### **Gaining momentum**

Summary of the 4<sup>th</sup> Annual Report of the SwissEnergy programme





## The SwissEnergy programme



With its SwissEnergy programme – which is based on partnerships in the areas of energy efficiency and renewable energy – the federal government created a broad platform for implementing its energy and climate policies. The SwissEnergy network is made up of cantonal and local authorities, industrial, consumer and environmental associations, and government and private-sector agencies. In 2004, the federal funding allocated to SwissEnergy amounted to CHE 49.1 million.

- ☐ Through SwissEnergy, the federal government is able to directly influence the development of energy and climate policy in Switzerland. Its main legal basis is the CO<sub>2</sub> Act. The programme is intended to help achieve the main objective of reducing domestic CO<sub>2</sub> emissions by 10 per cent by 2010 compared with the 1990 level
- □ In order to accomplish this, the volume of CO₂ emissions will have to be reduced by 4 million tonnes by 2010, primarily through voluntary measures to be defined in target agreements with programme partners and the economy. As additional support measures, the Federal Council has resolved to introduce a CO₂ tax on heating oil and a "climate centime" on petrol.
- ☐ SwissEnergy enjoys widespread acceptance, and as a result the energy debate has once

again become a major topic on the political agenda. The economy also has a high opinion of SwissEnergy since it combines efforts and encourages voluntary co-operation between the private sector, the federal government and the captons

The CO<sub>2</sub> Act, the SwissEnergy programme and its network, voluntary target agreements, the CO<sub>2</sub> tax and the "climate centime" are therefore all components of a coherent overall system.



### Energy-related impacts

#### SwissEnergy – a success story

The activities of the SwissEnergy programme in 2004 were studied and evaluated by experts.

They concluded that the impact of SwissEnergy's activities had noticeably increased yet again. The overall increase in the programme's impacts (voluntary action and legal measures) by 29 per cent compared with the previous year clearly indicates that SwissEnergy is on the right track and is making an ever greater contribution towards Switzerland's energy and climate policy objectives.

The impacts of the voluntary measures taken within the scope of SwissEnergy in the year under review rose by 38 per cent compared with the previous year. The biggest contributions

came from target agreements with the economy, the "Energy City" label, and the promotion of wood energy, heat pumps and the "MINER-GIE" standard. In the area of regulatory measures, the increase in the programme's energy-related impact was around 10 per cent. In the year under review, the overall energy-related impact of the various additional measures amounted to the equivalent of approximately 0.5 per cent of Switzerland's 2004 energy consumption.

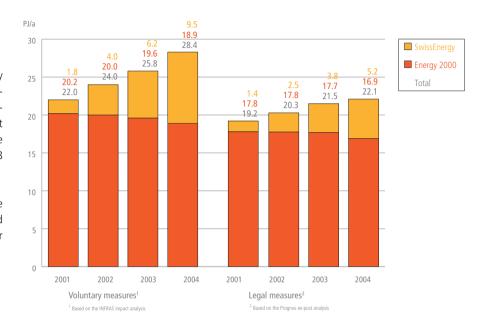


Lucius Dürr, director of the Swiss Insurance Association (SVV):

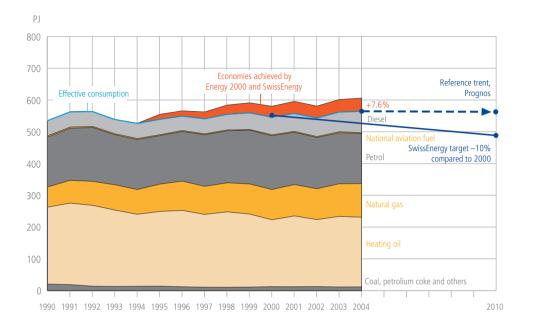
"SwissEnergy is a pacemaker for the Swiss economy in the fields of energy and the environment. It harnesses forces, strengthens co-operation between the private sector, the federal government and the cantons, and provides major impulses."

# The main results of the impact analysis may be summarised as follows:

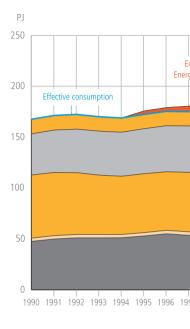
- ☐ The figures indicate that without SwissEnergy and its predecessor (Energy 2000), the consumption of fossil-based energy (combustibles and motor fuels) would be 7.6 per cent higher than the present-day level, and the level of CO₂ emissions would be around 2.8 million tonnes higher.
- ☐ Without Energy 2000 and SwissEnergy, the consumption of electricity in Switzerland would be approximately 4.7 per cent higher than the present-day level.



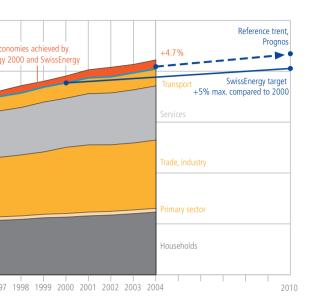
Energy-related impacts in the period from 2001 to 2004, resulting from the measures implemented by Energy 2000 and SwissEnergy since 1990



Consumption of fossil-based energy, 1990–2004, reductions brought about by Energy 2000 and SwissEnergy, and target according to SwissEnergy and reference trend



Electricity consumption, 1990–2004, redu according to SwissEnergy and reference t



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Bertrand Piccard, psychiatrist and aviator:

"The general public is ready to embark on new adventures and share the dreams of pioneers and discoverers. The time is now ripe for renewable energy."

### **Economic impacts**

#### SwissEnergy is cost-effective...

- ☐ If we compare the costs of federal funding with the energy-related effects of the programme's measures throughout its full lifetime, SwissEnergy's impact was approximately 46 per cent greater in 2004 than in the previous year, despite the fact that funding was cut by around CHF 14 million to CHF 49.1 million.
- ☐ In 2004, the required expenditure for saving one kilowatt hour was 0.3 centimes, compared with 0.6 centimes in the previous year. If we include expenditure on the part of the cantons, the result is 0.5 centimes (compared with 0.9 centimes).



Andreas Knörzer, head of Sustainable Investment, Bank Sarasin: "SwissEnergy has a positive impact on the economy: for every franc spent on the programme by the federal government, tenfold is generated in private investment."

#### ...generates investment...

- □ According to estimates by experts, Swiss-Energy generated energy investments in 2004 amounting to approximately CHF 980 million.
- □ Thanks to SwissEnergy, additional revenue amounting to between CHF 27 and 65 million flowed into the federal treasury in 2004. After deduction of federal and cantonal expenditure amounting to CHF 75 million, the reduction in revenue from energy duties of CHF 12 million and taking account of the reduction in unemployment insurance payments, the positive overall impact of SwissEnergy in 2004 was between CHF 91 and 254 million.



#### ...and creates jobs.

- ☐ Experts estimate that the activities of the SwissEnergy programme generate an equivalent of around 6,300 person years. The main beneficiaries here are the construction sector, the machine industry and the electrical technology, electronics, planning, IT, consulting and vocational training sectors.
- ☐ SwissEnergy has also eased the burden on unemployment insurance by between CHF 151 and 276 million, depending on scenario.



### Activities during 2004

## "Energy City" and "MINERGIE" labels continue to boom and set high standards

- □ In 2004, 20 more towns and cities were awarded the "Energy City" label, which certifies the implementation of a consistent and result-oriented energy policy. As of the end of 2004, a total of 121 towns and cities had qualified for the "Energy City" label, representing a combined population of approximately two million people.
- ☐ Two towns in Switzerland qualified for the "European Energy Gold Award" in 2003, and a further three (Cham, Schaffhausen and Zurich) followed suit in 2004.
- ☐ In 2004, the number of buildings qualifying for the "MINERGIE" label rose by 1,000 to reach close to 4,000. Furthermore, practical tests carried out for the first time during 2004

revealed that the level of energy consumption in buildings constructed in accordance with the "MINERGIE" standard is less than half that of conventional buildings.

## Innovative companies cutting their energy costs

- ☐ In April 2004, the federal government concluded a target agreement with the Energy Agency for Industry concerning voluntary increases in energy efficiency and the reduction of CO<sub>2</sub> emissions. More than 600 companies grouped into 45 categories undertook to reduce CO<sub>2</sub> emissions by a total of 462,000 tonnes by 2010.
- ☐ More companies are following suit. At the end of 2004, more than 1,000 companies had undertaken to voluntarily increase their

- energy efficiency and reduce their CO<sub>2</sub> emissions
- □ Joining forces to reduce electricity consumption: in December 2004, SwissEnergy and the Swiss Technology Network concluded an agreement aimed at enhancing the efficiency of electric motors. The potential here is enormous as electric motors in industry account for approximately 25 per cent of Switzerland's electricity consumption.



#### **Ecological driving, energy-efficient vehicles**

- □ In 2004, a further 60,000 drivers received instruction in economical driving techniques ("Eco-Drive"), thus helping them reduce their fuel consumption by between 10 and 15 per cent.
- ☐ Approximately half the population of Switzerland is familiar with the energy label for new cars, which classifies vehicles into efficiency categories from A to G.

### Further increase in the production and use of renewable forms of energy

In 2004, the amount of electricity generated from renewable energy sources other than hydropower was approximately 15 per cent higher than in 2000. The increase in heat production was 14 per cent.

- □ Wood the energy that grows back: in 2004, wood accounted for approximately 48 per cent of the total heat production from renewable forms of energy. According to available statistics, around 2.7 million cubic metres of wood are used to produce energy each year.
- ☐ A run on sales of heat pumps: In 2004, a total of 9,872 heat pumps were sold in Switzerland 13 per cent more than in 2003. Some 85,000 heat pumps are now in operation, and these substitute the equivalent of 265 million litres of heating oil.
- □ Interest in solar energy is on the rise: thousands of people made use of the promotion campaign held on 7/8 May 2004 to find out more about the potential of solar energy. In 2004, SWISSOLAR's information service re-

- ceived around 7,500 enquiries an increase of over 100 per cent compared with 2003.
- ☐ Biogas as a source of green power and heat:

  The production of biogas from liquid manure
  and organic waste represents a potential
  new source of income for agricultural operations. As of the end of 2004 there were 12
  commercial plants and 67 agricultural fermentation plants in operation in Switzerland
  with more at the planning stage or under
  construction.



"SwissEnergy promotes energy efficiency and the use of renewable energy, and thus helps us reduce our dependence on oil."

Moritz Leuenberger, Federal Councillor