Swiss Federal Office of Energy SFOE

# Facts & Figures 2004/2005







#### **Postal address**

Swiss Federal Office of Energy SFOE CH-3003 Bern, Switzerland Phone +41 31 322 56 11 / Fax +41 31 323 25 00 office@bfe.admin.ch www.swiss-energy.ch

#### Visiting address

Swiss Federal Office of Energy SFOE Worblentalstrasse 32 CH-3063 Ittigen

#### How to reach the SFOE

Take the "S7" train at Bern main station to the Papiermühle stop. From there, it is a five minute walk to the SFOE.

By car, leave the motorway at the Bern-Wankdorf junction and follow the "Ittigen" sign. There are several parking spaces available, marked "Besucher". The Swiss Federal Office of Energy (SFOE) is a competence centre within the Federal Department of Environment, Transport, Energy and Communications (DETEC), and is responsible for all questions relating to the supply and utilisation of energy.

#### The SFOE:

- creates the conditions necessary for securing an energy supply that is adequate, crisis-proof, broad-based, economical and sustainable.
- ensures that the high safety standards in the production, transport and utilisation of energy are upheld.
- actively promotes the efficient use of energy, expansion of the contribution made by renewable energies, and reductions in the emission of CO<sub>2</sub>.
- supports and coordinates energy research at the national level and actively nurtures the establishment of new markets for sustainable energy supply and use.

As a result of rapid progress in energy policy, the energy industry and energy technology, the professional activities of the SFOE are becoming more complex and interwoven. To be in a position to respond more effectively to higher demands, and with a view to establishing an even more efficient and selective internal organisation, the SFOE adopted a new organisational structure in August 2004. This comprises four specialised departments:



The **Strategy and Policy Division** functions as the main point of contact for all aspects of Swiss energy policy, comprising evaluations, performance analyses and the ongoing development of energy policy measures. The Division is also responsible for the coordination and anchoring of Swiss energy policy at international level. Specialists from the Division represent the interests of Switzerland in the various international committees and supervisory groups, and in multilateral negotiations. The Division is also responsible for the controlling and execution of strategic internal projects, in particular the ELIAS project (SFOE strategy) and the project for transforming the SFOE to a FLAG administrative unit (Management with a Performance Specification and Global Budget).

The **Energy Industry Division** is responsible for the development of a new organisation for the electricity and gas markets. The main focus is on the public services and supply security, and on the creation of favourable conditions for increasing the renewable energy contribution as well as the provision of the necessary instruments. Departmental specialists locate, process and analyse the energy specific data and prepare statistics on energy supply and consumption in Switzerland. Furthermore, the Division prepares long-term energy perspectives as a foundation for future policy decisions. With this objective in view, the Division is actively engaged in the scientific debate on the status and further development of the energy supply.

The **Energy Efficiency and Renewable Energies Division** manages and coordinates the SwissEnergy programme, on the basis of which the SFOE is making a substantial contribution to implementing Swiss climate and energy policy. One important aspect of the programme is the promotion and maintenance of good relationships with the partners and networks involved in the programme, the cantons, the municipalities, industry and the environmental and consumer organisations. In order to fulfil the main objective of the programme, which is to reduce the emission of  $CO_2$  by 10% by the year 2010 compared with 1990, SwissEnergy is actively promoting the efficient use of energy in industry, the trades, the service sector and in all forms of mobility. Furthermore, the Division prepares programmes and actively supports projects aimed at increasing the use of renewable energies. To boost the development of technologies and promote the practical application of the knowledge gained, it initiates research programs, coordinates energy research at national level and promotes the transfer of technology, and initiates education and training programmes covering the whole of the energy field.

One of the key tasks of the Legal Services and Safety **Division** is the processing of all legal questions arising in the SFOE. It drafts laws, manages the official consultation procedures, prepares policy statements (messages) to the Parliament and accompanies the parliamentary process. Regarding enforcement, the Division prepares decisions in the field of nuclear energy and issues planning approval and operating licenses for natural gas and oil pipelines, and for electrical installations (particularly high-voltage transmission lines). In doing so, the Department cooperates closely with the professional agencies of the Federation concerned with safety (HSK, ERI, ESTI), thereby contributing to efficient and gualitatively high-ranking fulfilment of the oversight objectives. Furthermore, the Division supervises the technical and requlatory tasks associated with the utilisation of nuclear power, and provides the knowledge base required for the disposal of radioactive waste in Switzerland. The secretariat of the Swiss Federal Nuclear Safety Commission (KSA) in Würenlingen reports to the Division.

The **Communication Section** is the competence centre and administrative hub for all public relations activities of the SFOE. It ensures that the positioning of the SFOE as an active, competent and service-oriented Federal Office is maintained. Key aspects of this are information transfer and the maintenance of good contacts with its target groups and the media. This involves the deployment of numerous modalities such as the internet, press releases, media conferences, workshops, seminars, publications, exhibition presentations, technical papers and lectures.

The **Central Services Section** is a support centre and performs the classical cross section functions required for the smooth operation of administrative processes in the SFOE. The Section comprises the personnel service, the financial service, basic services, the translation service, the central IT service, the library, the management secretariat and secretariat services. The Section plays an important role in implementing the transformation projects currently in progress in the SFOE (FLAG, ELIAS).

The **Swiss Federal Nuclear Safety Inspectorate (HSK)**, based in Würenlingen, is the federal oversight authority that assesses and monitors technical security and radiation protection in the Swiss nuclear installations. In 2004, the HSK was reconstituted as a FLAG department, whose activities are laid down by the Federal Council in a performance specification covering four years, and in an annual agreement with the SFOE.

#### Implementation of the Federal Nuclear Energy Act

The new Federal Nuclear Energy Act (KEG) enters into force on 1 February 2005. The Nuclear Energy Ordinance that implements the KEG was adopted by the Federal Council in December 2004. Additional legislation required to enforce the KEG will be submitted for formal consultation in 2005, and finally put into effect by the Federal Council.

#### **Revision of the Federal Nuclear Energy Liability Act**

In connection with the ratification of the international nuclear liability agreements of Paris and Brussels, a total revision of the Federal Nuclear Energy Liability Act (KHG) is planned. In particular, it is intended to raise the present limit of indemnity. Official consultation on the draft KHG is planned for the first half of 2005.

#### Disposal of radioactive waste

The documentation concerning proof of safe disposal of highly radioactive waste will be open to public inspection in 2005. This will provide all interested parties with an opportunity to express their standpoint. Furthermore, in 2005 the procedure for selecting a site for disposal in deep geological strata will be laid down in a sectoral plan in accordance with the Spatial Development Act. This will be prepared in consultation with the cantons, the responsible authorities in neighbouring countries and the federal agencies concerned.

#### Federal Electricity Supply Act

The draft Federal Electricity Supply Act (StromVG), which was prepared and submitted for formal consultation in 2004, will be discussed in Parliament from 2005. The law puts first priority on the public services and the security of supply, and provides for non-discriminatory grid access. Parallel to this, the amended Federal Electricity Act will be submitted to Parliament. The purpose is to create a legal framework for international electricity trading compatible with EU provisions. It is intended that the revised Electricity Law will enter into force in 2006.

#### Electricity labelling and funding of additional costs

In November 2004, the Federal Council adopted the amended Energy Ordinance, which provides for the introduction of electricity labelling and improved transparency for electricity consumers. The electricity utilities will begin data surveys in 2005, enabling them to provide information on the origin and method of production of electricity from 2006 onwards. This work, in conjunction with the implementation of the new financial mechanism for compensating the additional costs arising from electricity production in small-scale installations, will be supervised by the SFOE.

#### Energy perspectives for 2035/2050

The object of the energy perspectives 2035/2050 project is to demonstrate what the production mix needed to satisfy the Swiss demand for electricity, heat and mobility could look like in the years 2035 and 2050. The results, which will be available towards the end of 2005, will provide the basis for future energy policy decisions. Parallel to the scientific studies, the Energy Perspectives Forum will conduct a dialog with representatives from industry, the cantons, science, consumer and environmental organisations on the principal options and consequences of the resulting scenarios. In addition, the voice of youth will be heard, in that school classes selected from all over Switzerland will be engaged in preparing their own energy scenarios and perspectives in the first half of 2005.

#### The second half of SwissEnergy

In 2005, SwissEnergy will prepare the plan for the second half of the program covering the years 2006 to 2010. The objective is to focus the remaining finances even more directly on achieving an energetic impact; financial contributions towards the fulfilment of defined objectives will be augmented. Further, widening of partnerships and a more efficient exploitation of synergies are envisaged. The details of the SwissEnergy strategy are consequent on Federal Council decisions expected in 2005 on the introduction of a CO<sub>2</sub> tax and/or the climate centime. The "bau-schlau" campaign for energy conservation in buildings, a platform for the dissemination of the necessary knowledge, will be further pursued. In 2004, there were 113 employees working for the Swiss Federal Office of Energy, or the equivalent of 105.5 full-time employees. Overall, the percentage of women was 34% or 20% in managerial positions. The percentage of Frenchspeaking employees was 14%. In order to fulfil the legal tasks entrusted to the SFOE, the employees must dispose of a broad specialised knowledge from practice and research. The percentage of employees having a university or university of applied sciences diploma lies correspondingly high at 72%. Our collaborators frequently attend professional courses and lectures, and maintain an ongoing exchange of information and experience with the leading protagonists in administration, industry, politics, science and the NGOs.

#### Professions represented in the SFOE in 2004



The budgeted expenditure of the SFOE in 2005 amounts to 114.8 million CHF.



Material cost 31%

## Final energy consumption of Switzerland in 2003 by energy source



\* Remainder: coal and coke, wood and charcoal, district heating, domestic and industrial waste, other renewable resources

Source: Swiss Energy Statistics 2003

## Final energy consumption of Switzerland in 2003 by consumer groups



Source: Swiss Energy Statistics 2003



### Development of the final energy consumption of Switzerland 1990 to 2030 by consumer groups [in TJ]

Source: Prognos, 2000 (Reference Energy Act)

#### Development of the final energy consumption of the world 1990 to 2030 by consumer groups [in PJ]



Source: European Commission, WETO study, 2003

06.01.05	Federal Office of Energy New Year's Aperitif, Bern
01.03.05	Energy Perspectives "Mobility" Workshop, Bern
03.03.05	Forum Habitat & Jardin, Lausanne
22.03.05	SFOE Energy Breakfast in Lucerne
29.04.05	Conference of Energy Directors' Spring
	Conference, Bern
13.05.05	Specialised Energy Units' Conference
21.06.05	Annual general meeting of the Swiss Gas Industry
	Association, Schaffhausen
22.06.05	SFOE Energy Breakfast in St. Gall
25.06.05	Annual general meeting of the Petroleum Union,
	Zurich
30.06.05	SwissEnergy Strategy Conference
25.08.05	Annual general meeting of the Conference
	of Energy Directors, Aarau
22.09.05	Annual general meeting of the Swiss Electricity
	Supply Association, Lucerne

www.swiss-energy.ch www.energie-perspektiven.ch www.admin.ch/uvek www.hsk.ch www.ksa.admin.ch www.esti.ch www.svti.ch

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#### Swiss Federal Office of Energy SFOE Worblentalstrasse 32, CH-3063 Ittigen · Postal address: CH-3003 Bern Phone +41 31 322 56 11, Fax +41 31 323 25 00 office@bfe.admin.ch · www.swiss-energy.ch The SFOE is an agency within the Federal Department of Environment, Transport, Energy and Communications (DETEC)

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