

Energy sources and technology codes are specified according to the EECS Rules Fact Sheet 5 published by the Association of Issuing Bodies. The technology code 'unspecified' shall be indicated if the plant has several different technology codes.

Section 21 -An application for the issuance of guarantees of origin for heating or cooling shall, in addition to what is set out in sections 13 to 15 and 18, contain information on whether the energy produced by the plant is in the form of heating or cooling.

If a plant is capable of producing both heat and cooling, separate applications shall be submitted for heating and cooling if the producer wishes to apply for the issuance of guarantees of origin for both. Technology codes and energy sources for heating and cooling shall be specified with reference to the document "Bränslekoder och teknikkoder för värme och kyla" (Fuel codes and technology codes for heating and cooling), which is available on the Swedish Energy Agency website. The technology code 'unspecified' shall be indicated if the plant has several technology codes.

How information is to be provided

Section 22 -The producer shall apply for the issuance of guarantees of origin in the manner specified on the Swedish Energy Agency website.

Application for a special account for EECS guarantees of origin

Section 23 -The following information shall be attached to the application for a special account for EECS guarantees of origin pursuant to section 18(1) of the Ordinance on Guarantees of Origin for Energy if the applicant is to be regarded as anything other than a producer or a supplier:

- a) Name or company name;
- b) your personal ID number or company registration number;
- c) contact details;
- d) financial data;
- e) area of activity, including business plan;
- f) ownership structure;
- g) estimated volume of business;
- h) whether the applicant is active in similar registers in other countries; and
- i) the level of experience of the company in trading guarantees of origin or similar instruments.

The information in points a) to i) can be provided on a "know-your-customer form" provided by the Swedish Energy Agency upon request and on its

website. The Swedish Energy Agency may authorise exceptions to the provisions of the first paragraph if there are special reasons for doing so. If a previously known operator in the system has already submitted a current know-your-customer form, this is an example of a special reason.

General information on measurement and reporting

How energy sources for the production of electricity, gas, heating or cooling are to be reported

Section 24 -Energy sources shall be reported in a fuel declaration. For plants where electricity, gas, heating or cooling is produced by using different energy sources, the producer shall report the breakdown between the energy sources used in a fuel declaration. The producer shall state the share of supplied energy quantity per energy source out of the total supplied energy quantity. Total energy supplied includes only energy that has been supplied to produce the electricity, gas, heating or cooling for which guarantees of origin are to be issued. A fuel declaration is not necessary if the plant produces electricity and has one energy source, or if the plant has production units with different technology codes, as regulated in section 33.

If household waste is an energy source, the producer shall declare that the energy source consists of 40 per cent fossil energy source and 60 per cent renewable energy source.

If electricity, gas, heating or cooling is produced using commercial waste, the producer may calculate the breakdown between fossil waste and biomass in accordance with a report relating to the plant that the producer has drawn up and verified in accordance with section 6 of the Act on certain greenhouse gas emissions (2020:1173).

Further allocation of the share of renewables in energy sources shall be based on the reference values established by the Swedish Environmental Protection Agency in accordance with Article 31(1c) of Regulation (EU) 2018/2066 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council.

How electricity, gas, heating or cooling produced from electricity, gas, heating or cooling is to be reported

Section 25 -For plants where electricity, gas, heating or cooling is produced by conversion of electricity, gas, heating or cooling for which guarantees of origin have not been issued, the energy supplied shall be declared as an energy source in the fuel declaration.

It is also possible to use energy for which guarantees of origin have been issued, if the producer can prove the existence of a contract whereby the energy supplier cancels guarantees of origin corresponding to the producer's energy use.

Conversion

Section 26 -For plants where electricity, gas, heating or cooling is produced by converting electricity, gas, heating or cooling for which guarantees of origin have already been issued, with the exception of the second paragraph of section 25, guarantees of origin for output energy shall be issued only after the guarantees of origin for input energy have been cancelled in accordance with section 8 of the Ordinance on Guarantees of Origin for Energy.

- a) Before issuing guarantees of origin after conversion, the producer must attach a certificate of cancellation of guarantees of origin corresponding to the input energy.
- b) When issuing guarantees of origin after conversion, the energy losses incurred in the conversion process shall be taken into account when calculating net electricity, gas, heating and cooling production.

After conversion, the data on the guarantee of origin shall be taken over in accordance with section 16, second paragraph of the Ordinance on Guarantees of Origin for Energy.

Rounding down to the nearest whole megawatt-hour shall always be applied if a share of a guarantee of origin is issued after conversion.

The producer shall apply for the issuance of guarantees of origin after conversion in the manner indicated by the Swedish Energy Agency on its website.

Audit report for fuel declarations

Section 27 -If a producer declares energy sources of biological origin or a mix of biological and fossil origin, the producer shall submit every two years a report compiled by an independent auditor verifying the declared energy sources for electricity, heating and cooling. If the energy produced is gas, a report shall be submitted annually. The audit report shall cover three consecutive months within the last 12 months.

This report shall ensure that:

- a) the fuel declarations submitted to the Swedish Energy Agency are correct for the period under review; and
- b) it is reasonable that the composition and quantity of the reported energy source can result in the amount of energy produced to which the issued guarantees of origin correspond with respect to the period and the respective attributes.

For electricity, gas, heating and cooling, the producer does not need to submit a report in accordance with the first and second paragraphs if the producer is obliged to report in accordance with Chapter 3, section 1 of the Act on sustainability criteria for certain fuels (2010:598) and has a sustainability

certificate covering declared fuels of biological origin or evidence of certification in accordance with section 18 of the Ordinance on sustainability criteria for biofuels and bioliquids (2011:1088).

Time for reporting

Section 28 -The information required under Sections 24 to 26, 33 and 34 and 37 and 38 shall be reported to the Swedish Energy Agency no later than the 14th of each month. Reports shall cover the immediately preceding calendar month.

Measurement and reporting for electricity

Measurement and reporting from plants in networks subject to licensing

Section 29 -Provisions on the measurement and reporting of electricity injected into a grid requiring a concession are contained in the Swedish Energy Markets Inspectorate's regulations and general advice on the Measurement, Calculation and Reporting of Transmitted Electricity (EIFS 2023:1).

Measurement and reporting from plants in networks not subject to licensing

Section 30 -The producer shall measure and report electricity production in accordance with sections 31 and 32 if the electricity production of the plant is measured in a network not subject to licensing.

Section 31 -When the producer reports meter readings, the time shall be stated in Swedish standard time, without transition to summer time. The time specified in reports under section 32 shall refer to the current time.

Section 32 -The producer shall report meter readings for every 15 minutes of the day to the Swedish Energy Agency no later than the fifth working day following the measurement day. The meter readings must be checked, and if necessary corrected, before reporting. If they are corrected, it must be indicated who has corrected them, how they have been corrected and what has been changed. 'Working day' means a day that is not a Sunday, another public holiday, Saturday, Midsummer's Eve, Christmas Eve or New Year's Eve. The Public Holidays Act (253: 1989) lays down provisions concerning the days considered public holidays. Reports shall be sent electronically using the EDIEL messaging standard.

How electricity produced with different technology codes is to be reported

Section 33 -If the producer has specified different technology codes for units within the same production plant in accordance with section 19, the plant shall be considered to use several energy sources. The producer shall report the share of electricity produced from each energy source in a unit declaration. Reporting shall be based on the measurement of electricity production.

How own use of electricity is reported

Section 34 -If electricity production reported from a measurement point in a network not subject to licensing is partly used for own consumption, the producer shall declare every month what proportion of the net electricity production has been used for this purpose.

How issuance from plants with energy storage is handled

Section 35 -If there is energy storage within the same network not subject to licensing as a production plant, the stored electricity can only form the basis for issuance of guarantees of origin if the electricity is produced at the production plant.

For pumped storage power plants, guarantees of origin may be issued only for electricity production from natural water flow.

How electricity from high-efficiency cogeneration is to be reported

Section 36 -The producer shall report the information that, according to section 17 of the Ordinance on Guarantees of Origin for Energy, shall be stated on a guarantee of origin if electricity is produced using high-efficiency cogeneration.

Measurement and reporting for gas

Section 37 -Net gas production per month shall be reported to the Swedish Energy Agency in megawatt-hours. This reporting shall be carried out digitally in the accounting system by the producer's authorised representative.

After reporting net gas production, the producer shall also indicate the distribution of energy for the period. The producer may voluntarily indicate whether they have a sustainability statement and the type of sustainability statement.

Measurement and reporting for heating and cooling

Section 38 -The producer shall measure or calculate the net heat production and net cooling production in accordance with section 5. Net production of heating or cooling shall be reported per month to the Swedish Energy Agency in megawatt-hours. This reporting shall be carried out electronically in the accounting system by the producer's authorised representative.

Changes

Producer's obligation to notify change

Section 39 -The producer is obliged to notify the Swedish Energy Agency if energy is no longer produced at a plant for which guarantees of origin are issued. The producer shall provide this notification no later than 14 days after the cessation of energy production.

Section 40 -The producer is obliged to notify the Swedish Energy Agency of changes that are relevant to the issuance of guarantees of origin. The producer

shall provide this notification no later than 14 days after the producer's decision on the change.

Specific information on guarantees of origin for gas in the Union database

Section 41 When information on a batch of gas is reported in the Union database, in accordance with provisions issued pursuant to Chapter 3, section 1f) of the Act on sustainability criteria for certain fuels, guarantees of origin relating to that batch of gas shall be transferred to the database. Such a guarantee of origin shall be cancelled once the gas has been withdrawn from the interconnecting Union gas infrastructure.

Entry into force and transitional provisions

1. The regulations will enter into force with regard to section 41 when the Commission has announced that the Swedish accounting system is connected to the Union database, and otherwise on 1 January 2026.
2. When the regulations enter into force, the Swedish Energy Agency's regulations on guarantees of origin for electricity (2017:2) will be repealed.
3. Until 31 December 2026, the correction factor for net electricity production may be determined by the Swedish Energy Agency for a plant over 10 MW without the need to perform a calculation under section 6, second paragraph.