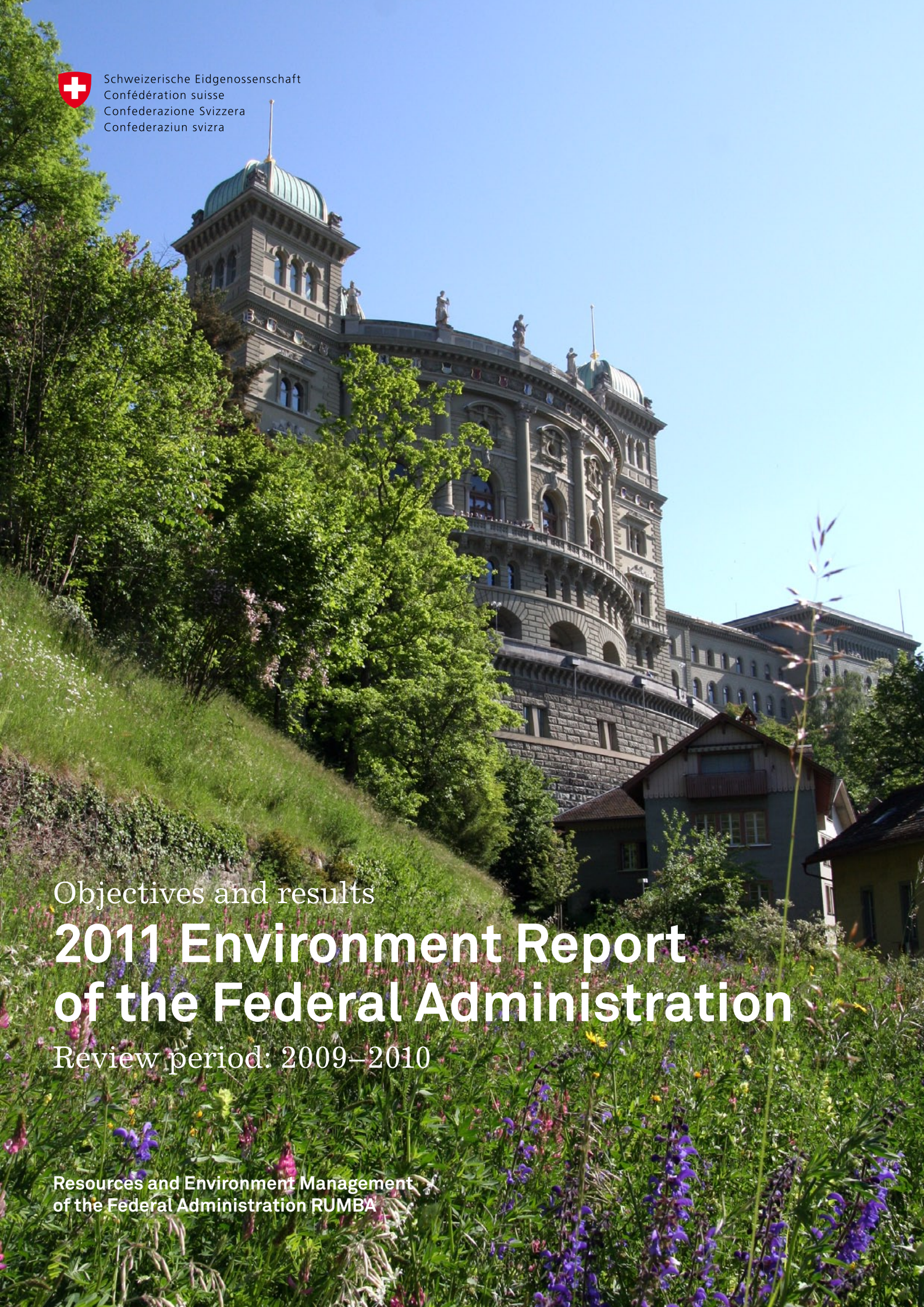

Schweizerische Eidgenossenschaft
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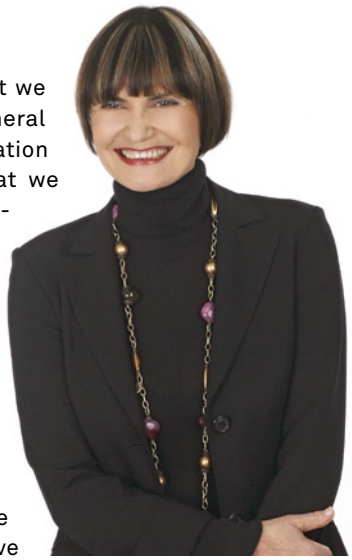
Objectives and results

2011 Environment Report of the Federal Administration

Review period: 2009–2010

Resources and Environment Management of the Federal Administration RUMBA

Resources and environment management – more important than ever!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Dear Reader,

In this sixth environment report we once again present to the general public and all federal administration employees an overview of what we have achieved in terms of environmental protection, and what still needs to be done.

By 2016, the Federal Council intends to reduce each department's environmental impact by at least ten per cent compared with 2006. The results of this environment report demonstrate that the federal administration is still on course to achieve this. Over the last five years, our environmental impact has decreased by 7.1 per cent per employee. However, the figures also show that environmental impact rose between 2008 and 2010 compared with the previous two years. This development is regrettable and indicates that the federal administration needs to intensify its efforts to achieve its environmental goals by 2016.

On 25 May 2011, the Federal Council defined its new energy policy, which focuses on expanding the power mix (giving priority to hydroelectric and new renewables) and on energy saving measures. Each unconsumed kilowatt hour saves money and helps us to implement the new energy policy. We can only do this if there is close cooperation between federal government and the cantons, scientists and businesses, indeed between a range of players. The federal government should act as a model and set a good example. It should meet a substantial part of its own energy needs with renewables and apply the principle of best practice in all areas.

The conditions required to do this are improving all the time. In the last two years we have been able to expand greatly the centralised services for the environment teams in the RUMBA units. This means they can contribute even more to implementing concrete measures to reduce the federal administration's environmental impact. However, in addition to all the technical improvements, the personal efforts made by the employees are also very important. The federal administration aims to set an example and make a huge effort to reduce resource use and environmental impact. This is now more important than ever!

My thanks to all employees who help to achieve this aim.

Micheline Calmy-Rey, President of the Swiss Confederation

Contents

This is a summary of the Environment Report. The full report, together with additional information on the ecological balance of the various Federal Departments and key data of all RUMBA units, can be downloaded from www.rumba.admin.ch (in German, French and Italian).

Ecological balance of the Federal Administration

Ecological objective of the Federal Administration

The principal objective of RUMBA is to continually reduce the pollution of the environment attributable to operational activities and the use of products within the Federal Administration.
The aim is that, by 2016, the level of pollution per employee (full-time equivalent) within each Federal Department should be at least 10 percent below the level recorded in 2006.

Presentation of key data

The key environmental data presented in this report refer to all OUs that currently implement RUMBA (i.e. RUMBA units).
The table shows the consumption of resources in 2010, the change since 2008 and the environmental impacts by source (polluter). Energy consumption is now expressed as primary energy in megajoules (MJ). In this way it is possible to directly compare the various energy sources with one another. CO_2 emissions have been included in this report for the first time. Pollution of the environment is expressed in the form of environmental pollution points (EPS) in accordance with the method applied by the Federal Office for the Environment FOEN since 2006. All key data are shown per employee.

Consumption of resources

The consumption of resources per employee fell versus 2008 in the areas of waste (–17%), paper (–6%), rail travel (–13%), and road transport (–30%), while marked increases were recorded with respect to electricity consumption (+7%) and air travel (+26%), and heat (–0.2%) and water (+0.3%) consumption only changed very slightly.

Environmental pollution and CO_2 emissions

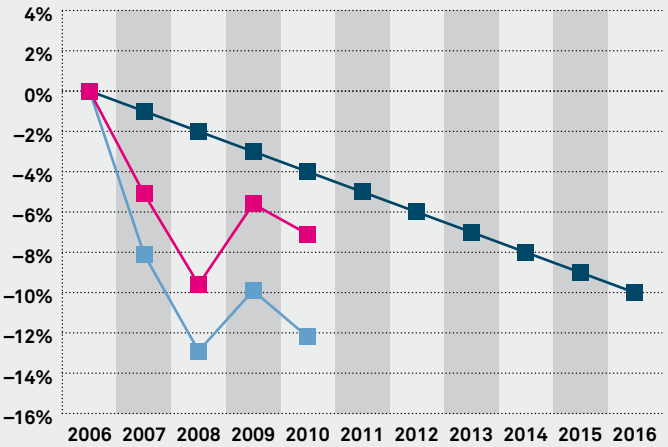
Electricity now accounts for 56% of environmental pollution, while travel is responsible for 26% (21% of which is attributable to air travel). Heating accounts for 11%.
CO_2 emissions rose by 1% and have now reached 3,149 kg CO_2 equivalents per employee.

Achievement of objectives

The level of pollution per employee (excluding CO_2 compensation) is to be reduced each year. This goal was achieved in 2010, but not in 2009. The main reason for this was higher electricity consumption. The level of environmental pollution was reduced by 7.1% versus 2006.
The target for 2016 is for the overall level of pollution per employee to be reduced by at least 10% versus 2006 (taking CO_2 compensation into account). If this reduction is depicted evenly, a target path can be obtained (cf. dark blue arrow in graph). The level of pollution for all RUMBA units (including CO_2 compensation) has fallen by 13.1% since 2006, which is well above the target path.

Consumption of resources and environmental pollution 2010

	Consumption of resources		Pollution	
	per employee	Change versus 2008	1,000 EPS per employee	%
Heat	14,039 MJ	0%	377	11
Electricity	49,291 MJ	+7%	2,006	56
Water	16,420 litres	0%	71	2
Waste	62 kg	–17%	69	2
Paper	71 kg	–6%	136	4
Air travel	3,770 km	+26%	743	21
Rail travel	1,177 km	–13%	34	1
Car travel	548 km	–30%	151	4
Total			3,583	100



Achievement of objectives in 2010
Change in pollution per employee versus 2006

Environment management within the Federal Administration

RUMBA programme – the systematic management of resources and the environment within the Federal Administration

RUMBA is strategically controlled by the Conference of General Secretariats (CGS) and operationally managed by the RUMBA Coordination Group and the RUMBA Workgroup.
Based on the criteria specified by the RUMBA Coordination Group, each Department designates the organisational units responsible for implementing RUMBA (= RUMBA units). Each Department coordinates the environmental activities of its RUMBA units, monitors the achievement of its target, and orders the implementation of additional measures if it appears that the target cannot be achieved.

RUMBA within the Federal Administration

In 2010 the workforce of the Federal Administration numbered around 51,950 employees (full-time equivalents) of whom 24,850 worked in the general Federal Administration (excluding the Federal Department of Defence, Civil Protection and Sport DDPS), 12,000 in the DDPS, and 15,100 in the Federal Institutes of Technology.
Within the Federal Administration, 14,120 employees (64%) are integrated into the RUMBA programme. This does not include the DDPS and independently operated organisational units (21,965 employees). Foreign representations and offices of the Federal Department of Foreign Affairs FDFA (approx. 3,330 employees) and the Federal Customs Administration (approx. 4,000 employees) are not included in the RUMBA programme. At the Federal Roads Office (approx. 450 employees), RUMBA has only been introduced in the products segment to date. Excluding these external locations, 96% of all Federal Administration employees are integrated into the RUMBA programme.
Within independently operated organisational units, RUMBA is implemented within the scope of service level agreements. RUMBA has already been fully introduced in all units of the two Federal Institutes of Technology.
In addition to the internal environment management system of the DDPS (RUMS DDPS), which focuses on ecological measures In the area of defence, within the DDPS, RUMBA is also implemented in the Federal Office of Sport (3.6% of the Department's workforce). The two other DDPS RUMBA units have had to postpone their activity due to restructuring.

Improvement of central services for RUMBA units

In 2010 the RUMBA Coordination Group adopted its environmental vision and objectives for the implementation of RUMBA within the Federal Administration (see below and at www.rumba.admin.ch). The RUMBA Workgroup implements the elements of strategic environment management through specific measures.
In the past two years, special attention was paid to improving and expanding the central services provided by the RUMBA Workgroup to RUMBA units. For example, wherever possible the input of building data (area, consumption of heat, electricity and water, volume of waste) and data relating to paper consumption and business travel (by rail and air) is now effected centrally and uniformly. This enables the environment team leaders to focus to a greater extent on the implementation of measures. In addition, the administrative procedure for RUMBA units wishing to claim compensation for reducing greenhouse gas emissions has been simplified.

Fellerstrasse 21: Renovation/extension meeting the MINERGIE standard

Environmental vision for the Federal Administration (RUMBA)
The Federal Administration's resource and environment management system serves as a model for both state and private institutions.

- The Federal Administration contributes towards the achievement of the interim goal of creating a "2,000-watt society" by 2050.
- The Federal Administration focuses its activities on the relevant environmental areas.
- With its RUMBA programme, the Federal Administration provides the affiliated organisational units (RUMBA units) with implementation tools that are simple and convenient to use.
- The Federal Administration pursues a policy of transparent internal and external communication, and actively, clearly and openly explains its objectives.
- The Federal Administration promotes the procurement of sustainable products.

General objectives for 2010

- Continue RUMBA programme in all RUMBA units, including annual action plans and environment reports.
- Achieve an annual reduction of pollution per employee in each Department (without taking CO_2 compensation into account).

Results in 2010

- All RUMBA units produced their key data for 2010, and most of them prepared an environment report and updated action plan (exceptions arose due to restructuring).
- The level of pollution per employee in all RUMBA units has fallen by 7.1% since 2006, or by 12.2% if CO_2 compensation is taken into account.
- In 5 out of 7 Departments the RUMBA units could reduce their pollution level versus 2006 as well as 2008

Targets for 2016

- Continuously reduce the level of pollution per employee (excluding CO_2 compensation) in each Department.
- By 2016, each Department is to reduce its overall level of pollution per employee by at least 10% versus 2006 (taking CO_2 compensation into account).

Heating, water and waste

Heat consumption by RUMBA units

The heat consumption per employee in the RUMBA units remained practically unchanged versus 2008 (–0.2%), but was around 16% below the 2006 level (see graph).
The heating requirement per square metre of reference space has risen since 2008 from 274 to 279 MJ (2.1%). 2010 was a comparatively cool year, during which there were around 6% more heating degree days than the long-term average. Although this influence was adjusted for in the calculation of the key data, fluctuations cannot be ruled out. The occupied space per employee fell versus 2008 by 2.3% to approximately 50 square metres.

Measures in buildings

The Federal Office for Buildings and Logistics (FBL), the Department of Defence, Civil Protection and Sport DDPS and the Federal Institutes of Technology are consistently working on improving energy efficiency in buildings. New buildings now have to comply with the MINERGIE standard, and in the areas for which the FBL is responsible they will have to meet the more stringent MINERGIE-P-Eco standard with effect from 2012.
Thanks to its consistent implementation policy, the FBL was able to more than double the total area of MINERGIE-certified buildings to 113,000 square metres (see graph). Approximately 86,000 square metres of the certified premises are occupied by RUMBA units, which is equivalent to 11% of their total occupied space.
Despite the great deal of effort exerted here, the low proportion is one of the reasons why the structural improvements are not yet reflected in the key data. Another reason is that renovation and retrofitting work was only completed in the course of the year, and the full effect will only be felt at a later date.
A broad variety of specific measures were also implemented with the aim of reducing energy consumption in buildings.
In 2006 the FBL, the Federal Institute of Technology, Zurich, EMPA laboratories in Dübendorf and WSL Birmensdorf formed a “Public Buildings” group and concluded a voluntary target agreement with the Energy Agency for Industry.

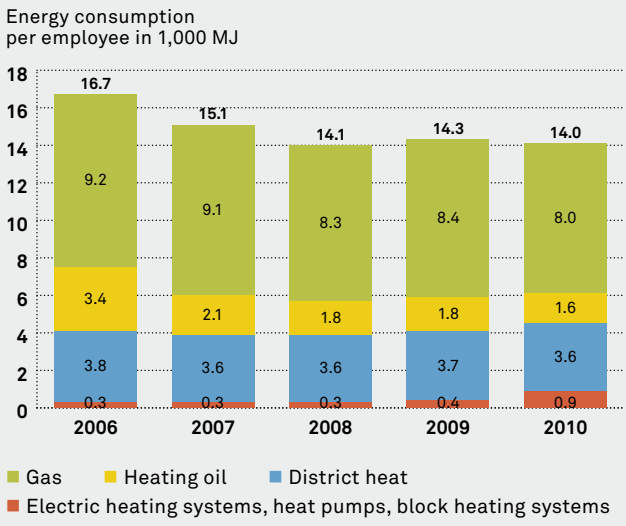
Water, sewage

In the RUMBA units the average water consumption per employee rose by 0.3% versus 2008 to 82.1 litres per day, but this figure represents a decrease by 15% versus the 2006 level.

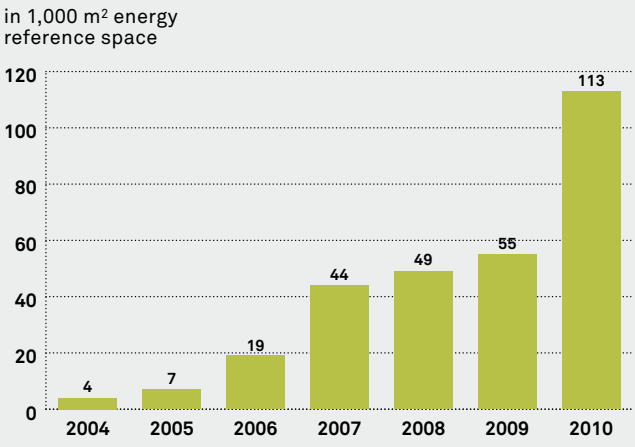
Waste

The total volume of waste comprises general waste and separately collected waste paper. In the Federal Administration, the separate collection of waster paper was already introduced more than 10 years ago. In the RUMBA units, the volume of waste per employee fell to 62 kg in 2010 (–17% versus 2008). This represents a decrease by 19% versus 2006.

Heating consumption by RUMBA units (by energy carrier)
(primary energy)



Area of FBL qualifying for MINERGIE certificate



Objectives for 2010
- Introduce a reliable method of collecting energy data for all buildings
- Action plans for meeting all the electricity and heat consumption targets of SwissEnergy

Achievement of objectives in 2010
- Method of collection of energy data for buildings corresponds to SIA 416/1 and fact sheet SIA 2031
- Energy efficiency action plans were produced for all RUMBA units

Measures for achieving the objectives
- Implement target agreement with Energy Agency for Industry concerning reduction of CO_2 pollution
- Implement MINERGIE directive
- Sensitise employees about efficient heating and ventilation

Electricity

Electricity consumption by RUMBA units

In the RUMBA units, the consumption of electricity per employee rose in 2009 to 50,006 MJ (primary energy), after having fallen in 2007 and 2008; it fell slightly again in 2010 to 49,291 MJ. This is 7% higher versus 2008, but 3% lower versus 2006 (see graph). In absolute terms, this corresponds to the consumption level of more than 14,000 households. The increase in electricity consumption is primarily attributable to the expansion of the information technology infrastructure. It was not possible to simultaneously offset this increase through savings elsewhere.

Measures to reduce electricity consumption

A broad variety of measures are being implemented with the aim of reducing electricity consumption and the resulting burden on the environment.

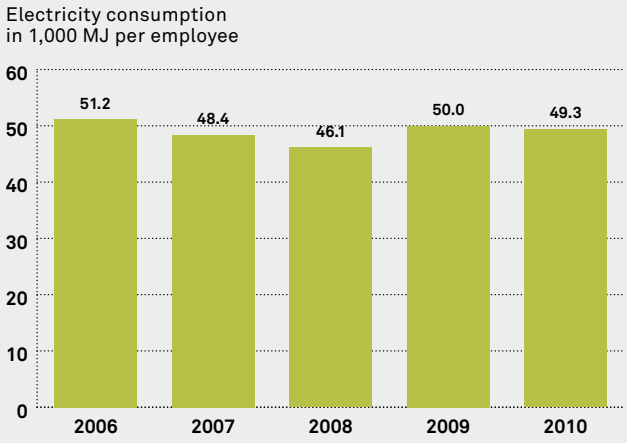
- The procurement standard (IKT resource and environment standard P025) is being constantly adapted to technological developments and new legal provisions.
- Work on the revision of the operational standard (IKT resources and environment standard P026) was initiated in 2010. The aim of this standard is to ensure that the energy options in IT devices such as PCs, monitors and printers are configured correctly so that the devices can be used with the lowest possible electricity consumption without seriously affecting their user-friendliness.
- Green IT: Developments in computer centres are resulting in servers with ever greater capacities, but which also consume more electricity. At the same time the demand for cooling systems increases. Existing and future computer centres need to be systematically designed for maximum energy efficiency.

Electricity from renewable sources

As procurement centre for most of the units in the Federal Administration, with its electricity supply mix the FBL is playing an exemplary role. The changeover of the agreements between the FBL and its electricity providers to the supply of 100% green power is being implemented on schedule. As of the end of 2010, 89.8% of the supplied electricity came from renewable sources. In addition to conventional hydropower (84.8%), 4.85% is certified green power (e.g. "nature-made star"), while wind and solar energy each account for 0.1%. The proportion of certified green power is to increase to 8% by the end of 2011, while that of electricity from renewable sources is to increase to 95%.

The changeover from the Swiss electricity mix to hydropower alone, which is taking place with the renegotiation of electricity agreements, would in purely mathematical terms reduce the pollution of the environment attributable to electricity by 85%.

Electricity consumption by RUMBA units
(primary energy)



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The Federal Administration also procures electricity from the Mont-Crosin wind park

Objectives for 2010
- Reduce the annual electricity consumption of RUMBA units
- Implement the IKT resources and environment standards
- Achieve a higher proportion of green power through purchases or own production

Achievement of objectives in 2010
- The electricity consumption per employee in the RUMBA units increased by 7% versus 2008
- Revision of the IKT operational standard is in progress
- Proportion of electricity from renewable sources increased from around 50% in 2008 to 89.8%

Measures for achieving the objectives
- Sensitise employees
- Revise IKT operational standard for resources and environment
- Introduce green IT in computer centres
- 95% of electricity is to come from renewable sources by 2011 (100% in the medium term); increase the proportion of certified green power from 5 to 8%

Business travel

Business travel within RUMBA units

The current trend shows how difficult it is to reduce business travel. As compared to 2008, air travel rose by around 25% to 3,755 km per employee, while travel by rail and road fell by a similar margin. In OUs with activities abroad (e.g. the FDFA), the requirement for air travel is particularly high and it also fluctuates considerably according to business activity.

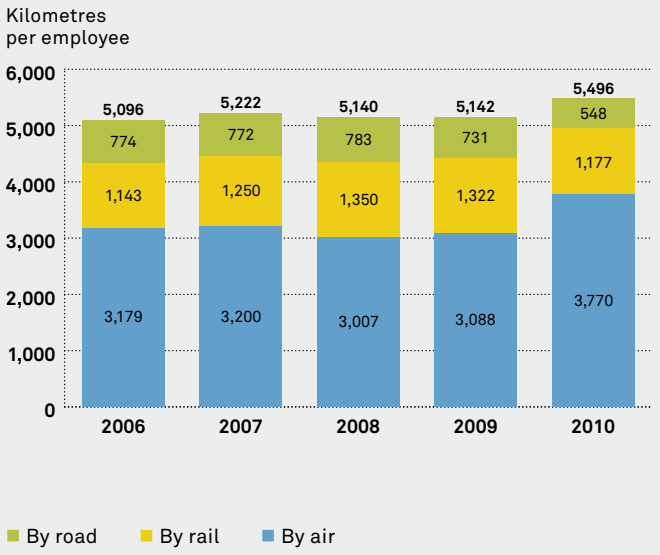
Thanks to the RUMBA programme, a variety of measures has already been introduced with the aim of reducing air travel, including smaller delegations, travel by rail instead of by air, use of video-conferencing, better control of travel activity. Here, some RUMBA units achieved remarkable results.

The reliability of air and rail travel data has been significantly improved thanks to centralised processing by the federal travel centre and Swiss Federal Railways.

CO_2 compensation of air travel

CO_2 emissions that are responsible for climate change can be offset through the purchase of certificates from climate protection projects. Since air travel cannot be avoided, in 2010 13 RUMBA units compensated the CO_2 emissions arising from air travel in full or partially: FDFA, FOC, SFA, SER, FOH, SECO, DETEC General Secretariat, FOEN, OFCOM, FOT, FOCA, SFOE and FPD. In addition, three RUMBA units (ARE, FOA and SwissMeteo) compensated all the RUMBA-relevant CO_2 emissions and have been classified as “climate-neutral”. A total of around 18,400 tonnes of CO_2 equivalents were compensated in 2010, above all by the FDFA (61%). This corresponds to an increase by around 50%.

Business travel by RUMBA units



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The major share of business trip milage is travelled by air

Paper

Paper consumption

Among the RUMBA units, the consumption of printing and photocopy paper has fallen from 76 kg per employee in 2008 to 71 kg in 2010 (–7%), compared with 79 kg per employee in 2006. The "GEVER" electronic business management system is expected to lead to a further reduction in paper consumption in the next few years.

At 3,941 tonnes, the paper consumption throughout the entire Federal Administration was approximately 11% lower in 2010 than in 2008 (see graph), and is now at the lowest level since 2005. The consumption of paper for photocopiers and printers has fluctuated between 1,400 and 1,800 tonnes for a number of years, with no clearly apparent upward or downward trend.

Paper consumption for printed matter fluctuates from year to year, primarily in line with the required volume of explanatory material for national votes on initiatives and referenda. At 1,433 tonnes, the figure for 2010 was very low.

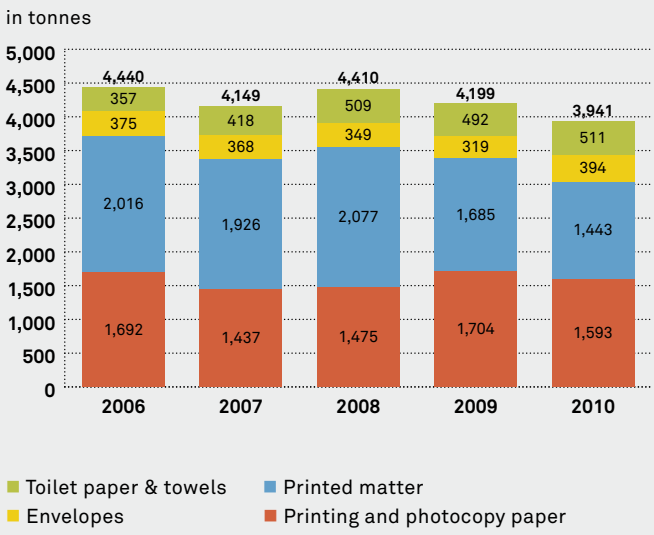
The quantity of envelopes increased again for the first time since 2005, and was 13% higher than in 2008. The consumption of paper towels, toilet paper, etc., was more or less unchanged versus 2008 and appears to have stabilised at around 500 tonnes. Thanks to improved quality, the roll weight (double layer) increased considerably versus 2006.

Paper recycling

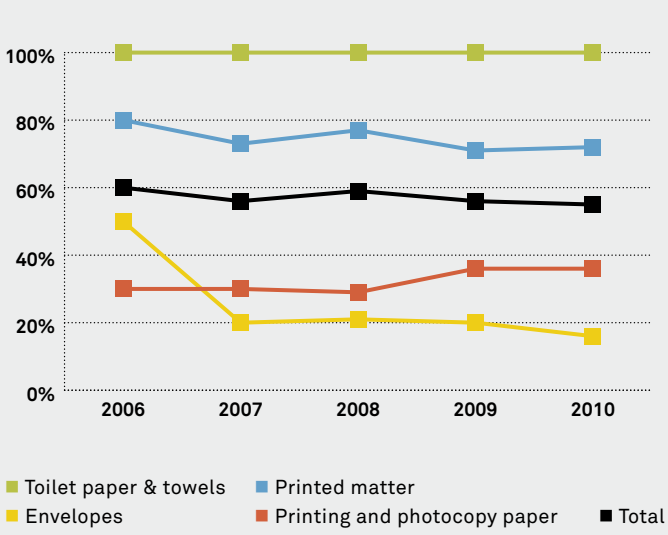
The RUMBA units were able to increase the recycling proportion of paper from 32% in 2006 and 33% in 2008 to 40% in 2010. From mid-2009, the content of recycled material in white paper suitable for archiving reached around 20%.

The recycling proportion of paper throughout the entire Federal Administration has continued to fall since 2008, and reached around 55% in 2010 (see graph at bottom right). For printed matter the proportion fell by 5 percentage points in the past two years, and reached 72% in 2010. Similarly, the recycling proportion of envelopes also fell, and was around 16% in 2010. In 2005, 90% of envelopes were produced from recycled material. This downward trend is the consequence of the new corporate design that was introduced in the Federal Administration in mid-2006. The lower recycling proportion of paper is clearly contrary to the ecological objectives of the federal government. On a positive note, however, the majority of fresh fibre now originates from sustainably produced wood (FSC). Non-certified fibre is now only found in printer paper and only accounts for 1.3% of the total fibre content.

Paper consumption by the Federal Administration
(excluding Fed. Institutes of Technology, external units)



Recycling proportion of paper products
(excluding Fed. Institutes of Technology, external units)



Further information and contacts

Further information
The full report, together with additional information on the ecological balance of the various Federal Departments and key data of all RUMBA units, can be downloaded from *www.rumba.admin.ch* (in German, French and Italian). This web site also contains the environment reports of the individual RUMBA units, plus additional documents relating to the RUMBA programme.
The members of the RUMBA Coordination Group and the RUMBA Workgroup will be pleased to provide more detailed information upon request.

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2001, 2003, 2005, 2007 and 2009 Environment Reports of the Federal Administration.
Downloadable as PDFs from www.rumba.admin.ch

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