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Federal Department of the Environment, Transport, Energy and

Communication DETEC

**Swiss Federal Office of Energy SFOE**

Most important innovations in energy law from 2018

02/11/2017

The totally revised Energy Act and other revised federal laws, the new regulations adopted by the Federal Council on 1 November 2017 (Energy Ordinance, Energy Promotion Ordinance, Energy Efficiency Ordinance) or Ordinance Changes (Nuclear Energy Ordinance, Electricity Supply Ordinance, CO2 Ordinance, Ordinance on Fees and Supervision Fees in the Energy Sector, State Geology Ordinance) New Regulation of the Federal Department of the Environment, Transport, Energy and Communications (DETEC) on Guarantees of Origin and Electricity Labeling will enter into force on 1 January 2018. An exception is the amendment to the Federal Act on Direct Federal Tax, which will only come into effect on 1 January 2020 (see media release of 2 November 2017) and Article 37 and Article 146e of the CO2 Ordinance, which will enter into force on 1 December 2017 , The following major innovations in energy law (laws and regulations) are summarized here.

**network Award**

network Award

The maximum amount of the grid supplement will be increased from previously 1.5 cents per kilowatt hour to 2.3 Rp./kWh. Due to the demand, this maximum will already apply from 2018 onwards. The network surcharge fund will replace the feed-in tariff system, the one-off payments, the investment contributions, the market premium for hydroelectricity, the competitive tenders for electricity efficiency, the exploration contributions and risk guarantees for geothermal projects, and the water rehabilitation measures ongoing obligations under the existing remuneration instruments (KEV1 and additional cost financing) and the respective enforcement costs. The net supplement fund is now managed by DETEC and no longer by the foundation "Kostendeckende Einspeisevergütung" (KEV).

Refund network surcharge

Power-intensive companies can partially or fully reimburse the grid surcharge. The reimbursement amount must be at least CHF 20,000 per annum and the company must commit to increasing energy efficiency in a target agreement with the federal government. The previous obligation to invest at least 20% of the reimbursement amount in additional efficiency measures no longer applies. To calculate the current intensity (electricity costs in relation to Gross value added), the grid surcharge and the costs for the operation and maintenance of area networks can now be included. End users who are predominantly performing a public law task are no longer eligible for reimbursement. Excluded are large-scale research facilities of national importance.

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**Promoting renewable energy**

Feed-in tariff system (formerly cost-covering feed-in tariff KEV)

Since 2009, operators of plants for the production of electricity from small hydropower, solar or wind energy as well as geothermal and biomass can claim a cost-covering feed-in tariff.

Their financing takes place via the network surcharge. The subsidy system is now limited in time: new facilities can only be added to the conveyor system until the end of 2022, renewed and expanded facilities no longer. The remuneration for systems newly added to the conveyor system3 is based on the production costs of a reference system and is therefore not

more in every case cost-covering. The compensation period will also be reduced from 20 to 15 years (exception: biomass plants). Compensation rates for wind and hydroelectric power plants will be increased slightly compared to the consultation draft, in order to partially offset the reduction in the compensation period. Overall, the new compensation for an investment thus corresponds to around 80-90% of the previous remuneration. Extensions of existing small hydropower, photovoltaic and biomass plants,

who are already in the KEV will be remunerated with a reduced rate. Micro-hydropower plants (with a capacity of less than 1 MW) are generally no longer included in the subsidy system. The existing KEV will be converted into a feed-in tariff system with direct marketing: Operators of plants with a capacity of 500 kW, who already receive a KEV, as well as operators of systems from 100 kW, which are newly included in the support system, must be no later than 1 January 2020 market their own electricity. Thus, they contribute to a needs-based

Generation at. The remuneration of direct marketing investments consists of the price obtained from the sale and the feed-in premium (remuneration less reference market price). If the operator can feed at a price higher than the reference market price, he will earn more revenue than a fixed fee (and vice versa). For plants that are not in direct marketing, the balance group Renewable Energies (BG-EE) will be continued. It will take the energy itself and sell it again.

***Information for designers in the factsheet "Feed-in remuneration (KEV) for small***

***hydro, wind, geothermal and biomass plants ":***

[***www.bfe.admin.ch/kev***](https://translate.google.com/translate?hl=en&prev=_t&sl=auto&tl=en&u=http://www.bfe.admin.ch/kev)***>***[***Fact sheets***](https://translate.google.com/translate?hl=en&prev=_t&sl=auto&tl=en&u=http://www.bfe.admin.ch/kev)

Special features photovoltaic

Small systems with a capacity of less than 100 kW can only apply for a one-time fee.

One-off payments are generally available for photovoltaic systems with a capacity of at least 2 kW up to a maximum of 50 MW. The one-time fee covers a maximum of 30% of the investment costs of a comparable facility (reference facility). Systems with a capacity of more than 100 kW can in principle continue to be included in the feed-in tariff system. there

the previous mining regime is retained, ie the reduction of the waiting list takes place in the order of submission date of the applications. According to calculations by the Swiss Federal Office of Energy (SFOE), it is likely that around 950 photovoltaic systems above 100 kW, which were registered for KEV before 30.06.2012, will be included in the subsidy system under the legal framework in force from 2018. From this date can no

Legal title to be derived. The date is an assumption calculated on the basis of the information available today and the legal framework conditions, which have changed due to changed framework conditions (e.g.

Electricity market price, political changes to the support system). The financing of the three plant operators, who already receive a feed-in tariff, is still entitled to this (Art. 72 (1) EnG).

One-off payments and feed-in tariffs are made via the grid surcharge. New feed-in tariffs can be granted until the end of 2022 at the latest, and one-off payments until 2030.

Information for designers of photovoltaic systems in the factsheet "Promotion of photovoltaics": www.bfe.admin.ch/kev> Factsheets

**Investment contributions biomass plants**

Instead of a feed-in tariff, new waste incineration and sewage treatment

as well as for substantial extensions or renewals of such

be applied for. Wood-fired power plants of regional importance can either invest

apply for a contribution or a feed-in tariff. The investment contribution should be increased

Electricity production or the extension of economic life allow and amount

not more than 20% of the eligible investment costs. Financing will be provided through the network

impact.

***Information for Designers in Fact Sheet "Investment Contributions for Biomass Plant***

***gene":*** [***www.bfe.admin.ch/foerderung***](https://translate.google.com/translate?hl=en&prev=_t&sl=auto&tl=en&u=http://www.bfe.admin.ch/foerderung)***> Investment contributions> Biomass***

Investment contributions Small and large hydropower plants

Only new small hydropower plants with an output of 1 to 10 MW are new

Feed-in tariffs promoted. An exception to the lower limit of 1 MW is made if

These are, for example, systems connected to drinking water supply or wastewater systems

connected or if there is a secondary use system. Significant expansions and renewals

of small hydropower plants from 300 kW upwards can now only be used for investment contributions.

fitieren. The investment contributions are determined on a case-by-case basis. They amount to small hydropower plants

(up to a capacity of 10 MW) a maximum of 60% of the eligible investment costs. Also for

Large hydropower plants (with a capacity of more than 10 MW) are new investment contributions;

these amount to a maximum of 35% of the eligible investment costs.

***Information for designers in the Fact Sheet "Investment Contributions for Small Water***

***turbines ":*** [***www.bfe.admin.ch/foerderung***](https://translate.google.com/translate?hl=en&prev=_t&sl=auto&tl=en&u=http://www.bfe.admin.ch/foerderung)***> Investment contributions> Small hydropower***

***More detailed information on the investment contributions for large hydropower plants***

***follow later.***

Market premium for existing hydroelectric power

Existing large hydropower plants can be used for their electricity production, which they market in

must sell the production costs and can not settle in the universal service, a

Apply for market premium. The market premiums amount to a maximum of 1 Rp./kWh. The applicants must

also provide information on measures to improve the cost situation. The names of

Investments receiving a market premium will be published by the Federal Government. The market premiums are over

financed the network surcharge. The measure is limited to five years until the end of 2022.

***More detailed information on the market premium for large hydropower plants will follow***

***later.***

Special features wind energy and "Guichet Unique"

New positive CES declarations of wind energy projects to other projects within the

in the same canton, if, for the original projects,

there is no basis for granting in cantonal planning. The coordination task for

Statements and approval procedures for wind turbines at the federal level will be submitted to the SFOE

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transfer. The "Guichet Unique" is not a leading authority in the sense of directing

Management and Administration Act. It is rather a pure coordination

task to optimize and accelerate the processing of dossiers.

**Geothermal guarantees and geothermal exploration contributions**

The new funding instrument for geothermal exploration ("Searching for and finding geothermal energy")

Reservoirs) complements the already existing funding instrument "Geothermal Guarantee". The

contribution significantly reduces the prospecting risk in advance,

be achieved. Designers can either make an exploration contribution or a guarantee

antragen.

**National interest**

If authorities or courts in the context of a balance of interests between the interests of

Nature and landscape protection and the interest of electricity production from renewable energies

In the future, both concerns will enjoy the status of a national interest. you

should therefore be equally weighed against each other. Specifically, new and best

hydropower and wind turbines above a certain size and significance have the status

of national interest. Wind turbines are available from a production volume of 20 GWh per

Year in the national interest. The threshold of national interest for hydropower plants

is for new plants with a production of at least 20 GWh per year, for extended or renewed

plants at 10 GWh per year. A new fully controllable new plant (removal of water for

800 hours of full operation) is in the national interest starting from a production of 10 GWh per year.

the renewed or renewed taxable investments is the national interest from a size of 5

GWh per year and a removal of water for 400 hours full operation. New, advanced

or renewed pumped-storage power plants are subject to an installed capacity of

interest. In biotopes of national importance and certain bird reserves, new

gene ruled out.

**Regulations for network operators and associations consumption**

Intelligent measuring systems / smart metering

By the end of 2027 (ten years after the entry into force of the new regime), 80% of all trade fair

be converted to smart meters in a network area. The remaining 20% ​​are allowed until the

Remain in service at the end of their functionality. Data from the use of measuring, control and

Control systems may only be used by network operators without the consent of the data subject

the measurement, control and regulation, the use of tariff systems and the safe,

efficient and efficient network operation, network balancing and network planning, for

energy supply, network user charges and remuneration for the use of

Control systems are used.

Intelligent controls

Network operators may only allow smart control systems with end users or producers

install with their consent unless otherwise necessary to avoid an immediate and substantial

Danger of the safe mains operation is necessary. Already installed intelligent control and re-

systems may be used by the network operator until the end user

prohibited. The end-user can not prohibit the use of

substantial and considerable danger to the network.

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Rates

Within one voltage level, end users with a comparable reference profile form a customer

dengruppe. For end users in properties used all year round with a connected load

up to 30 kVA only one customer group is allowed. For all end users at voltage levels below

1 kV with an annual consumption of up to 50 MWh, at least 70% of non-degressive labor

tariff (rp./kWh). If a smart meter is installed, the network operator can also use other network

which may include a lower percentage of the working tariff.

Proof of origin and electricity labeling

So far it was possible in the power labeling "unverifiable energy sources" (so-called

Greige) if there were no guarantees of origin. New for the

Electricity labeling always guarantees of origin are used. The indication of non-verifiable

available energy sources is no longer permissible. So, if you supply end customers with electricity, you always have to

also devalue the corresponding amount of guarantees of origin. Also the consumption of

Traction current and the losses due to (pump) storage are subject to labeling. The origin

The obligation to provide proof of detection applies not only to systems that feed electricity into the grid, but also to

basically for all systems connected to the network (exceptions: systems with a connection

not exceeding 30 kVA or a maximum of 50 hours per year), even if

these completely consume the produced electricity on site.

Acceptance and remuneration obligation of the network operator

Decentralized renewable electricity must be remunerated at least at the price charged by the

Network operator paid for the other procurement of electricity (applies to systems up to 3 MW output

or with a maximum feed-in of 5'000 MWh / year). This procurement includes the cost of

the reference of equivalent electricity at the pre-suppliers as well as the cost price of any possible

own power plants of the network operator. "Equivalent" refers to the amount of energy and that

Performance profile and the tax and predictability of the purchased electricity. The ecological

The added value of electricity must be remunerated only if the proof of

is taken. There is no obligation to do so. Network operators and producers must

contractual terms and, in particular, the connection costs, the maximum

Feed-in performance and remuneration are regulated. In addition, it must be noted whether the producer

All energy is fed into the grid or whether it consumes some of it locally itself.

**Merger for own consumption**

Merger for own consumption

Anyone who produces electricity himself already had the right to consume it himself. Likewise, it has been possible so far for end consumers to combine in a certain spatial proximity to a decentralized power production plant for their own consumption. The new energy law sets out the framework conditions for the internal and external relationship of the merger, which includes landowners, plant operators, potential tenants and tenants, and the relationship with the grid operator. In addition to the land on which the production plant is located, surrounding land is also considered the place of production. These properties must be adjacent to each other and at least one of these properties must be adjacent to the property with the production facility. A merger can therefore not extend over a public land (for example a road) or over a private property whose landowner does not wish to participate in the merger. The electricity between the system and self-consumers must not flow through the distribution network of the network operator. Residents of surrounding land are measured by a single point of measurement, which usually means that they are connected behind the same grid connection point.

More detailed information on the organization of self-consumption communities follow

later.

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**energy efficiency**

Competitive tenders in the field of electricity efficiency (ProKilowatt)

The funding for this funding instrument will be increased. In the future, efficiency measures will also be implemented in

Electricity production and distribution (including promotion of electricity production from not

otherwise usable waste heat).

Emission regulations for vehicles

The emission requirements for new passenger cars are being tightened. You should

On average, only 95 g CO 2 / km will be emitted by the end of 2020 . The rules are also on

newly added delivery vans and light semi-trailers. These should end up

In 2020, emissions averaged 147 g CO 2 / km. Both measures are carried out in accordance

with EU law. Between 2020 and 2022, introductory facilities (phasing-in

in and supercredits for vehicles with emissions of less than 50 g CO 2 / km).

building program

The Confederation and the cantons want energy consumption and CO 2 emissions from the building program

lower in the Swiss building park. For this they have been making financial contributions to energy since 2010

Renovations of buildings. On the one hand, the program will cover part of the revenues of CO 2 -

Tax on fuels, on the other hand financed by cantonal services. There will be more funds in the future

from the CO 2 levy available for the building program. A small part of the CO 2 release (ma-

a maximum of CHF 30 million per year) is used by the federal government to promote the direct use of geothermal energy

(Heat supply) used.

Tax incentives in the building sector

Investments in energy-efficient building renovation can already be expected from the income tax

be deducted. From 2020, the costs of dismantling a replacement building will also be deductible.

Furthermore, both these and the energy investment costs from 2020 can also in the two

deducted from the taxable period, if in the year in which they were incurred,

can not be fully taken into account for tax purposes.

**nuclear energy**

No new general licenses and prohibition reprocessing

General permits for the construction of new nuclear power plants as well as for fundamental changes

existing nuclear power plants will no longer be granted. The existing nuclear power plants may

be in operation for a long time than you are sure. Whether the conditions for safe operation are fulfilled

resigns the Federal Nuclear Safety Inspectorate (ENSI). It will be continued by the Parliament

previously adopted moratorium on the export of spent fuel

replaced by a perpetual ban.