Hub for future energy use

9th Annual Report of SwissEnergy 2009/2010

swiss energy

Stability in a turbulent year

In 2009, the SwissEnergy programme functioned well despite the economic crisis. The impacts of the voluntary measures implemented in the partnership programme for energy efficiency and renewable energies once again attained the same high level as that attained in 2008. In these economically uncertain times the programme significantly stimulated the economy generating investment and creating employment. The SwissEnergy programme thus successfully proved its worth as a hub for the non-bureaucratic coordination of the stabilisation programmes recently adopted by Parliament. The next stages of the SwissEnergy programme for the period up to 2020 also took shape.

The SwissEnergy programme bundles expertise, stimulates innovation, promotes the introduction to the market of efficient, renewable technology in the energy sector and supports voluntary initiatives by providing help in the fields of communications and consulting. The programme is an important instrument for the implementation of Switzerland's energy and climate policies. SwissEnergy has clear, ambitious targets:

- By 2010 consumption of fossil fuels and emissions of CO_2 will be reduced by ten per cent compared to the year 2000 for the former and compared to 1990 for the latter.
- Electricity consumption will increase by five per cent at most by 2010 in comparison to 2000.
- Production from hydropower, small-scale hydropower plants in particular, will be promoted further.
- The proportion of renewable forms of energy contributing to the overall generation of electricity will be increased by one per cent (500 gigawatt-hours [GWh]) and of heat by three per cent (3,000 GWh).

In addition to legal measures (e.g. CO_2 tax and partial earmarking for a building programme and energy regulations for buildings and appliances), to reach these targets there is still a need for the voluntary measures instituted by SwissEnergy in the form of information, consulting, and training and continuous education. The programme relies on its broadly supported network established steadily over the years in which all players pull together in implementing intelligent energy and climate policies.

Solid result

After nine years as an overall programme the SwissEnergy programme has made a convincing impact:

- In 2009, the voluntary measures promoted by the SwissEnergy programme achieved an additional impact – savings or substitution by renewable sources of energy – amounting to 3.9 petajoules (PJ). This corresponds to about 0.5 per cent of Switzerland's energy consumption.
- Despite the economic slump, the fine result achieved in 2008 could be equalled because of the efficient use of funds. The poor economic environment had a negative effect on the Industry sector, however this could be compensated for in the other sectors.
- The impact of all the continuing voluntary measures implemented by the SwissEnergy programme since 2001 increased in 2009 compared to 2008 by 21 per cent to 27.1 PJ.
- The energy-related impact of continuing voluntary measures implemented by the SwissEnergy programme and Energy2000, its forerunner, rose by seven per cent to 35.9 PJ and savings in CO_2 (incl. outlying processes) amounted to 2.8 million tonnes, or more than four per cent of Switzerland's total CO_2 emissions.
- The additional, stable, energy-related impacts served to support the economy and the labour market: Promotion measures introduced by the SwissEnergy programme generated investments and expenditure for operating and maintenance of about 1.4 billion francs. The impact on employment coupled to this expenditure, including the estimated impact in 2009 arising from earlier measures, is at about 6,800 person-years.

- From the financial standpoint, 2009 was a special year: As part of the stabilisation measures, about 100 million francs were made available for the building refurbishment programme planned for 2010 (on the basis of partial earmarking of the CO_2 tax). The cantons received 80 million francs in the form of global contributions. 18 million francs were used in a campaign to introduce the cantonal energy certificate for buildings (CECB) of which 15,000 were issued. About 2 million francs flowed into preparations for the national building refurbishment programme and into other cantonal schemes. By contrast, only about 26 million francs were available to the SwissEnergy programme for voluntary measures, about six per cent less than in 2008.

With such results the SwissEnergy programme is well positioned to implement the further stage of the programme from 2011 to 2020 that got the go-ahead of the Federal Council in December 2009. In the long term the programme is committed to achieving the ideal of the 2,000 watt society and is based on the energy-related four pillar strategy established by the Federal Council. The programme should make an additional meaningful contribution to exhausting the potential of energy efficiency and renewable energies. The programme is influenced by the sustainable energy policy and also contributes to the security of Switzerland's energy supplies

	Targets for 2010	Situation in 2009
Rational energy use		
Consumption of fossil fuels[1/2]	−10 %	−1.3 %
Electricity consumption[2]	≤+5 %	+9.8 %
CO_2 emissions[1/3]	−10 %	−2.7 %[5]
from combustibles	−15 %	−12.1 %[5]
from vehicle fuel	−8 %	+12.8 %
Renewable forms of energy		
Hydropower[2/4]	stable	+2.2 %
Other renewable forms of energy[2]		
Electricity[2]	+0.5 TWh (+1 percentage point)	+0.46 TWh
Heat[2]	+3.0 TWh (+3 percentage points)	+3.37 TWh

Figure 1 – SwissEnergy goals for 2010 and the situation in 2009.

1 Excluding foreign flights; domestic principle according to the CO_2 Act
2 With reference to 2000
3 With reference to 1990
4 Average production anticipated
5 Corrected for variations in the climate

Impacts on energy consumption in 2009

The programme management has continued to concentrate on five priority sectors determined as to content in 2009. These are building modernisation, renewable forms of energy, energy efficient appliances and electric motors, rational use of energy and use of waste heat by industry and energy efficient, low-emission mobility. This consequent course has led to the following picture for 2009:

- The additional impacts achieved in 2009 – based on voluntary measures encouraged by the SwissEnergy programme – lay at 3.9 PJ, which is about 0.5 per cent of the final energy consumption. This is almost a repeat of the very good result obtained last year. Considering the downturn in the economy it is a remarkable result.
- The most successful products in 2009 with respect to additional impacts were MINERGIE, SwissEnergy for municipalities, promotion of energy from wood, heat pumps and use of waste heat.
- Compared to 2008, the impact of all the continuing voluntary measures implemented by the SwissEnergy programme since 2001 increased in 2009 by 21 per cent to 27.1 PJ. The impact of all continuing voluntary measures from Energy 2000 and SwissEnergy combined increased by seven per cent to 35.9 PJ.
- In the ninth year of the SwissEnergy programme economies of around 2.9 PJ could be attained in combustibles, 0.4 PJ in vehicle fuels and about 0.6 PJ in electricity or could be substituted with renewable forms of energy as a result of voluntary measures and of the promotional measures at cantonal level.

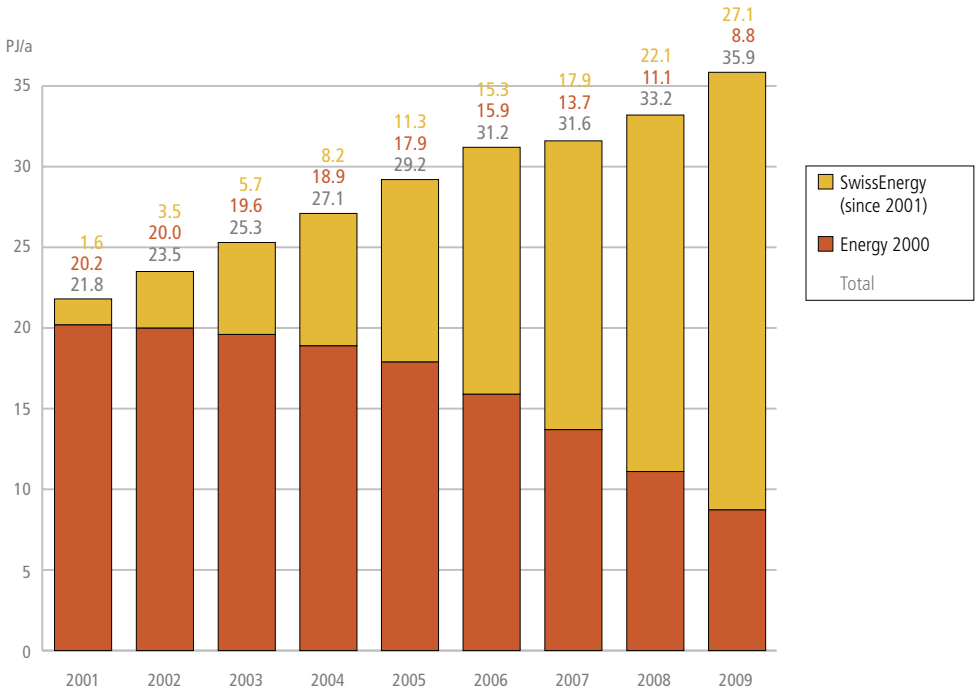


Figure 2 – Energy-related impacts from 2001 to 2009 based on voluntary measures introduced since 1990 as a result of the Energy 2000 and the SwissEnergy programmes according to the INFRAS impact analysis.

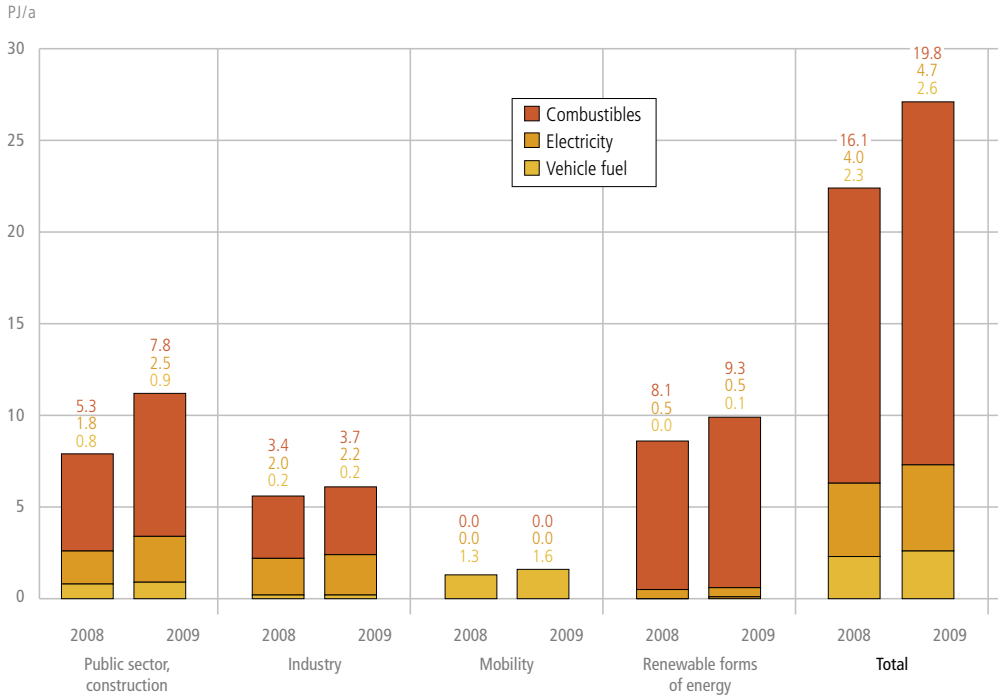


Figure 3 – Savings in energy and additional production from renewable forms of energy in the years 2008 and 2009 respectively including the continuing impact of voluntary energy-related measures generated during the SwissEnergy programme (excluding the impact of legislation).

- The additional impacts in the sector Public sector and buildings increased clearly in 2009. The impacts rose by 19 per cent to 2.2 PJ compared to 2008.
- The Renewable energy sector achieved an additional impact of 1.5 PJ, a 9 per cent increase. It should be noted that facilities that profit from compensation for feed-in remuneration (CRF) are not included in the impact achieved by the SwissEnergy programme. The development of the impact achieved by the SwissEnergy programme does not reflect the admirable overall growth rates in all sub-markets.
- Based on the figures, the additional impacts in the Industry sector amounted to approximately 0.4 PJ, so such have been halved in comparison to the previous year. In this market sector the main impacts achieved resulted from the actions taken by the Energy Agency for the Economy (EnAW). The main reason for this distinct decline is the economic crisis. Numerous companies were forced to reduce production in 2009. This led to a significant reduction in energy consumption, but because this was not achieved by EnAW measures it could not be counted as an additional impact on energy consumption. Further, numerous existing measures depend on the annual production and so such had less impact than in 2008.
- In the meantime, a strong increase was noted in the market sector Mobility with a 36 per cent increase to almost 0.2 PJ. The improved Eco-Drive product that informs drivers about how to drive economically made a significant contribution in this respect.

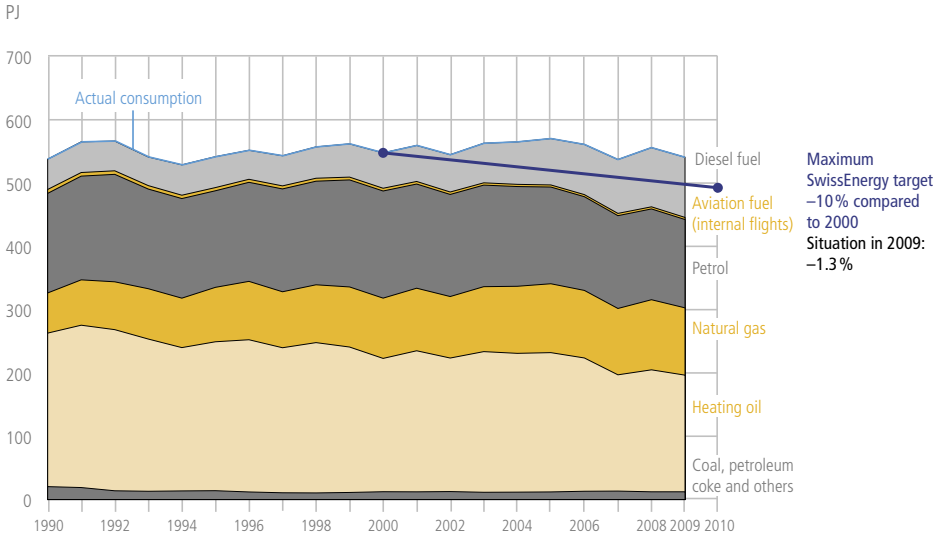


Figure 4 – Consumption of fossil-based energy, 1990 to 2009, and SwissEnergy target.

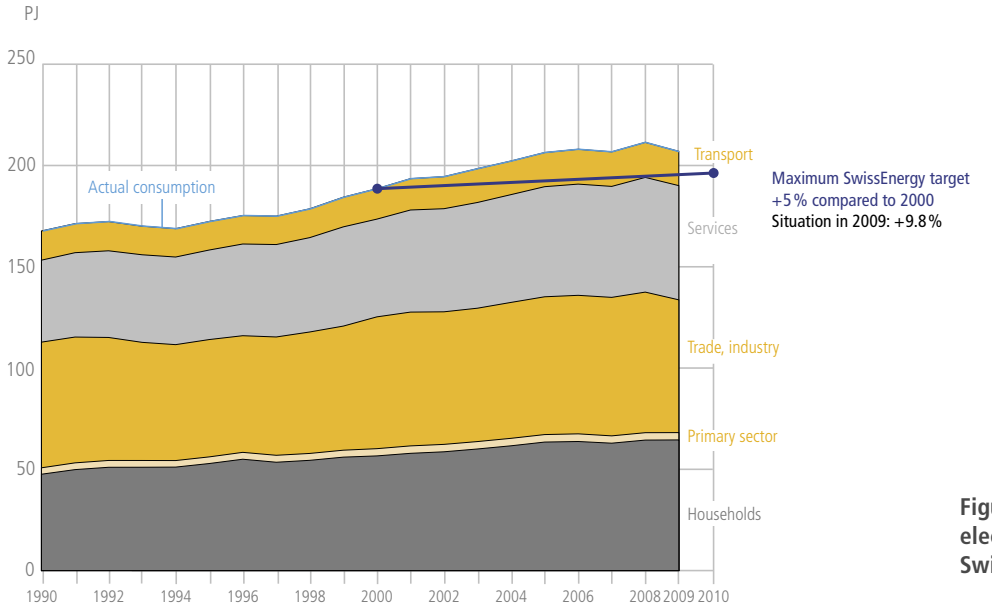


Figure 5 – Consumption of electricity, 1990 to 2009, and SwissEnergy target.

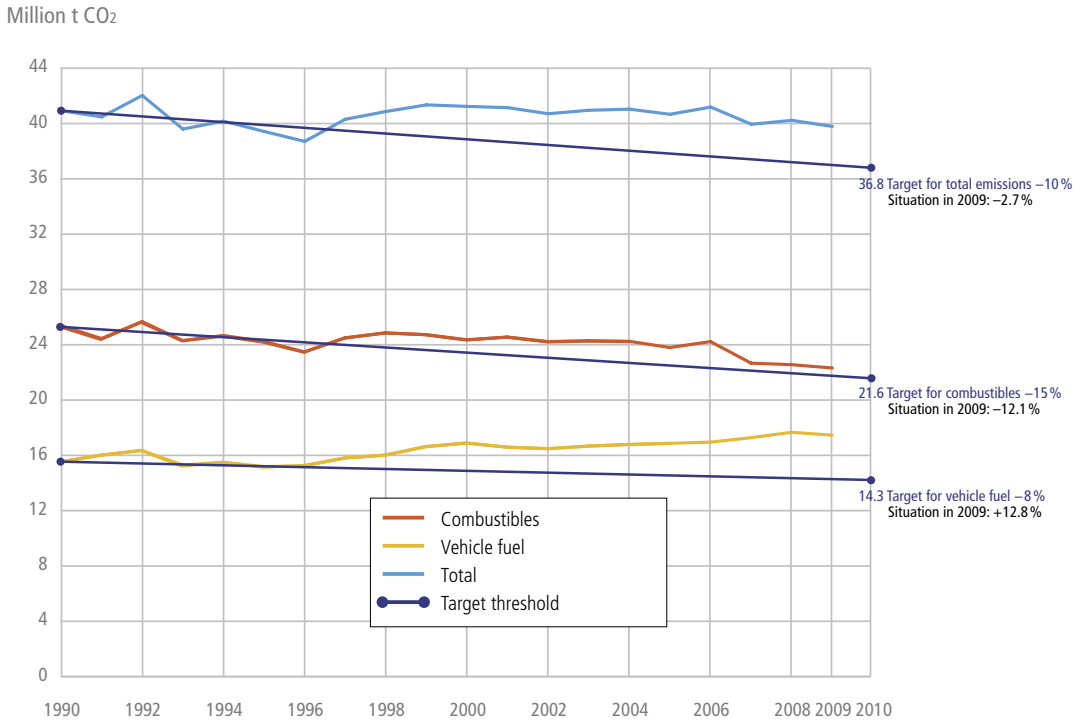


Figure 6 – CO_2 emissions, 1990 to 2009, and targets according to the CO_2 Act.

Impacts on the economy

Use of funds

The effectiveness of the funds employed (excluding global contributions) improved further compared to 2008: To achieve savings of one kilowatt-hour of energy in 2009 required subventions of 0.09 cents, 6 per cent less than in 2008. In 2003, the amount required was about 0.6 cents. This shows how strong the leverage achieved by the funds used by the SwissEnergy programme was – and how efficient the programme has become through experience and continuity.

Investments in the green economy

In 2009, together with the cantons, its partners in the market and the target groups concerned, the SwissEnergy programme generated gross investments amounting to 1,400 million francs (2008: approx. 1,190 million francs). Half the investments were made in the Renewable energy sector; the second most important pillar was the Public sector and buildings.

Stimulating the job market

Once again the SwissEnergy programme had a stimulating effect on the job market: the impact on employment in 2009 rose to about 6,800 person-years. The greatest effect on employment was generated by Public sector and buildings, and Renewable energies. Three-quarters of the estimated impacts are consolidated in these sectors. The building industry profited most from the volume of employment created. Positive effects were also seen in the branches machinery and vehicles, consulting, planning, information technology and training, and in electrical engineering and electronics.

Additional revenue	Million CHF
Income tax	54 – 92
Value Added Tax	3 – 34
Unemployment Insurance (lower amounts paid out)	326 – 550
Total additional revenue	**383 – 676**
Expenditure	
Voluntary measures of the SwissEnergy programme	26
Global contributions to the cantons	80
Introductory campaign for the Cantonal Energy Certificate for Buildings (CECB)	18
Preparations for a national building refurbishment programme	2
Funding generated by cantons as a result of global contributions	112
Decrease in energy tax revenue	13
Total expenditure	**251**
Balance (positive)	**132 – 425**
Investment generated[1] by voluntary measures[2]	**1,480**

Figure 7 – Impact of voluntary SwissEnergy measures in 2009 on public finances and the unemployment insurance, and investment generated by SwissEnergy funding in 2009.

[1] Funding by Federal Government, cantons and other SwissEnergy partners
[2] Including cantonal promotional programmes

Activities in 2009

Energy Cities surge ahead

2009 was the most successful year in the history of the SwissEnergy for Municipalities programme. 30 further towns received the "Energy City" label as a reward for their exemplary energy policies. Lucerne, Münsingen and Vernier won the international "European Energy Award GOLD". This brings the number of Energy Cities – small and large – to 205 as of 1 January 2010. 3.1 million people, more than 40 per cent of the Swiss population, live in an Energy City. The energy-related impacts rose in 2009 by twelve per cent. In addition to the new Energy Cities, the existing Energy Cities also continued to adhere to their policies.

Keeping a grip on business transport

The Internet site "mobitool.ch" enables companies to examine the amount of traffic their businesses cause. At the same time they receive advice and useful instruments with which to arrange company mobility more sustainably. The platform, which is supported by the SwissEnergy programme, was set up in 2009 and launched in March 2010 by the SBB, Swisscom, BKW and the Network for a Sustainable Economy (Öbu). "mobitool.ch" offers a series of analysis and planning instruments, among them tools for emission factors and the ecological balance, so users can find new transport solutions with a few clicks of the mouse. After all, over half the fuel consumption, and therefore emissions, is caused directly or indirectly by business decisions. The "mobitool.ch" platform shows firms how great the potential is that can be leveraged to improve their own ecological balance in the mobility sector and where their own greatest potential lies.

Minergie more popular than ever

The Minergie label for buildings is still developing rapidly: at the end of 2009, there were 14,686 certified MINERGIE, 538 MINERGIE-P, 60 MINERGIE-ECO and 55 MINERGIE-P-ECO buildings in Switzerland. The total energy reference area of all buildings conforming to these standards totalled 15.9 million square metres. Almost 15,400 buildings in Switzerland have been awarded one of the Minergie labels since the building standard was introduced in 1998. Among these are houses and apartment blocks as well as large service industry and industrial premises, offices and hotels. The standard is also gaining ground in the building refurbishment sector, however in this field the level of interest is still relatively low.

energho for successful optimisation

The energho association optimises technical plant in existing buildings thus increasing the energy efficiency of the facilities. Service contracts are offered for public buildings in particular. At the end of 2009, the savings in energy resulting from 400 service contracts were measured with excellent results: 540 TJ of energy could be saved, a significant increase over the previous year. energho's customers benefited from energy costs that were 20 million franc lower than before; CO_2 emissions were reduced by 34,000 tonnes.

MINERGIE-P at 3,883 metres above sea level

The "Matterhorn Glacier Paradise" tourist centre on the Klein Matterhorn above Zermatt is situated at 3,883 metres above sea level and is the highest vantage point in Europe that can be reached by cable car. Minergie, the partner of SwissEnergy, awarded the construction the strict MINERGIE-P certificate in April 2009. The building consists of prefabricated wooden elements; only the plinth is made of concrete to meet statics standards. The external walls are insulated with 52 centimetres of rock wool. The walls are clad in a skin of metal and glass to guarantee that the façade remains impervious to winds with speeds of up to 300 kilometres per hour, a requirement for the MINERGIE-P certificate. Use of solar energy is essential at this height in the Alps: the entire south-facing façade of the building consists of integrated photovoltaic panels.

Companies save energy and cut CO_2

The number of target agreements under the aegis of the Energy Agency for Industry (EnAW) could be further extended. Under such target agreements companies undertake to increase energy efficiency and reduce CO_2 emissions. The number of companies integrated into this process rose from 1,899 at the end of 2008 to 1,957 at the end of 2009. So, when the Cemsuisse association is included, almost half (43 per cent) of CO_2 emissions produced from combustibles by Switzerland's industry sector are now the subject of target agreements.

Enjoy a coffee while saving energy

Coffee machines are in use in about two-thirds of all Swiss households and in numerous offices. Each year they consume about 400 million kilowatt-hours of electricity, about as much as the city of Lucerne. The standby mode can consume almost three-quarters of this amount in just keeping the machine warm. It is therefore worthwhile selecting an energy saving model. This is now a simple task thanks to the new En-

"Low heating oil" calcium silicate bricks in Volketswil

At its plant at Volketswil, Hard Ltd produces calcium silicate bricks, a versatile and attractive building material. Earlier the company used to use large quantities of heating oil per tonne of calcium silicate. Driven by changes in the market and from the potential to economise the management decided to search for new solutions. Employees were able to make suggestions from the very beginning and were also given the freedom to search for creative ideas to achieve savings. The results achieved in cooperation with the Energy Agency for Industry (EnAW), a partner of SwissEnergy, are impressive: the consumption of heating oil per tonne of calcium silicate produced was more than halved in 2009 in comparison to 2003 and now lies at 7.5 litres. This makes Hard Ltd the leader in Europe because the average consumption of EU companies lies at about 10 litres per tonne. Hard Ltd's example proves one thing: the motivation, creative spirit and determination of employees supported by a management prepared to make the necessary financial investments has made continuous improvements possible over many years.

Energy City Buchs relies on renewable energy

Buchs has been an Energy City since 2001. In 2009, the local authority established its energy concept called "Buchs 2010" thus setting course for the 2,000 watt society. En route to attaining this target, by 2020 Buchs intends to reduce the energy required by buildings by 20 per cent, to increase the proportion of renewable energies and waste to produce heat to 60 per cent and to expand the area of installed solar arrays from 0.2 to 0.5 square metres per resident. Today, the Energy City can already point to some impressive achievements: ecological electricity production is triple the Swiss average and the municipality covers more than one third of its final energy consumption with electricity from renewable sources and waste heat.

ergy Label for coffee machines introduced in 2009. This is a unique arrangement made possible by the voluntary commitment of the Swiss household appliance industry because Switzerland is the first European country to introduce an energy declaration for this heterogeneous type of apparatus.

Petrol consumption less than 7 litres – energy label remains

The average fuel consumption of newly registered cars in 2009 was 6.86 litres per 100 kilometres. In contrast to 2008, this is a significant drop of 3.9 per cent. The average CO_2 emissions of newly registered cars fell by 4.6 per cent to 167 g CO_2 per kilometre. In addition, the average unloaded weight of new cars fell again and lay at 1,448 kilograms in 2009 corresponding to a reduction of 25 kilograms, or 1.7 per cent, compared to 2008. A vehicle's fuel consumption depends largely on its weight: the consumption increases by about half a litre per 100 kilograms of

Energy science for architects and planners

In 2009, five universities of applied sciences in German-speaking Switzerland cooperated to extend and consolidate the master of advanced studies in sustainable construction "MAS EN Bau" course. New modules were created, such as the "CAS Minergie Eco" and the "CAS CECB Expert" courses, so that 12 modules are now on offer. Architects and planners with a degree from a university of applied sciences or from the ETH can freshen up their knowledge of energy efficient construction methods. In content the course covers topics ranging from the fundamentals for sustainable building, energy optimised development and construction, solar architecture, building refurbishment and renewable sources of energy. The number of participants has developed positively: about 150 students completed one or more modules last year. The course is offered at a number of locations and is held at Horw, Burgdorf, Chur, Muttenz or Zurich. As an equivalent, the MAS EDD BAT (Energie et développement durable dans l'environnement bâti) course is offered in the French-speaking part of Switzerland. Together with the cantons, the Federal Office of Energy and the SwissEnergy programme have supported the setting up and national coordination of the "MAS EN Bau" course within the "energiewissen.ch" (energy science) programme since 2007.

supplementary weight. The efficiency of new cars has improved substantially in recent years. This gain in efficiency was lost in part up to 2007 because of the Swiss preference for heavier and heavier vehicles. Whether this trend will change, remains to be seen. In the meantime, in June 2010, the Federal Council decided to retain and to improve the established energy label for private cars. In future, CO_2 emissions and energy consumption will be even more clearly presented than before. An evaluation will

also be made of electric cars and bio-fuel powered private cars.

Renewable energies on target

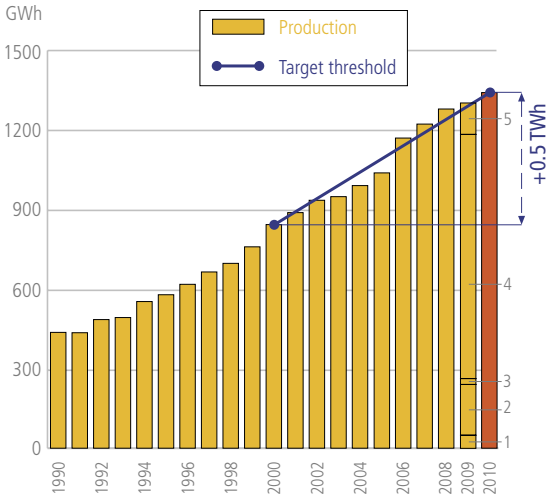
The Renewable energy sector is well on the way to reaching its target of providing an additional 500 gigawatt-hours (GWh) of electricity and 3,000 GWh of heat per year from renewable forms of energy by 2010 (in comparison to levels in 2000).

With a further 575 GWh of **heat** produced (corrected for fluctuations in the climate) this sector more than doubled the gains of 2008, which means that before the end of the current period, the SwissEnergy target of 3,000 GWh has already been exceeded by almost 12 per cent.

- The largest contribution came from energy from wood as before. At 4 per cent, growth has slowed somewhat.
- Heat pumps, which experienced a growth of 12.5 per cent, are in second position.
- Once again, less energy was produced from waste (renewable) in 2009 than in the previous year.
- With an increase of 13.4 per cent, solar power recorded the largest percentage growth.

Generation of **electricity** from renewable sources did not increase as anticipated in comparison to 2008 despite the boost it was assumed would result from the compensation for feed-in remuneration (CRF). In 2009, an additional 23.5 GWh of electricity were produced from renewable sources of energy Nevertheless, 92 per cent of the target value has already been attained in this sector.

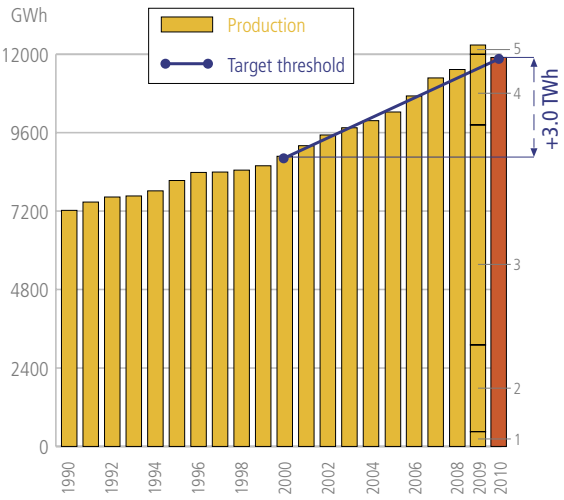
- The greatest increase in absolute terms was seen in the energy from wood sector.
- By contrast, waste incineration plants produced less electricity, however, such plants still make the greatest contribution to achieving energy targets.
- The largest percentage increase was achieved in the photovoltaic sector with an increase of 44.5 per cent. Despite the moratorium for the CRF programme, the increase in this sector can be traced back to the impact made by this promotional instrument.



Electricity production (excluding hydropower)

1 Solar power (3.8 %)
2 Biomass (14.7 %)
3 Wind energy (1.7 %)
4 Proportion of renewable energy from waste (70.7 %)
5 Proportion of renewable energy from drainage (9.1 %)

Situation target 2009: 92.1 %



Heat production

1 Solar power (3.7 %)
2 Ambient heat (21.6 %)
3 Biomass (54.8 %)
4 Proportion of renewable energy from waste (17.6 %)
5 Proportion of renewable energy from drainage (2.3 %)

Situation target 2009: 111.9 %

Figure 8 – Production from renewable forms of energy (electricity and heat), 1990 to 2009, and production in 2009 from the various energy sources.

Finances

Special year because of stabilising measures

The measures to stabilise the economy adopted by Parliament during the financial crisis resulted in an exceptional financial situation. Overall, with almost 126 million francs in funding, the Swiss Federal Office of Energy (SFOE) had significantly more money available for direct and indirect promotional measures, information and consulting in 2009. The cantons received 80 million francs of these funds in the form of global contributions. 18 million francs were used in a country-wide campaign to introduce the cantonal energy certificate for buildings (15,000 CECBs were issued) and about 2 million francs flowed into preparations for the national building refurbishment programme and into other cantonal schemes. Twenty-six million francs were available to the SwissEnergy programme for voluntary measures.

An increase in the global contributions by the Federal Parliament meant the cantons could increase their promotional budgets: 112 million francs in additional funding were set aside by the cantons for direct and indirect subsidies and for pilot and development (P+D) measures. With the global contributions from the Federal Government, the cantons had funds of about 200 million francs available to finance cantonal promotional programmes.

Reduction in funding for SwissEnergy

A closer look at the actual funds available to the SwissEnergy programme to implement voluntary measures in all four market sectors shows that funds fell by six per cent to nearly 26 million francs. Of these funds, 6.7 million francs were allotted to the Renewable energies sector (2008: 7.0 million francs), and 13.6 million francs were made available for measures to promote rational use of energy in the Public sector and buildings, Industry, Appliances and Mobility (2008: 14.2 million francs). SFOE expenditure for management, controlling, general marketing and communications, and continuous education and training increased to 5.5 (5.3) million francs.

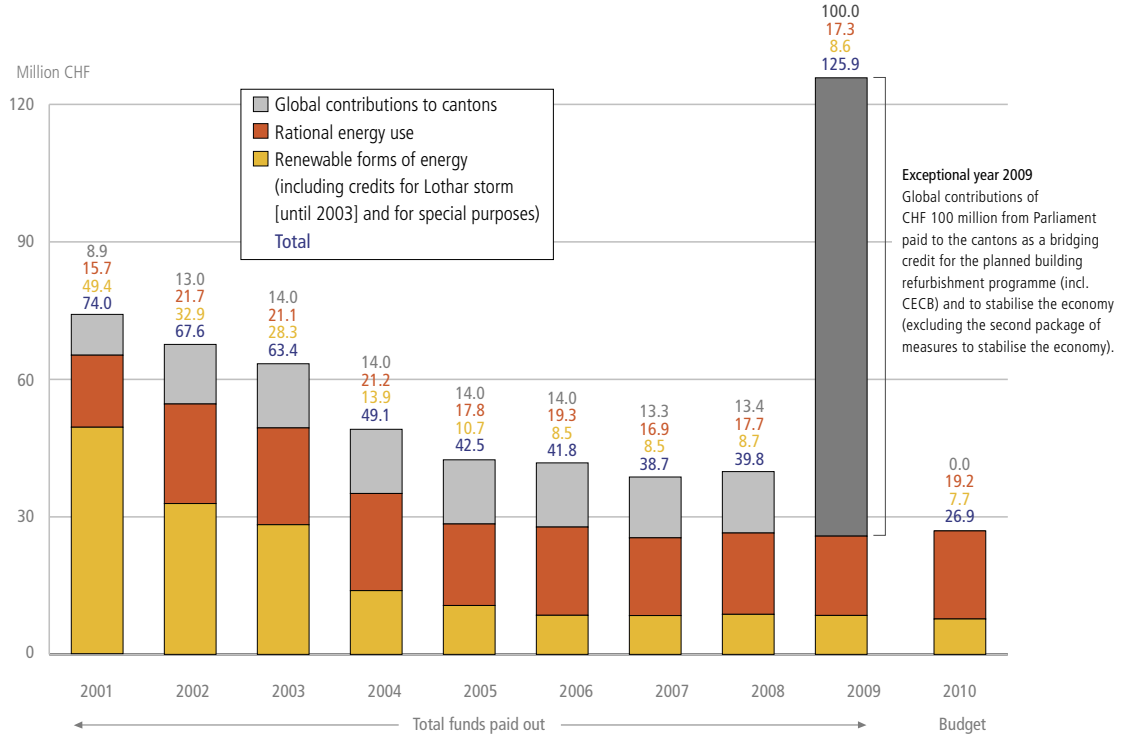
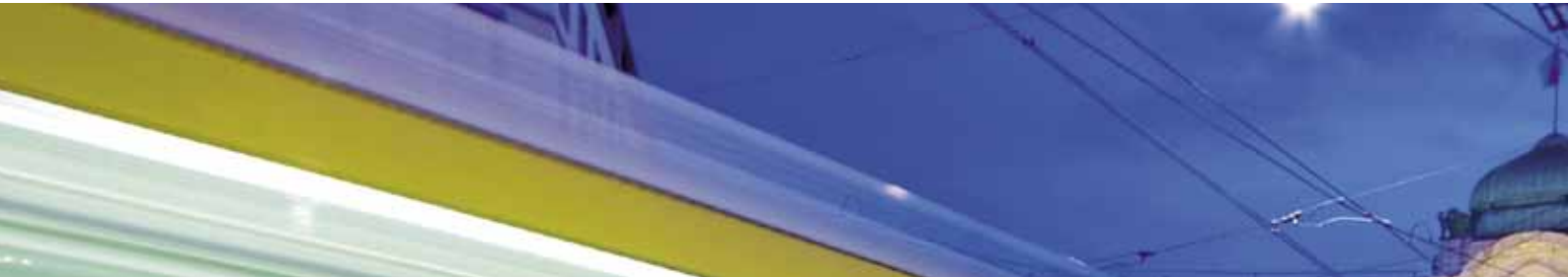


Figure 9 – Federal funds for the SwissEnergy programme 2001 to 2010 (funds for programme management, continuous education and training, evaluation and overall communications are divided proportionately between rational energy use and renewable forms of energy).



New, strengthened promotional programmes

More money for green electricity

In future more money will be available to promote the generation of electricity from renewable sources. In the 2010 summer session, Parliament approved an amendment of the Energy Act containing provisions providing more funds for compensation for feed-in remuneration (CRF) for green electricity and increasing charges for water rights from 2013 on. Since 1 January 2009, a surcharge has been levied on every kilowatt-hour of electricity consumed to finance the CRF and further measures foreseen by the Energy Act. Up to now, in accordance with the Energy Act, this has been limited to a maximum of 0.6 cents. From 2013 onward, the surcharge can be increased to a maximum of 0.9 cents. Thus, from then on, there will be approximately 500 million francs available to promote the generation of electricity from hydropower (up to a capacity of 10 megawatts), photovoltaic plant, wind energy, geothermal power, biomass and biomass waste. This decision makes it possible to lift the moratorium on the CRF and to increase funds for photovoltaic plant from mid-2011.

Rewards for those who economise

Companies and private individuals who try to find methods to economise on electricity consumption will be rewarded: Following upon a call for tenders in 2010, the first contracts for projects and programmes specifically designed to save electricity in industry, in service industries and in households have already been awarded. About nine million francs have been allotted to

subsidise schemes to save electricity in the cheapest, most sustainable manner. The call for tenders, an annual event from now on, attracted a great deal of interest. The spectrum of themes addressed by the projects ranges from optimised lighting, ventilation and IT systems to efficient mechanical drives and to smart metering. Suggestions for programmes include measures for self monitoring of domestic electricity consumption, promotion of energy efficient canteen kitchens, replacement of electric hot water boilers with heat exchanger boilers, a programme to promote the use of highly efficient electric motors, a national bonus programme to promote energy efficient electrical appliances, substitution of mini-refrigerators in hotels and an Internet-based energy data analysis system to sensitise users.

CECB and building programme successful

The new means to determine the energetic quality of buildings, the cantonal energy certificate for buildings (CECB), has been available since the beginning of August 2009. In 2009, the Federal Government supported a campaign to introduce the CECB and an initial consulting programme using the additional funds made available through the measures to stabilise the economy: the first 15,000 energy certificates were made available along with an expertise for only 200 francs instead of 1,200 francs. The campaign was a complete success. About 1,000 CECB specialists were trained and all 15,000 approved CECB were issued within just three weeks. These owners now have the necessary information about the energy characteristics of their buildings and what they will have to do to refurbish them. When the building programme starts they will be able to implement the advice and profit from subsidies. The current building programme sponsored by the Federal Government and the cantons started successfully at the beginning of 2010: numerous applications were received from house owners who wanted to improve the energy characteristics of their buildings and profit from the substantial funds available for the building programme. During the next ten years the Federal Government and the

cantons will thus promote refurbishment of buildings and the use of renewable energies. The building programme is an important pillar of Swiss energy and climate policies because over 40 per cent of all CO_2 emissions in Switzerland are caused by heating buildings. Thanks to better insulation and the use of renewable energies buildings will become climate friendlier.

Run on energy promotion programmes from measures to support the economy

The energy promotion programmes approved by Parliament in 2009 as part of the second programme to stabilise the economy were a complete success: demand was so high that funds were exhausted 10 weeks after the programmes were initiated. Twenty million francs were available for investments in new photovoltaic plant. Nine hundred and sixty six applications were accepted and 428 projects with a peak capacity of 3,020 kilowatts have been realised to date (as at June 2010). Ten millions francs were earmarked for subventions for the complete replacement of electric storage heaters in permanently occupied buildings. By the end of June 2010, about 1,330 applications had been awarded subsidies from the programme. The entire budget for the programme is now exhausted. Over 3,500 applications were received and 902 projects have already been completed resulting in future annual savings of about 13 gigawatt-hours of electricity. Thirty million francs were available as subventions for district heating projects using waste heat and renewable sources of energy. By the end of June 2009, applications had been received for more than 100 district heating projects requesting subsidies in the sum of 80 million francs, almost triple the programme budget. In the end, 22 projects could be approved which when completed will deliver approximately 174 gigawatt-hours of heat each year; this corresponds to the energy from about 14,000 tonnes of heating oil.

Promotion of innovation and know-how transfer

Footbridge to a future profession

The Federal Government set up the "Passerellen-Programm" (Footbridge Programme) to counter a shortage of qualified trades in the building sector. The partners in the programme are the branch associations (i.e. Polybau, SIA, SWKI, STV) and the educational institutes. The first courses for 55 participants who will absolve an abbreviated training course leading to a federal certificate of capacity as a "Polybauer" (poly-builder) began at the Polybau training centres at Uzwil and Châtel-St. Denis. As the second cornerstone of the programme a course starts in October 2010 called "Passerelle Energieingenieur" (Footbridge Energy Engineer).

The Federal Government is investing 15 million francs as part of the stabilisation programme in the "Passerellen" training programme. The aim is to recruit 500 to 1,000 additional tradesmen and women for the installation branch, the building trades (roofing and walls) and in planning. The programme facilitates pilot projects in professions that have been unable recruit young people for many years and that are increasingly dependent on tradespeople from abroad. The programme focuses on qualified people who have little prospect of advancement in their present occupation or whose trades are no longer required. It is also designed for those who are working in the branch who have not yet been able to gain a qualification and now wish to do so.

Cleantech master plan launched

Many different players lay claim to the newly launched term "Cleantech". The SwissEnergy programme has been promoting such clean, sustainable technology for many years – from basic research to legislation to introduction to the market and promotion of exports. The intention now is to strengthen the Cleantech strategy: To this end, in 2009, the federal departments for economic affairs (FDEA) and for transport, energy and communications (FDETEC) inaugurated a master plan for the Cleantech sector. At the innovation conference of 5 November 2009 on the topic of "Swiss Cleantech for Global Markets" the President of the Swiss Confederation, Doris Leuthard, brought the topic to the attention of the Federal Council and the federal administration. The conclusion was that as one of the leading international centres for innovation of highly specialised products and services, Switzerland is well placed to participate in the growth of and actively shape the Cleantech market and related sectors of science. The Federal Government intends to promote developments in this field with the Swiss Cleantech master plan (see www.cleantech.admin.ch). At the same time, with the routine it has acquired the SwissEnergy programme remains an important element in the promotion of Cleantech.

SwissEnergy a significant platform in a dynamic environment

The SwissEnergy programme will remain as a trailblazer in the fields of energy efficiency and renewable energies. On 11 June 2010, the Federal Council adopted the concept for the action programme to run for a further ten years from 2011 on. In so doing it acknowledged the effectiveness of the programme until now and the fact that in such a dynamic environment a broad platform such as the SwissEnergy programme really is a necessity.

However, today's situation is somewhat different to that in 2001. The correct response needs to be found. In the next stage the priorities remain the same: buildings, renewable energies, efficiency of appliances, electric motors and road vehicles, efficiency in industry and services and in mobility. The topic of "Electricity" is central to the concept of the new programme: This highlights clearly that in addition to the challenge of reducing CO_2 emissions through climate policy attention has to be paid to the security of supply – through efficient use of electricity and of course generation of electricity from renewable sources.

However, the cross-sector themes that unite various aspects to get a systematic overview and thus create synergies are a new task. The cross-sector field "Municipalities and agglomerations" underlines the fact that the focus is not solely on the building or the car, but rather on the question of where the buildings stand, what effect cars have on traffic, how settled areas are tapped in to make people mobile and to gain access to energy sources. The cross-sector field "Education and training" is also important. Only if we are able to

train enough skilled people and advisers for the energy sector will it be possible to ensure long term market penetration for innovative technology and to exhaust the potential of energy efficient buildings. And finally the cross-sector field "Communications" will sensitise, motivate, inform, and advise investors, buyers and sellers alike about energy efficiency and renewable energies.

Annnual report on the Internet

The annual reports of Swiss Energy can be downloaded at the following Internet addresses:

German
www.energieschweiz.ch/jahresberichte
French
www.suisseenergie.ch/rapportsannuels
Italian
www.svizzeraenergia.ch/rapportiannuali
English
www.swissenergy.ch/annualreports

“SwissEnergy will continue to shape future energy use for the next ten years.”

Michael Kaufmann, head of the SwissEnergy programme

Production and printing:
Concept, editing, layout: Swiss Federal Office of Energy, Communication
Figures: Grafikwerkstatt Upart, Bern
Photos: Swiss Federal Office of Energy and iStockphoto.com.
Good examples: programme partners.
Published in four languages (German, French, Italian, English)
Bern, October 2010

Publisher and distribution:
SwissEnergy Programme Management
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