



COST-EFFICIENT CLIMATE PROTECTION AND ENERGY EFFICIENCY

 **ENERGY AGENCY**

■ ■ **SWISS PRIVATE SECTOR** EnAW

The Energy Agency for Industry (EnAW)



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The legal framework for energy and environmental policy comprises national and cantonal regulations. Every enterprise faces different challenges and has its own potentialities depending on economic sector, canton and energy intensity. We advise enterprises individually and point to the best way in which to meet their legal obligations simply and economically.

One basis on which to be exempted from the federal CO₂ tax is a target proposal, which is formulated when establishments opt to participate in the EnAW Energy or SME Model. The energy management system that underlies our models is easy to handle and inexpensive to implement. «Power-intensive» enterprises can also use the target agreement from the Energy Model to secure reimbursement of the network surcharge.

Experienced EnAW advisers determine the cost-effective energy-saving potential and on that basis formulate an individual energy and CO₂ reduction target, as well as a list of measures with which each establishment can efficiently attain its own target.

EnAW: By industry. For industry.

We provide our participants with tried and tested, all-round service in energy management, through excellent products, services and ISO 50001-compliant tools that are recognized by the authorities. For implementation, we rely on cost-effective efficiency measures that bring down each establishment's energy consumption and CO₂ emissions. EnAW is a non-profit organization run by industry, for industry.

Cost-cutting through tax exemptions

The Federal CO₂ Act

The CO₂ Act lays out the Confederation's climate policy goals. Switzerland is aiming for a 20 per cent cut in its CO₂ emissions by 2020. The business sector is required to make its contribution through a CO₂ tax on its use of fossil fuels. EnAW guarantees the cost-effective implementation of this requirement.

Establishments engaged in certain activities can obtain a waiver of the CO₂ tax. To do so, they must make a commitment to the Federal Office for the Environment (FOEN) to lower their CO₂ emissions. One basis for reaching a target agreement is participation in the EnAW SME or Energy Model.

The CO₂ tax can be waived only for enterprises engaged in the activities expressly laid out in the CO₂ Ordinance and with annual CO₂ emissions of at least 100 tonnes. This is roughly equivalent to 38 000 litres of heating oil or 500 000 kWh of natural gas. Businesses that do not reach this threshold can join forces and jointly commit to a reduction target.

The Federal Energy Act

The Energy Act contemplates, inter alia, financial contributions for promoting renewable energies (KEV). The contributions are financed by means of network surcharges and amount to a maximum of 2.3 cents per kilowatt hour.

«Power-intensive» establishments with electricity costs of at least 10 per cent of their gross value added may obtain a full refund of the network surcharges. Electricity costs falling between at least five and less than 10 per cent of gross value added qualify for a partial refund.

The refund is tied to conditions. Amongst other things, the amount of the refund must be at least CHF 20 000 and the company must commit to enhancing energy efficiency in a target agreement with the Confederation. Participation in the EnAW Energy Model is a condition for concluding a target agreement.

Eight steps to the target agreement

- 1 Work out costs and benefits using the cost-benefit calculator at www.enaw.ch
- 2 Select appropriate model and sign up for SME or Energy Model
- 3 Work out the bases (data, analysis of current situation, type of target agreement)
- 4 Produce a list of measures using the EnAW check-up tool

EnAW benefits under a target agreement

Target agreement		Third party subsidies	CO ₂ tax Refund	Network surcharge Refund	Large-scale consumers and cantons
 SME-Modell	voluntary	×			
	mandatory	(×)	×		×
 Energy-Modell	voluntary	×			
	mandatory	(×)	×	×	×
ETS-participants	mandatory		(×)	×	×

CO₂ tax exemption for:

Swimming pools and artificial ice rinks, mining industry, chemical and pharmaceutical industry, greenhouses, glass and ceramics, woodworking, hotels, coking plants and mineral oil processing, synthetics, metal production and working, food and feedstuffs, paper, tobacco processing, textiles and laundries, watchmaking industry, amongst others.

Exhaustive list of the activities specified by the lawmaker: CO₂ Ordinance, Annex 7

Voluntary target agreement

Over 1000 establishments have voluntarily concluded a target agreement and set themselves climate and efficiency goals independently of legal obligations. Thanks to the cost-effective measures and energy management system being operated jointly with EnAW, establishments benefit from energy cost savings and subsidies from EnAW partners.

- 5 Work out proposed target based on cost-effective measures
- 6 Submit request for waiver to FOEN (reduction obligation)
- 7 Conclusion of (universal) target agreement (audit)
- 8 Twofold benefits: Save on energy costs and CO₂ tax.

Three sample calculations	Small enterprise	Medium-size enterprise	Large, CO ₂ -intensive enterprise
Initial situation of the enterprise			
Electricity per year (kWh)	200 000	400 000	2 500
Heating oil (liters)	25 000	100 000	1 500 000
CO ₂ emissions (tCO ₂ /a)	66	264	3 953
Energy costs per year ¹ (CHF)	47 500	130 000	1 425 000
CO ₂ -Tax per year ² (CHF)	6 336	25 344	379 488
per year (CHF)	53 836	155 344	1 804 488
over 10 years (CHF)	538 360	1 553 440	18 044 880
Savings	with SME model	with SME model	with energy model
Energy cost savings per year (CHF)	-4 280	-11 700	-128 000
CO ₂ tax savings per year ³ (CHF)	not permitted	-25 344	-379 488
per year (CHF)	-4 280	-37 044	-507 738
over 10 years (CHF)	-42 800	-370 440	-5 077 380
Participation costs			
∅ participation costs per year ⁴ (CHF)	1 600	3 842	6 600
Total participation costs over 10 years (CHF)	16 000	38 420	66 000
minus one-off benefits ⁵ (CHF)	-2 715	none	none
over 10 years (CHF)	13 285	38 420	66 000
Net savings over 10 years (CHF)	-29 515	-332 020	-5 011 380

■ pay ■ save

1 Energy price estimates: Heating oil CHF 0.7/ l, electricity price CHF 0.15/kWh.

2 at CHF 96 per tCO₂.

3 Authorization by industry and from 100t of CO₂.

4 According to price model EnAW: first year with surcharge plus 9 subsequent years.

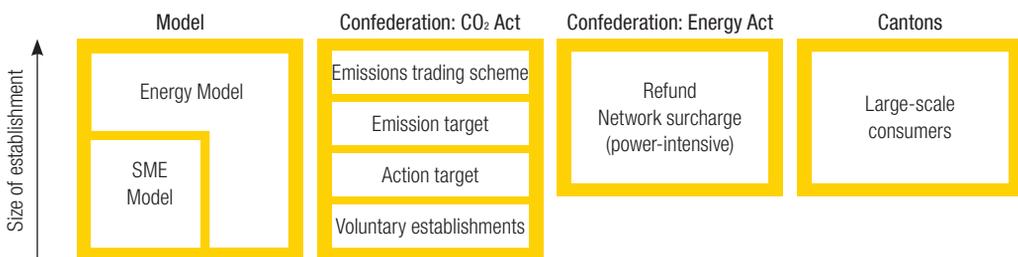
5 cf. www.enaw.ch/foerdermittel

The Universal Target Agreement

By concluding a Universal Target Agreement, establishments throughout Switzerland – including enterprises with operating locations in several cantons – comply with federal and cantonal statutory provisions. The Universal Target Agreement forms the basis for exemption from:

- Cantonal detailed provisions (large-scale consumer legislation)
- the CO₂ tax (CO₂ Act 2013 to 2020)
- the network surcharge (including the levy to support the «feed-in remuneration at cost» (KEV) scheme)

Scope of the Universal Target Agreement



Excellent products for implementing the universal target agreement



SME Model

Entities with annual CO₂ equivalent emissions falling between 100 and 1500 tonnes can submit

a request to the FOEN that the scale of the reduction be set through an action target. Implementation takes place using the SME model. The action target covers the amount of greenhouse gas emissions to be cut by the enterprise by the end of 2020.



Energy Model

Establishments may be waived payment of the CO₂ tax and the network surcharge if they accept

a pre-set, absolute emission/efficiency target. The emission target includes the maximum amount of greenhouse gases that an establishment may emit by the end of 2020. Implementation takes place using the Energy Model.

In the SME model, measures are dictated, inter alia, by:

- The state of technology in the company,
- the remaining potential for reduction,
- the cost effectiveness of the measures,
- the potential CO₂ tax savings.

Under the Energy Model, the individual reduction path is based, inter alia, on:

- The level of greenhouse gas emissions in the preceding two years,
- the state of technology in the establishment,
- the measures already taken to reduce greenhouse gas emissions,
- the remaining reduction potential,
- the cost-effectiveness of further measures.

The benefits of participating in the EnAW

**Your
advan-
tages**

- ✓ **Cost savings**
Reduced energy costs (power and heating) through consistent evaluation, recommendations and technical support in implementing cost-effective measures.
- ✓ **Advice by qualified and neutral consultants in all energy and CO₂-related matters**
Basis for energy management, goods accounting, monitoring and for any ISO 50001 certifications.
- ✓ **Exemption from taxes and cantonal detailed provisions**
Concluding a Universal Target Agreement is the basis for exemption from the federal CO₂ tax, the network surcharge and cantonal detailed provisions under the legislation governing large-scale consumers in the cantons. This reduces administrative costs.
- ✓ **Benefits and subsidies**
Thanks to partnerships with the Swiss Climate Foundation, power companies throughout Switzerland as well as other organizations, EnAW participants benefit from a range of advantages.
- ✓ **Support from A to Z**
From experienced and qualified energy consultants, through to the conclusion of a target agreement, to follow up and reporting, we are a one-stop shop for all services, delivered long-term and with high quality.

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