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MARCH 2005

SISIKON/CANTON URI – 46°57'00"N 8°41'60"E

MONDAY

15 Today we were on the Internet for the first time! Mrs Bernasconi, our teacher, showed us the website of her home canton of Ticino. Last year I spent a week there on holiday with my family. The Maggia is a wild river! The Internet is like the big window in our kitchen at home. A window on the world. Only the high mountains are missing.

TUESDAY

16 Drawing is my favorite subject. I draw all my teachers and classmates. When I grow up I want to be a PE teacher. Because my brother is a graphic artist and sometimes has to work at weekends.

WEDNESDAY

17 Today we had swimming. I'm already a real water baby! Soon I'll be able to swim without my armbands! Unlike my little brother. He's only half as fast as I am. I'm looking forward to next summer in the Ticino.

THURSDAY

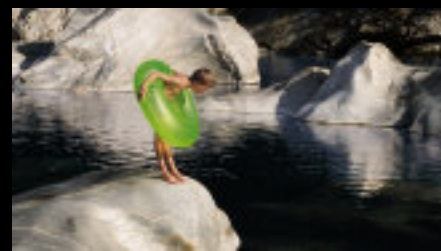
18 In the afternoon we read stories about the Mumintralls. Ninni is a foster child living with the Mumins and is invisible when the story begins. I wonder if we'll be able to make ourselves invisible one day? I like fantasy stories best of all.

FRIDAY

19 Auntie Eve is visiting us from Vancouver. She brought me a paint-box with loads of new colors. I used them to paint her a picture. She promised to send me an e-mail as soon as she got back to Canada. It's so easy nowadays.

Andrea Bieri discovers  
an entirely new world





# Swisscom as a sustainable company

**Swisscom stands by its environmental and social responsibilities. Alongside purely economic successes, it also considers its performance on ecological and social issues to be of vital importance, since this shows Swisscom the way to a sustainable future.**

A team at Group headquarters is responsible for corporate responsibility matters, identifying and correcting any deficiencies within Swisscom and incorporating its findings in Swisscom's risk and reputation management policy. Thanks to Swisscom's performance on this area, the Swisscom share is listed in seven sustainability indices including the well-known Dow Jones Sustainability Index. It also features in more than 20 sustainability funds. One objective still to be achieved is implementation of a systematic improvement cycle for social aspects along the lines of the ISO environmental standard 14001.

## **Wide-ranging public expectations**

Swisscom occupies a special position in Switzerland as market leader in telecommunications and as the country's basic service provider. The Swiss population expects it to display a commitment that goes beyond the purely economic. As a result, Swisscom has always been heavily involved in the public domain, whether in the fields of sponsorship and corporate-giving or in special incentive schemes such as its "Internet for Schools" project. Swisscom keeps a close watch on social needs and trends and has created a platform specially for this purpose. Furthermore, it is conscious of its model role in issues relating to safety, environmental protection and ethics.

Swisscom operates a successful energy management policy and also supports external environmental organizations. It has largely achieved and in some cases greatly exceeded its 2004 environmental targets. Environmental management delivers savings, eliminates risks and enables compliance with legal requirements. Above and beyond these essentially economic motives, all interest groups share a vital interest in an intact environment. It would therefore go against the principles of corporate responsibility to ignore the issue of environmental protection. Since sustainable corporate policy cannot be achieved in isolation, Swisscom is a member of the following industry associations and organizations, each of which is committed to sustainable and environmentally-friendly corporate management:

- ETNO (European Telecommunications Network Operators' Association), Sustainability Working Group and signatory to the Sustainability Charter
- ÖBU (Swiss Association for Environmentally Conscious Management)
- Transparency International Switzerland
- ITU (International Telecommunication Union): World Summit on the Information Society (WSIS)
- EnAW (Energy Agency for Industry): Universal target agreement for CO<sub>2</sub> reduction and increased energy efficiency

Swisscom supports the principles of the Swiss Code of Ethics, and bases its reporting on the Global Reporting Initiative (GRI). The business principles of Transparency International Switzerland on combating and preventing corruption are taken into consideration in Swisscom employment contracts on the one hand and in a financial code of ethics on the other.

## Swisscom and the community

Relations with different interest groups are fostered at several levels within Swisscom. Overall responsibility lies with Group Communications, a staff function attached to the CEO. One special feature of Swisscom is that, because its many customers represent a large part of the community, public and customers can be regarded as virtually one and the same. Swisscom is a value-based company founded on four basic brand values: respect, reliability, roots and cosmopolitanism. Swisscom has formalized these values in collaboration with customer groups. The value propositions are incorporated into its business activities.

Swisscom uses this value system as a means of strengthening the company's integrity and ensuring a unique and unmistakable corporate identity. Swisscom endeavors to achieve the same level of cultural diversity in its workforce as in the community at large. Along with increasing the percentage of female employees, communicating this goal to the public is one of the aims of the "Diversity at Swisscom" project.

Swisscom maintains regular contact with all major interest groups, in order to provide them with the information they need and to stay abreast of developments. This allows the company to determine its public image and identify social trends at an early stage. To this end, Swisscom has created the "Swisscommunity" platform. Leading figures from the worlds of science, business, politics and culture with strong views on Swisscom's role in Switzerland regularly meet with senior Swisscom executives, who are thus able to improve their perspective on the external situation and outlook for the future. If deficiencies are identified at Swisscom, concrete projects are initiated to address them. Three such projects have been launched to date.

### Basic provision

Swisscom Fixnet is responsible for the basic provision of telecommunications services throughout Switzerland until the end of 2007. Although basic service provision is not a break-even business, Swisscom Fixnet does not demand any investment contributions for this. Swisscom spends a non-recoverable sum of approximately CHF 3 million annually on services for the visually impaired and hard of hearing alone. The supplementary services for call forwarding, information on unsolicited calls, statement of charges, itemized statement, calling line identification restriction and barring of outgoing calls form part of the basic provision.

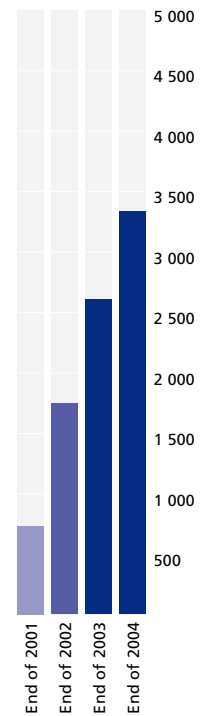
Key figures for basic service provision	2004
Fixed network lines*	3.9 m
Traffic minutes (Swisscom Fixnet national traffic)	8.2 bn
Dial-up Internet connections (connections to service providers)	300 m
Public payphones	8 500
Average response time to directory enquiries	7.9 sec
Emergency calls (numers 112, 117,118, 143, 144, 147)	3 m
Calls to the service for the visually impaired	400 000
Calls to the service for the hard of hearing	85 000

\* 76.4% analog, 23.6% digital

Internet for Schools	2004
Schools connected*	3 403
Classes*	37 510
Pupils*	659 250
Number of PCs*	63 437
Number of MACs*	25 416
Yearly investments in CHF	40 719 780
Initial investment in CHF	4 507 970

\* Status at December 2004

Internet for Schools  
Connected schools



### **Investment in future communications**

According to a number of surveys, Swisscom customers want the company to relieve them of the “burden” of having to worry about telecommunications. When it comes to new products and services, a key criterion is that they should be easy to use. Innovation and the novelty factor are of secondary importance. In a project on the subject of user behavior conducted by Swisscom Innovations among a group of high-school students in Berne, even students rated telecom products and services primarily according to usefulness rather than novelty.

Many customers see mobile communications in particular as complex. With this in mind, in 2005 Swisscom Mobile will launch a number of products and services designed specifically to minimize obstacles and make mobile communications easier and more accessible. Swisscom Innovations has extended its technical and scientific competencies to include psychological expertise. The aim is to offer every consumer telecommunications services that promote the dissemination of information and knowledge. One such example is the “speech-enabled Web”, which brings the Internet to the visually impaired. Swisscom supports “Access for All”, the Swiss foundation for technology adapted to people with disabilities, one of whose aims is to offer disabled people “barrier-free access” to the Internet. In the summer of 2004, the Swisscom Internet site ([www.swisscom.com](http://www.swisscom.com)) was adapted for use by the visually impaired.

In the year under review, Swisscom Innovations examined user requirements and the possibility of positioning information and communications technology in the healthcare sector. To this end, a prototype was developed for the remote monitoring of oxygen levels, pulse rate and medication intake, for example via mobile phone. Tele-medical services will in future supplement, and to a certain extent replace, traditional medical processes for out-patient and in-patient treatment, thereby providing patients with more comprehensive care.

### **Bridging the digital divide**

The success of the “Internet for Schools” initiative in Switzerland prompted Swisscom to implement a similar pilot project in Mali. In collaboration with ITU/WSIS (World Summit on the Information Society), Swisscom and Mali, two schools in Mali have been connected to the Internet. The two schools in Timbuktu and Mopti have been equipped with PCs and connected to a satellite link. Teaching staff are trained in Switzerland with the support of Swisscom. Around 1,300 students and 80 teachers can now use the Internet as a source of information and for communication purposes. Swisscom has invested some CHF 500,000 and 130 working days in the project. The Mali government and the communities involved will provide long-term financing.

With the support of the Swiss Institute for Child and Youth Media, Swisscom aims to promote media skills among children and young people.

Swisscom is a patron of the "Schweizer Jugend forscht" foundation. In co-operation with Swisscom Innovations, study weeks have been held on the topics of people, technology and the environment.

### **Responsibility for products and services ...**

The network infrastructure, consisting of the wireline fixed network and the mobile network, requires long-term planning and major investments well before the necessary terminal equipment comes on stream.

Legal requirements, ranging from the provisions of the Federal Law on Environmental Protection (USG) to ordinances on specific issues, provide the basis for the safe operation and expansion of telecommunications networks. In accordance with the precautionary principle enshrined in the Federal Law on Environmental Protection, the radiation limits defined by the Ordinance relating to Protection from Non-Ionizing Radiation (ONIR) for mobile communications installations in Switzerland are ten times stricter than those valid in the EU and apply to the maximum expansion of the installation. Stricter limits and extremely comprehensive legislation enforced through rigorous control mechanisms make Swiss mobile communications regulations among the toughest in the world.

The Mobile Communications and Environment unit at Swisscom Mobile is happy to provide information on mobile communications issues ([www.swisscom-mobile.ch](http://www.swisscom-mobile.ch)). Forum Mobil ([www.forummobil.ch](http://www.forummobil.ch)), an association of companies in the mobile communications sector, also supplies relevant information. The Ombudsman for Mobile Communications and the Environment has been in existence since the autumn of 2003 and provides a free service to the Swiss public.

### **...and equipment**

Discussions on radio waves repeatedly focus on the electromagnetic radiation emitted by mobile handsets (mobile phones, DECT cordless phones, etc.). The physical unit of measurement is the SAR (Specific Absorption Rate in watts per kilogram), which quantifies the rate of energy absorption in biological tissue as a result of exposure to electromagnetic radiation. The internationally recommended SAR limit is 2.0 W/kg. It applies to all equipment available on the retail market and sets the acceptable exposure limits for all user groups. The SAR limits for all current equipment are listed on the Swisscom Mobile website.

UMTS (third generation) mobile handsets require less power than GSM handsets since they set up the connection on very low power, adjusting it upwards until it becomes sufficient for the desired transmission quality.

DECT cordless handsets have an even lower transmission power than mobile handsets due to their short range. However, some users have concerns about the DECT base station, which is in constant wireless contact with its handset. In response to these concerns, Swisscom Fixnet is to launch a number of cordless phones (five or six models) with a "low radiation node" in the first half of 2005. The base station for these terminals will only transmit when the handset is in use.

### **Data and personal protection**

Much of Swisscom's product responsibility relates to customer data protection and confidentiality. This covers all areas that handle data for customer billing and identification. Measures such as building security, entry controls and regulations governing access to applications and systems guarantee the confidentiality and integrity of the content of customers' communications and personal data. Employees and suppliers are contractually bound to treat as confidential all information associated with the execution of their duties.

Data protection criteria are particularly important for data-sensitive services such as Location Based Services (LBS). The basic design of LBS along with the associated services was therefore worked out in detail with representatives of the Federal Data Protection Commissioner. The location information in the NATEL® network is kept completely anonymous, so that content providers are aware only that a NATEL® customer has used their service but do not know his or her identity.

### **Greater protection against intrusion**

For roughly a year, Swisscom and other network operators have been taking a joint stand against misuse by providers of chargeable 090x numbers. To this end, an agreement has been reached governing misuse of value-added services offered via the telephone or Internet (dialer). Swisscom Fixnet provides free dialer protection.

In the area of "mobile spam" (unsolicited phone calls and SMS/MMS messages), Swisscom Mobile has greatly enhanced the information it supplies to customers, providing tips on SMS/MMS spam and premium-rated numbers on its homepage and also periodically in its NATEL update customer information publication.

National and international agreements are making spamming a less commercially attractive proposition.

Content providers working with Swisscom Mobile are required to sign agreements containing stringent spam abuse clauses. They are also contractually obliged to operate a hotline for customers wishing to opt out from the receipt of further SMS messages. Swisscom Mobile is intent on using all the means at its disposal to tackle those responsible for spamming. Where direct intervention is possible, Swisscom Mobile will block the access.

## **Economy**

Swisscom supports the Swiss economy by providing the very latest in efficient telecommunication services and by making the majority of its investments in Switzerland.

The company is actively involved in several institutions that promote domestic economic growth. These include the Swiss Economic Forum in Thun, the International Management Symposium ISC in St. Gallen, ESPRIX, the Swiss Quality Prize for Business Excellence in Lucerne and Switzerland Tourism.

Swisscom also collaborates with groups that promote ecological and social awareness in companies. For instance, it is participating in a project run by the Swiss Association for Environmentally Conscious Management on corporate reporting of social indicators.

## **Culture and sport**

With its cultural and sporting commitments, Swisscom contributes towards the attractiveness of Switzerland as a business location and a place to live. Sport and culture serve to make life more enjoyable. It is also a known fact that outstanding performance and achievement by top athletes boost sport at recreational level. Swisscom views both of these aspects as its contribution towards the health of the nation. The wide range of cultural events supported by Swisscom would not be possible without sponsors and patrons. This applies in particular to investments in infrastructure and support at major national events.

In the area of culture, Swisscom supports a diverse range of musical events from classical and jazz to blues, rock and pop. In addition, the company is a sponsor of the Locarno International Film Festival and the Golden Rose. Swisscom is also the main partner of the Museum of Communication in Berne. The Paul Klee Center in Berne, which will house the world's most important collection of Paul Klee works (around 4,000 in total covering all the artist's creative periods), has also received start-up capital from Swisscom. The Center is due to open in the summer of 2005.

In the sporting arena, Swisscom is heavily involved in football and in the winter sports disciplines that come under the umbrella of the Swiss Ski Association. Since the 2004/05 season, downhill and cross-country skiing have been joined by snowboarding, freestyle and telemark. Swisscom is also the communications partner for major sporting events, and is therefore involved in ice hockey, athletics and rowing. Thanks to its sponsorship of Switzerland's main knockout football competition – known since 2003 as the Swisscom Cup – Swisscom is represented throughout Switzerland. Swisscom sponsored the national football team at the 2004 European Championships and also supports disabled sport through its sponsorship of the Swiss Paralympics.

### Help for people in need

Sometimes it is necessary to help others without expecting anything in return. Swisscom does just this in its commitment to "Die Dargebotene Hand" (The Samaritans), "Glückskette" (Swiss Solidarity) and other institutions.

The Samaritans' 24-hour number 143 is the first point of contact for people in desperate need of help or advice – irrespective of age, culture or creed. The number of calls has increased by around 50 percent over the past ten years, with more than 200,000 calls now being taken each year. Since 2000, Swisscom has been the organization's official partner, offering support in the form of goods and services.

Swisscom is a partner of Swiss Solidarity, the Swiss media appeal charity headed by SRG SSR idée suisse. Swiss Solidarity currently works with around 30 relief organizations. Swisscom provides the freephone numbers and the entire telecom and Internet infrastructure for the regular national appeal days. In addition to its usual support, Swisscom organized an internal appeal for victims of the devastating tsunami that struck Asia on December 26, 2004. Swisscom doubled employees' donations to produce a final tally of CHF 2.32 million.

The Pestalozzi Children's Village Foundation received a donation of CHF 100,000 thanks to the generosity of some 7,500 Swisscom Fixnet employees, who elected to donate money to the foundation in lieu of a Christmas gift. The relief organization Terre des Hommes was also a beneficiary.

# Swisscom and the environment

## **Environmental policy and strategy**

Environmental management, an integral part of environmental policy and strategy, is a common point of reference for the independently operating Swisscom Group companies. Environmental policy and strategy form the “environmental umbrella” for all Group companies. The key points of the environmental strategy are:

### **Environmental law and risks**

Impact: Protection of the environment and corporate security.

Goals achieved: Environmental compliance and substantial elimination/minimization of risks, for example by eliminating the use of hazardous substances at Swisscom.

### **Conservation of resources and alternative energies**

Impact: Reduction in CO<sub>2</sub> emissions, improved energy efficiency and promotion of renewable energy sources.

Goals achieved: Energy savings in the consumption of electricity, vehicle fuels and heating oil (in terms of eco-efficiency). Swisscom has far exceeded its goal of promoting alternative energy sources thanks to the large-scale purchase of naturemade star eco-energy generated from sun, wind and water.

### **Ecological products and services**

Impact: Reduced environmental impact (consumption of raw materials and energy, waste).

Goals achieved: Swisscom supplies ecologically beneficial services. Not achieved: Product portfolio still lacking any real eco-products.

### **Environmental communication and marketing**

Impact: Promotion of internal and external awareness of environmental matters, extension of environmental performance beyond the borders of the company.

Goals achieved: Environmental communication established, several convincing external environmental commitments, marketing of services through involvement with naturemade star eco-energy.

### **Environmental organization and system**

The environmental organization has been brought into line with the Swisscom Group structure. A Group-wide Environment Committee acts as a supervisory body. Eight of Swisscom's Group companies are ISO 14001 certified and have an environmental manager and an environmental officer. The other Group companies and organizational units have an environmental contact partner.

A standardized, well-established environmental process ensures that all environmental standards are addressed and incorporated in a Group-wide environmental policy and strategy, implemented with the aid of a quality management system that is also certified.

ISO 14001 focuses on awareness of the environmental aspects relevant to a company based on materials and energy flows as well as legal and corporate requirements. In the main, the relevant areas are handled and documented with indicators. There is also an web-based environmental training program for all staff. Added to this, there are environmental indicators of global significance (e.g. water consumption) that are ascertained by Swisscom even though they are not relevant for business processes.

### **Consumption of resources**

Swisscom does not manufacture any equipment and so does not consume any raw materials. The company does, however, require consumables such as paper and water as well as resources such as building materials, electronics and cables, etc. in order to maintain and expand its fixed and mobile networks. Swisscom also uses land for buildings and parking facilities, which of course affects the landscape. However, the main area of consumption for the company is energy, in the form of electricity, heating and vehicle fuels.

Electricity now accounts for around three-quarters of all energy consumed by Swisscom, an increase on its previous share of total consumption. In second place come heating fuels (heating oil, gas, district heating), followed by vehicle fuels (petrol, diesel). Swisscom has slightly reduced its total energy consumption in the last five years, with the figure currently standing at 1805 terajoules, or 502 gigawatt hours

Swisscom has examined several energy scenarios up to 2010. Based on the most probable scenario, a target-based agreement has been concluded with the Energy Agency for Industry (EnAW) under which Swisscom undertakes to improve energy efficiency for electricity consumption by 17 percent and reduce CO<sub>2</sub> emissions by the same percentage between 2002 and 2010.

### **Electricity**

Electricity consumption at Swisscom has remained virtually constant over the past few years. In 2004 it stood at 1366 terajoules, which corresponds to some 380 gigawatt hours. Huge savings in some areas have been offset by additional consumption in other expanding business areas such as mobile communication and radio.

The largest share of electricity is used for operating the fixed network and for air-conditioning/ventilation systems. Swisscom has made substantial energy savings in this respect, partly by streamlining the network infrastructure, replacing old equipment and cutting down on air-conditioning. This is likely to cut annual energy costs by several million Swiss francs over the next few years. The adjustments are time-consuming and are therefore made during times when the workload is somewhat lighter.

### **naturemade star eco-energy**

Swisscom intends to purchase around 13.2 million kWh of eco-energy (naturemade star) in 2005. Of this, 11.7 million kWh will come from naturemade star certified hydroelectric power stations, 900,000 kWh from a wind generator on Mont Crosin and 600,000 kWh from several solar installations. This makes Swisscom the largest purchaser of wind and solar energy in Switzerland. The aim behind purchasing eco-energy is to promote renewable energy sources and help make the use of hydropower ecologically sustainable. This has a positive impact both on the countryside and on biodiversity. Swisscom's energy savings more than compensate for the additional costs of eco-energy.

### **Heating fuels (heating oil, gas, district heating)**

In recent years, Swisscom has managed to continuously reduce its consumption of heating fuels, particularly heating oil. Gas, and especially district heating, are better than heating oil from the point of view of CO<sub>2</sub> emission. Swisscom recently concluded a contract with the Zurich Electricity Company for the supply of waste heat from its premises in Zurich-Binz. This waste heat will be used for two new developments, thus saving 300,000 liters of heating oil per annum.

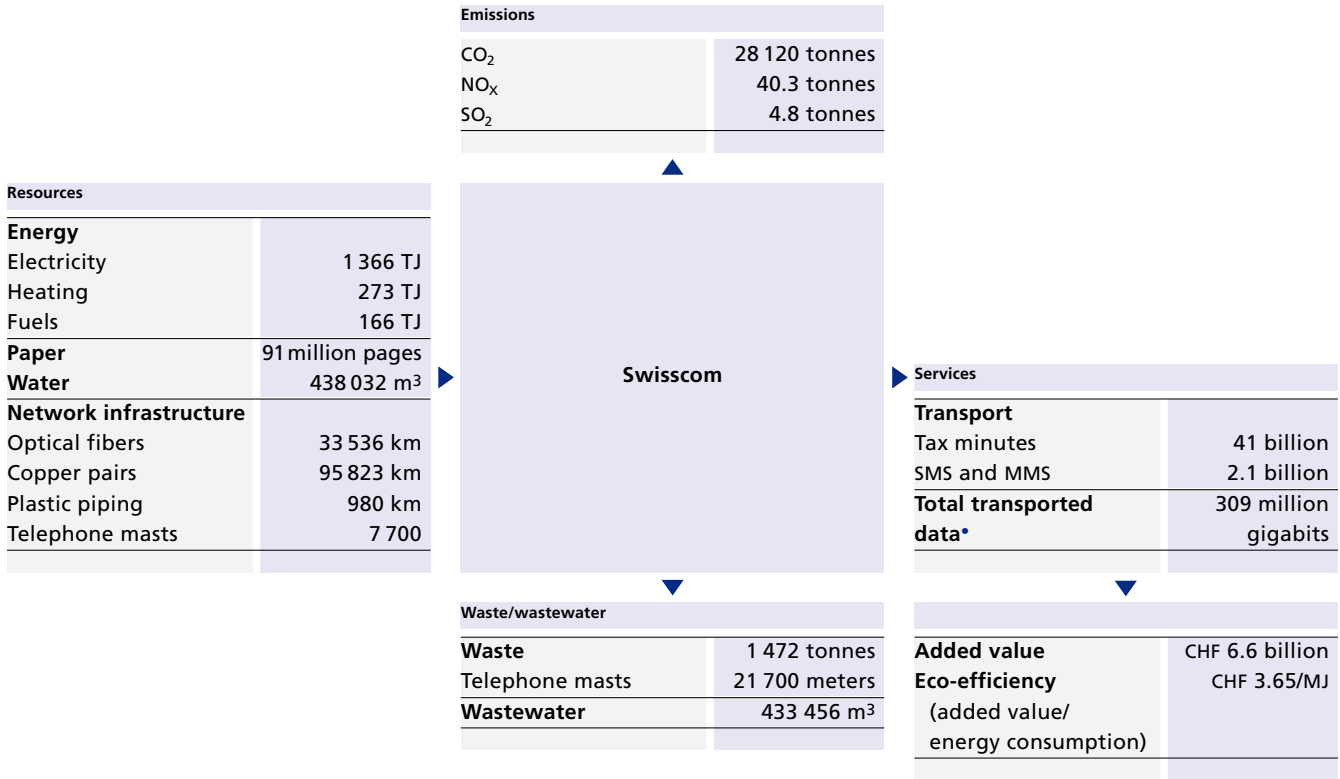
### **Vehicle fuels (petrol, diesel)**

Swisscom reduced its vehicle fuel consumption still further in 2004. The company has continued and expanded the bio-fuel project, which involves the use of a blended fuel comprising petrol mixed with five percent bioethanol. Swisscom is also running several test vehicles that are powered by alternative means (batteries, hybrids and gas). New diesel vehicles fitted with particle filters have replaced older petrol vehicles.

### **Resources for the network infrastructure**

Swisscom is continuing to expand its networks, and to do this it requires resources for technical applications. The investments involved are largely long-term ones, comparable with real estate investments. For example, the fixed network was expanded and upgraded in 2004 in a process that involved 33,536 km of optical fiber, 95,823 km of copper pairs and 7,700 telephone masts.

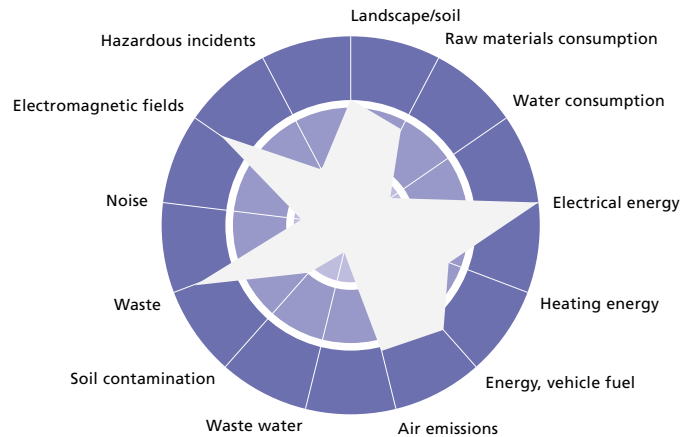
**Input/output diagram**  
Key environmental indicators 2004



\* Calculation based on Fixnet tax minutes (64 kbps) + Mobile tax minutes (13.6 kbps) + ADSL

**Environmental aspects**

The following chart illustrates the relevance for Swisscom of the individual environmental aspects, based on the environmental indicators, legal and social requirements:



**Paper**

More than two million Swisscom Fixnet customers now receive bills only once every two months, which constitutes an annual saving of 60 million sheets of paper or around 1,000 trees. Swisscom has also contributed CHF 36,000 to the forest protection projects of three communes in central Switzerland. As a basis for comparison: total office paper consumption at Swisscom amounts to 91 million sheets of (A4) paper per annum.

**Water**

Swisscom only uses water for sanitary purposes, and none of the company's processes are water-polluting. Nevertheless, Swisscom has put measures in place to keep down the consumption of fresh water, for example by using rainwater for toilets and plants as well as installing water savers (AquaClic) in around 130 buildings. This last measure also saves energy, as less hot water is required. Fresh water consumption stood at 433,456 m<sup>3</sup> in 2004, a reduction of 5.5 percent compared with the previous year.

To reduce the amount of waste, rainwater is returned to the natural water cycle wherever possible.

**Landscape/soil**

Swisscom endeavors to create and maintain natural surroundings that employees and local residents can also use for relaxation. Four Swisscom locations, including most recently the site in Zurich-Binz, have already been awarded the "Swiss Business Naturepark" certificate.

At the request of the conservation organization Pro Riet Rheintal, Swisscom has moved its overhead cables underground in the Bannriet conservation area at Altstätten in the canton of St. Gallen. This was done to improve the appearance of the landscape and protect the local birds.

Spatial requirements: the total space for offices and technical operations (net floor space) was reduced by 12 percent in 2004 to 1.5 million m<sup>2</sup>. Freestanding mobile base stations take up a total area of 18,000 m<sup>2</sup>.

## Emissions and waste

### Waste gas emissions

At Swisscom, 60 percent of CO<sub>2</sub> emissions come from heating fuels (oil, natural gas) and 40 percent from vehicle fuels (petrol, diesel). Their reduction follows the same curve as the savings in heating and vehicle fuels, which went down again slightly in 2004.

There are various sources of the air pollutants NO<sub>x</sub> and SO<sub>2</sub>: NO<sub>x</sub> is primarily a by-product of vehicle emissions, while SO<sub>2</sub> comes from heating oil. Here, too, there has been a reduction.

### Noise

As an intangible, noise does not impact ecology as such, but it is a nuisance to people and animals. The only source of noise at Swisscom is the vehicle fleet. A year-on-year drop in kilometers traveled resulted in a reduction in noise emission.

### Non-ionizing electromagnetic radiation

Like noise, electromagnetic emissions are intangible. According to current findings, non-ionizing radio signals do not represent an ecological problem. The current legal limits are based on thermal effects, and additionally take into account the precautionary principle.

Swisscom operates a GSM network, a UMTS mobile network and, in addition, a PWLAN (Public Wireless Local Area Network). The WLAN requires little power due to its short range (only up to 300 meters). The power radiated by mobile base stations is generally significantly below the permissible maximum level. On an average day, transmitted radiation is less than 30 percent of the permissible radiation.

### Waste

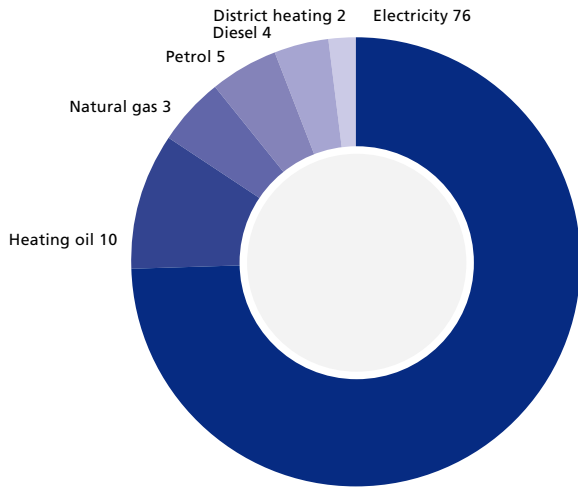
Most of Swisscom's waste continues to be offered as "product waste" over the Swiss Waste Exchange at [www.abfallboerse.ch](http://www.abfallboerse.ch), where authorized waste disposal and recycling companies can bid for it. The total volume of waste fell again slightly in 2004.

## Products and services

Swisscom is transmitting ever larger volumes of data over its networks. This has the environmentally beneficial effect of reducing the volume of material data carriers and physical transport requirements. At the same time, however, the transmission requires hardware in the form of terminal equipment and network components that consume energy and ultimately produce waste. It is ecologically and economically beneficial to operate optimally loaded networks and multifunctional terminal equipment. In 2004, the volume of data transmitted by Swisscom amounted to approximately 309 million gigabits (based on Fixnet tax minutes [64 kbps] + Mobile charge minutes [13.6 kbps] + ADSL). This is 39 percent more than the previous year.

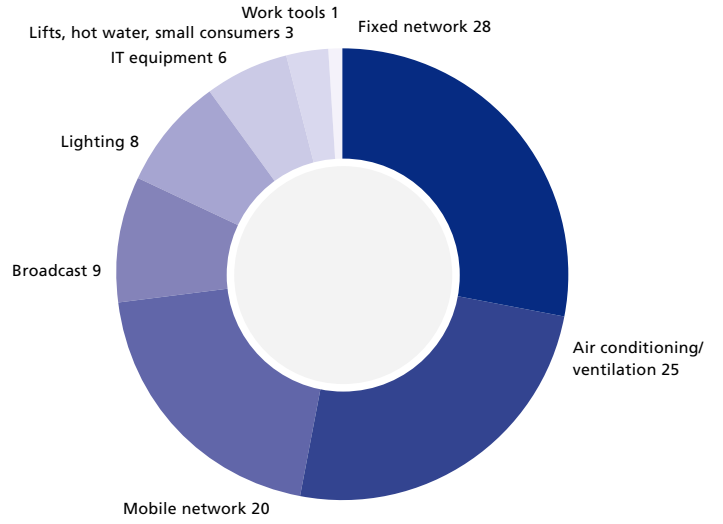
Energy resources 2004

%



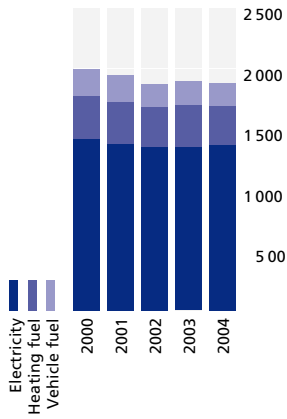
Electricity distribution by consumer

%



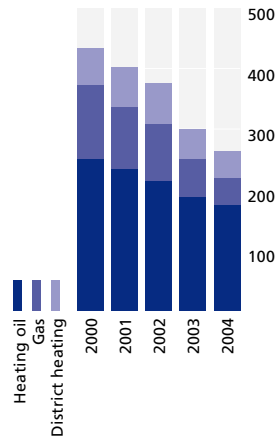
Energy consumption

Terajoules



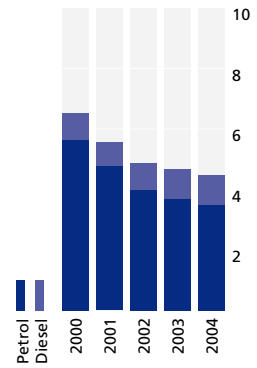
Heating fuel consumption

Terajoules

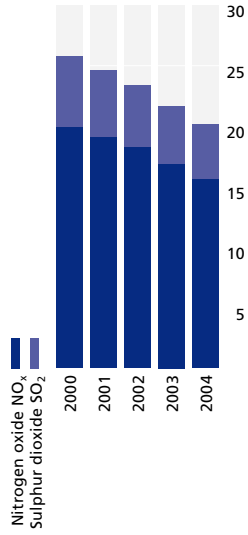


Vehicle fuel consumption

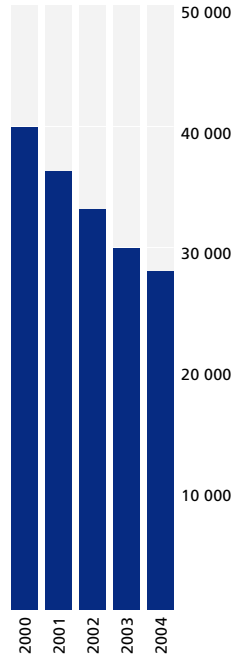
Million liters



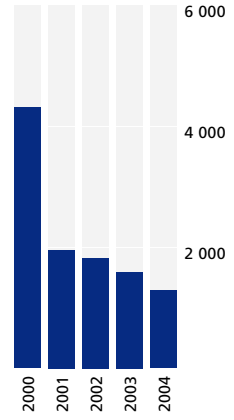
**Air emissions: NO<sub>x</sub> und SO<sub>2</sub>**  
Tonnes



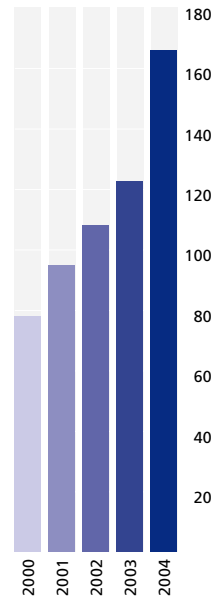
**Air emissions: CO<sub>2</sub>**  
Tonnes



**Waste**  
Tonnes



**Product-related eco-efficiency**  
Telecom traffic/Energy in bits/joule



In terms of products, Swisscom relies on close cooperation with its suppliers. This is the only way to achieve ecological product improvements and, if necessary, more socially acceptable working conditions in the production area. Swisscom uses eco-social parameters for supplier evaluation.

The Swisscom Environment Committee has set up a central Group-wide system for evaluating suppliers according to defined ecological and social criteria. These requirements criteria for principal suppliers – together with supplier evaluations – should help to generate sustainable improvements in the entire procurement chain. Swisscom exerts “eco-social pressure” on its immediate suppliers; they then do the same to their suppliers and so on until finally the entire production chain is involved.

#### **Swisscom's eco-efficiency**

Environmental indicators in isolation say little about a company's environmental performance. They merely represent the amount of environmental damage and must therefore be considered in relation to the added value. This comes under the heading of eco-efficiency. The eco-efficiency indicators are based on the general format of the added value per unit of environmental damage, i.e. a company's eco-efficiency increases if the added value created is proportionally greater than the environmental damage caused or if the damage is proportionally lower than the added value created. The higher the figure, the more positive the environmental impact, and the more sustainable the company's approach. Added value can be financial or product-related. Environmental damage is the total impact on the environment caused by the value-adding process; at Swisscom this primarily relates to energy consumption.

According to the standard definition, financial added value is the EBITDA value plus personnel expenses. Product-related added value at Swisscom is best represented in terms of telecommunications traffic, i.e. the volume of data transmitted in bits. This is calculated on the basis of the following bandwidths: Fixnet (64 kbps)+ ADSL, Mobile (13.6 kbps).

In 2004, Swisscom achieved a financial added value of CHF 3.65 per megajoule of energy used and transmitted a data volume of 171 bits per joule. Financial eco-efficiency has remained constant over the last few years, while product-related eco-efficiency has enjoyed a steady rise. The reason for this lies in the increase in data traffic coupled with a reduction in data transmission (tax minutes and ADSL).

Swisscom aims to further improve its eco-efficiency over the next few years, both by increasing the added value (transfer of larger data volumes) and by reducing or at least containing the current level of environmental damage (energy consumption).

### **Environmental risks and legal conformity**

The elimination or reduction of environmental risks and the review of legal conformity are ongoing tasks at Swisscom which are addressed at regular intervals in the context of the ISO 14001 certified environmental management system.

In the year under review, environmental risks were reduced thanks to comprehensive supplier assessment systems and a targeted reduction in environmentally hazardous substances, for example by downsizing battery systems, which has reduced the electrolyte volume (sulphuric acid as a hazardous substance).

In terms of ensuring compliance with environmental legislation, the focus has been on the following: new requirements for air-conditioning systems (amendment of the Swiss Ordinance on Environmentally Hazardous Substances, StoV); the disposal of old mobile phones as well as the return and transportation of mobile phone batteries; the export of old, but still usable telephones and the disposal of electrical and electronic waste.

### **External environmental commitments and projects**

Although ecology in the operational sphere is at the heart of Swisscom's environmental activities, the company still looks beyond the Group to enhance and strengthen ecological benefits through appropriate external commitments. Our eco-sponsorship supports the following projects:

- WWF SMARAGD project
- Swiss National Park
- GLOBE environmental schools project

What these projects have in common is nationwide relevance, an affinity with the Swisscom values of "roots" and "respect" and, from an ecological viewpoint, a benefit to biodiversity.

These projects also offer possibilities for a stronger collaborative relationship involving both employees and customers. In 2004, Swisscom and its employees implemented seven nature-conservation initiatives on behalf of the SMARAGD project. Swisscom Fixnet also supported the main WWF campaign for the protection of rare plant and animal species with a TV advertisement (Swisscom Fixnet – partner for the protection of species), accompanied by billing enclosures and flyers.

Reference indicators	Unit	1998	1999	2000	2001	2002	2003	2004
Net revenue	CHF in millions	10 461	10 170	10 067	10 366	10 415	10 026	10 057
Employees	FTEs	21 946	19 254	17 459	17 784	17 171	16 070	15 477
EBITDA	CHF in millions	4 472	4 152	3 867	4 222	4 254	4 504	4 404
Added value	CHF in millions	7 029	6 502	6 169	6 446	6 581	6 770	6 598
Telecom traffic	Million minutes	24 560	33 264	43 133	48 667	47 079	44 270	40 652
Telecom traffic	Million gigabits		121	157	177	192	223	309
SMS messages	Millions		217	651	1 317	1 650	1 847	1 986
<b>Ground/buildings</b>								
Net floor space	Million m <sup>2</sup>	2.4	2.4	2.2	2.1	2.0	1.7	1.5
<b>Paper (photocopying/printing)</b>								
White A4	Million sheets	98.3	104.3	93.6	109.0	89.0	82.2	83.3
Grey A4	Million sheets	11.4	29.4	11.1	11.9	13.0	9.0	7.6
<b>Water consumption/wastewater</b>								
Water consumption	m <sup>3</sup>	614 488	539 112	488 852	483 224	480 788	450 380	433 456
<b>Energy, electricity</b>								
Electrical energy consumption	TJ	1 357	1 368	1 377	1 289	1 215	1 346	1 366
<b>Energy, heating</b>								
Heating oil	TJ	271.8	277.3	267.4	246.6	222.9	188.1	181.6
Natural gas	TJ	74.2	94.0	99.7	85.2	84.1	66.7	48.0
District heating	TJ	41.9	44.6	58.6	58.7	58.5	47.3	43.8
<b>Energy, fuels</b>								
Petrol	TJ	233.1	204.6	180.9	149.7	130.3	113.9	98.1
Diesel	TJ	25.3	27.3	24.3	35.9	47.0	61.3	68.1
Kilometers driven	Km in millions	61.2	54.6	51.5	55.9	57.0	63.5	60.2
<b>Total energy consumption</b>								
Terajoules	TJ	2 004	2 016	2 007	1 865	1 758	1 823	1 805
Gigawatt hours	GWh	557	560	558	518	489	507	502
<b>Air emissions</b>								
Carbon dioxide CO <sub>2</sub>	Tonnes	42 991	42 527	40 144	36 364	33 964	30 286	28 120
Nitrogen oxide NO <sub>x</sub>	Tonnes	49.8	42.6	40.8	41.6	41.0	16.7	40.3
Sulphur dioxide SO <sub>2</sub>	Tonnes	6.0	5.9	5.5	5.3	5.1	4.8	4.8
<b>Total waste</b>								
(excl. household waste)	Tonnes	9 045	6 741	4 242	1 954	1 894	1 651	1 472

EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortisation

Added value: EBITDA + personnel expenses

Energy: 1 TJ (terajoule) = 278 MWh;

1GWh (gigawatt per hour) = 1 million kWh = 3.6 TJ (terajoule)