



# Exemplary Energy and Climate Fact Sheet

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## 1 Initial situation

The Exemplary Energy and Climate (EEC<sup>1</sup>) initiative is aimed at actors who want to act in an innovative and exemplary manner to achieve the objectives of the Energy Strategy 2050. The actors targeted are primarily enterprises and organizations all over Switzerland that are closely linked to the Federal Government and the cantons.

2021 marks the start of a new decade for EEC. The Swiss Federal Office of Energy is convinced this is the right time for other organizations or businesses to join this Initiative. Because future energy- and climate-policy challenges can only be overcome with a joint commitment.

## 2 EEC targets system 2021-2030

The targets system 2021-2030, which includes monitoring, serves as proof for the EEC actors that their actions are in line with the Energy Strategy 2050. In summary, the targets system consists of the following variables:

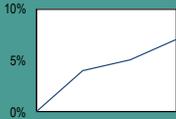
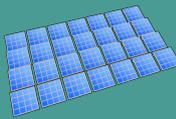
	Energy efficiency (energy intensity)	Share of renewable energies	Absolute green power production	Measures
				
Target value Description	Energy consumption divided by reference variable	Renewables' share of total final energy consumption	In-house production + Energy sourced from contracting facilities	15 joint and individual measures
Target value	Individual	Thermal energy and liquid fuels: individual Power: 100% renewable	Individual	Specific measures
System limit	Significant share (benchmark 80%) of the organization's energy consumption in CH	Total energy consumption of the organization in CH (according to GRI* standard)	CH	Specific measures

Figure 1: Overview of targets system \* Global Reporting Standard

The target values are based on the following two international reporting/target systems for energy and climate:

- Global Reporting Standard GRI (the basis for energy data collection)
- Science-Based Target initiative SBTi (CO<sub>2</sub> reduction path)

<sup>1</sup> Exemplary Energy and Climate



## 2.1 Energy efficiency



**Description:** the actors are increasing their energy efficiency. This is calculated from the reduction in energy consumption per reference variable (e.g. energy consumption per square metre) compared to the average value for 2018/2019. This calculation method is based on the Standard Global Reporting Initiative GRI 302. Different reference variables can be defined for different corporate divisions. The increase in efficiency per division is added up on a weighted basis to calculate the energy efficiency of the whole company.

**Target value:** the target value for energy efficiency is proposed by the actor, together with a description of their level of ambition.

**System limit:** the main energy consumption should be included in energy efficiency in order to be able to represent as far as possible a trend for the whole organization or company. 80% of the final energy consumption as per GRI 302-1 is included as a benchmark.

**Monitoring:** data on final energy consumption per corporate division and the corresponding reference variables is collected annually.

## 2.2 Share of renewable energies



**Description:** the actors are increasingly using renewable energy sources. To this end, they are setting themselves targets for the share of renewable energies. This is calculated from the ratio between renewable final energy consumption and total final energy consumption. The share is shown separately for electricity and other energy sources.

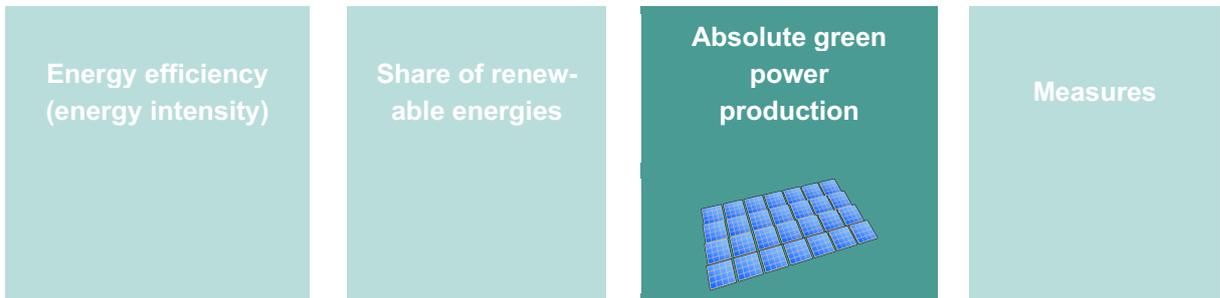
**Target value:** the share of renewable power (sourced and own production) is set at 100%. Certificates of origin (CO) for renewable sources from the grid of the European Network of Transmission System Operators for Electricity (ENTSO-E) are counted as renewable power. The target value for the share of renewables excluding electric power is proposed by the actor, together with a description of their level of ambition.

**System limit:** the organization's total energy consumption in Switzerland is within the system limit (calculated according to GRI Standard 302-1).

**Monitoring:** data on final energy consumption per energy source is collected annually (electricity, solid fuels/heat, liquid fuels). Electric power is recorded separately as renewable/non-renewable.



### 2.3 Absolute green power production



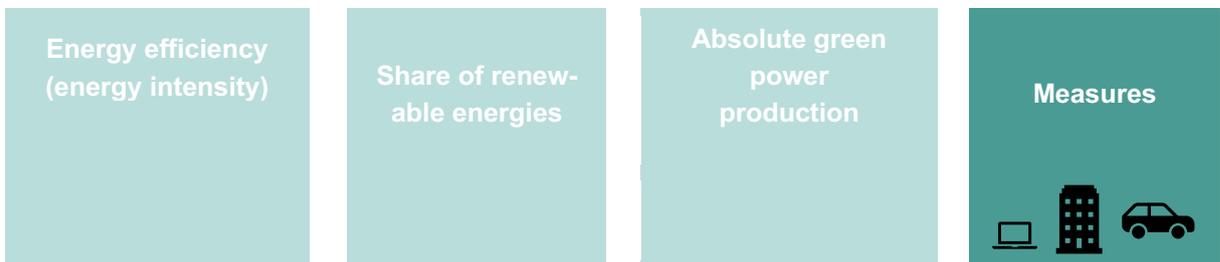
**Description:** the actors are increasing their own green power production by building power generation facilities (e.g. photovoltaic installations). The power quality must meet the stringent requirements of naturemade star.

**Target value:** the target value for green power production is proposed by the actor, together with a description of their level of ambition.

**System limit:** all the actors' power production facilities in Switzerland that meet the requirements of naturemade star are within the system limit. The power can be consumed by the producer itself or be sold. In the case of contracting facilities, only the consumer can be credited for the renewable power.

**Monitoring:** data on self-generated green power or, as applicable, the power sourced from contracting facilities, is collected annually.

### 2.4 Measures



**Description:** the actors implement exemplary measures, which can also be adopted by other companies. For this purpose, they defined a catalogue of 15 joint measures from the three areas of management, specified targets and procurement, as well as operation with target values. The joint measures apply as a matter of principle to all actors. Measures for which individual organizations have no leeway (for example, for legal reasons) can be excluded for those organizations. The individual measures are described briefly on the following pages.

**Target value:** implementation of the measures is evaluated using a four-stage traffic-light system. The last stage corresponds to the target value set for 2030.

**System limit:** the system limit is defined individually for each measure.

**Monitoring:** a distinction is drawn between qualitative and quantitative measures. In the case of qualitative measures, the actors assess annually the degree of implementation by indicating the stage they have reached. In the case of quantitative measures, the parameters used to calculate the stage are asked for directly (e.g. the number of newly-installed, renewable heating systems for measure 7).

In addition to the joint measures, the actors define individual measures with target values before the programme starts in order to set out their individual leeway for action.



## The 15 joint measures

### 1) Energy management system

The actors run their own energy management system (EnMS) or an externally-certified EnMS (e.g. according to ISO 50001). Energy management means systematically analysing energy consumption, planning measures to optimize energy utilization and regular monitoring of their effectiveness (Plan-Do-Check-Act cycle). 2030 target: the EnMS is implemented and the PDCA cycle is run at least once a year.

### 2) Mobility management

The actors run their own mobility management system (MMS) or an externally-certified MMS (e.g. according to SNR 1555000). Mobility management means systematically analysing mobility aspects, defining targets and planning measures to optimize mobility aspects and regularly monitoring their effectiveness (Plan-Do-Check-Act cycle). 2030 target: the MMS is implemented and the PDCA cycle is run at least once every 4 years. Continuous improvement of mobility aspects is proven and ensured.

### 3) Eco-funds management

The actors each manage an eco-fund. The eco-fund is financed from the reimbursement/re-distribution of environmental incentive levies. The eco-fund is used to finance energy-efficiency measures, measures for renewable energies, measures to reduce greenhouse-gas emissions and further measures to reduce negative environmental impacts. **Target 2030:** 100% of the reimbursements/re-distributions flow into the eco-fund.

### 4) Awareness-raising among employees in the energy and climate sectors

The actors regularly raise awareness among their employees of energy-efficient and climate- or resource-saving behaviour and urge them to actively implement energy-saving measures. To this end, they conduct broad-based awareness campaigns and take specific activation measures for individual employee groups. **Target 2030:** at least 1 awareness campaign plus at least 2 activation measures per year.

### 5) Energy-efficient new buildings

The actors have their standard new buildings (e.g. administration and residential) certified with one of the

following labels: Minergie-P/A-ECO, SNBS, DGNB System Switzerland, LEED or 2000-watt site for site superstructures. If a new building is not certified, it must comply with strict efficiency requirements derived from labels for construction and operation. For special buildings (e.g. train stations and barracks), the actors have specified their own targets, based on the best practice principle. **Target 2030:** at least 90% of the new buildings built since 2021 are certified with one of the above-mentioned labels and/or meet the energy-consumption requirements.

### 6) Promotion of energy-efficient modernization

The actors are modernizing their existing standard buildings (e.g. administration, residential and industrial) so that as large a share as possible attains a GEAK class A-C in building shell efficiency, or the limit value for converted buildings according to SIA 380/1:2016. **Target 2030:** at least 60 % of the energy reference area of existing buildings is modernized in terms of energy efficiency.

### 7) No new fossil-fuel-powered heating systems

The actors do not install any fossil-fuel-powered heating systems in their buildings. This also applies to the replacement of existing systems. In justifiable exceptions, renewable substitutes for fossil fuels (e.g. biogas) are used wherever possible. If substitutes are not possible either, the quantities of fossil fuels sourced must be offset with certificates. The offsetting obligation also applies to the fossil-fuel share of new district-heating connections. **Target 2030:** at least 95% of heating systems newly installed since 2021 are operated without fossil fuels.

### 8) Energy-efficient building technology

The energy-relevant aspects of newly-planned building technology facilities correspond at least to those of the latest Building Technology Recommendation of the Coordinating conference of the construction and real-estate services of public building owners (KBOB). **Target 2030:** specified targets are used and their implementation is subject to random checks. The target value of this measure is to be achieved by no later than 2026.

### 9) Procurement of energy-efficient vehicles

The actors procure energy-efficient vehicles. Passenger cars must run on renewable fuels and be in



energy-efficiency category A. Tyres with tyre label A (summer) or at least B (winter) must be used. For other vehicles, either the most energy-efficient models available are procured, or the CO<sub>2</sub> emissions and energy efficiency are weighted as an assessment criterion for procurement with a combined weight of at least 20%. The actors provide the charging infrastructure necessary for electric vehicles. **Target 2030:** the specified criteria are applied to at least 95% of the vehicles procured.

#### 10) Life cycle cost analysis

When making investment decisions on energy-consumption-related appliances or equipment, appropriate account shall be taken of the total life-cycle costs. Life-cycle costs as defined by ISO standard 20400 are taken to mean not only the acquisition, operation and maintenance costs but also the indirect costs that are passed on to the environment through production, operation and disposal. Where possible, indirect costs are taken into account by the stakeholders in the life-cycle cost analysis. **Target 2030:** at least 50% of procurements meet the above requirements.

#### 11) Building-specific recording of energy consumption (energy accounting)

The actors record their site-related energy consumption at least once a year, on either a building-specific or a facility-specific basis. **Target 2030:** at least 80% of site-related energy consumption is recorded on a building- or facility-specific basis.

#### 12) Optimization of building technology operation

The actors conduct continuous operational monitoring and regular operational optimizations (OO) of building technical facilities and check on their success. Frequency of the OO: an energy-efficiency OO is carried out after commissioning, major conversions, etc. If no such events occur, at least once every five years. **Target 2030:** at least 80% of the energy consumption of building technical facilities is subject to the regular OO.

#### 13) Highly energy-efficient data centres (DCs)

The actors apply best-practice standards to their data centres including their infrastructure. Cooling solutions without refrigeration machines are promoted and, where possible, surplus waste heat is used. In existing DCs with conventional cooling, the cold aisle

temperature in the IT system room is at least 27° C. Furthermore, if IT infrastructure is outsourced, energy efficiency is taken into account when evaluating bids. **Target 2030:** the average PUE across all in-house data centres and outsourced IT infrastructure is a maximum of 1.3.

#### 14) Data Centre Infrastructure Management (DCIM)

Data Centre Infrastructure Management (DCIM) systems are used to collect data from the various sectors of a data centre in a structured manner. This enables the data centre to be monitored, analysed and controlled centrally and optimization measures to be planned. The actors evaluate and test DCIM tools. **Target 2030:** the DCIM tool is used for energy-efficiency optimization in at least one sub-sector of a data centre.

#### 15) Elimination of decentralized server rooms

If possible, the actors will abolish decentralized server rooms if they are operated less efficiently than their large data centres. Elimination is achieved, for example, by integrating them into the centralized data centres. **Target 2030:** at least 50% of possible decentralized server rooms will be abolished.



### 3 Reporting and communication

Final energy consumption, the CO<sub>2</sub> emissions and the targets achieved by the actors will be published in a report every two years. The Office for Exemplary Energy and Climate ensures basic communication on the Initiative with a focus on the target groups of the public sector and Swiss companies. The actors explicitly refer to the Initiative in their own communication.

### 4 Organization

The Initiative's activities are coordinated by the Coordination Group on Exemplary Energy and Climate (CG-EEC), which consists of one representative of each of the actors. The CG-EEC is managed by the SFOE and supported by the Office. The Office carries out the operational activities such as the annual monitoring and communication activities. If necessary, working groups are set up by the CG-EEC to deal with specialized topics.

