

# The 39 joint measures taken by all actors in detail

The Confederation: exemplary in energy initiative plan has defined 39 joint measures in the three action areas buildings and renewable energy, mobility, and data centres and Green IT. Here you can read the detailed descriptions, including the relevant indicators and targets.



## Action area buildings and renewable energy

### 01 Energy-efficient new and converted buildings

The actors' strategies for buildings and sites are guided by best practice. For specific building standards they are based as much as possible on existing labels, such as MINERGIE-P-ECO.

For sites, strategies with an aggregate energy review are appropriate.

Indicator: standards existing, published and complied with.

Target: 100% compliance with the standards from 1 January 2016.

### 02 Analyses of potential of waste heat and renewable energy

The actors each draw up an analysis of potential. It is intended to show the extent to which waste heat could be utilised and renewable energy produced on their sites and in their buildings and what this would cost. The FOE is consolidating these analyses and drawing up a master plan called "New renewable energy in the federal government and parastatal enterprises".

Indicator: analysis of potential available.

Target: analyses of potential available.

### 03 No new fossil-fuel powered heating systems

The actors no longer build any fossil-fuel operated heating systems in their buildings. This also applies explicitly when replacing existing systems. Justifiable exceptions are possible, for example for special sites or functions. In such cases, renewable substitute energies such as biogas should be used or, as the second priority, emissions should be offset by CO<sub>2</sub> reduction measures.

Indicator: newly-installed heating systems operated without fossil fuels.

Target: 100% from 1 January 2016.

### 04 Full cost accounting of energy efficiency

In order to evaluate energy efficiency measures, the actors use life cycle costs (LCC) or total cost of ownership (TCO) approaches. Investments in energy efficiency measures that pay for themselves over the life cycle of a measure are implemented. The application of the methodology is made public in a strategy paper.

Indicator: 1–2 case studies available.

Target: available from 1 January 2017.

### 05 Energy-efficient lighting

The actors now only procure lighting that is guided by the best practice principle, i.e. which is based on the latest and most energy-efficient technology. In the case of outdoor lighting, special attention is paid to nature-related issues, especially light pollution.

Indicator: internal standards available and complied with.

Target: 100% from 1 January 2016.

### 06 Energy-efficient cooling machines

The actors plan, procure and operate cooling machines to best practice standards: first of all, generation of heat/cold has to be designed integrally and, if possible, without a cooling machine (taking account of the annual heat/cold curve, use of waste heat, free cooling). If a cooling machine is nevertheless required, it has to be implemented according to the latest SIA standard; in addition, a greenhouse gas effect evaluation should be carried out.

Indicator: proportion of cooling machines procured

in compliance with the requirements.  
Target: 100% from 1 January 2016.

#### **07 Energy-efficient sanitation facilities**

Cold water alone is the standard for hand-washing and similar activities in toilet blocks and comparable facilities in new and renovated buildings. In addition, the actors now only procure sanitary ware in energy class A, except for showers (energy class B).  
Indicator: internal standards available and complied with.

Target: 100% from 1 January 2016.

#### **08 Energy-efficient electromotors**

When installing (in new and replacement buildings) new electrical building apparatus (ventilation, air-conditioning, cooling, sanitary), electromotors and other electrical apparatus (e.g. lifts, conveying equipment, compressors), the actors use the most efficient electromotors in each case (best practice strategy).

Indicator: internal standards available and complied with.

Target: 100% from 1 January 2016.

#### **09 Building technology with operating optimisation regime**

The actors subject their building apparatus to continuous operating optimisation (OO). Recognised measures for increasing energy efficiency are being implemented constantly.

In addition, whenever a new apparatus is commissioned in a building, an acceptance procedure is consistently carried out; any defects are rectified.

Indicator: consumption of apparatus with a continuous OO regime as a percentage of total annual energy consumption.

Target: 60% (by 2020).

#### **10 Procurement of green power and power from renewable energy**

The actors will gradually increase their proportion of green power (naturemade star or equivalent) to 20% by 2020. The remaining power requirement should be met by no later than 1 January 2020 exclusively with power from renewable energy sources.

Indicator: 1. green power as a percentage of total consumption, 2. power obtained from renewable energy as a percentage of total consumption.

Target (not including rail traction power): 1. 20% (by 2020), 2. 80% (by 2020).

#### **11 Mobility concepts for buildings**

From now on, the players only construct new buildings with more than 50 permanent employees when there is an overriding mobility concept, and take the traffic volume into consideration already when

choosing the location. The concept comprises minimum requirements for opening up areas with public transport (PT) and non-motorised traffic, as well as measures to reduce induced traffic and promote energy-efficient mobility.

Indicator: new buildings (> 50 permanent jobs) as a percentage of all new buildings (> 50 permanent jobs) with a mobility concept.

Target: 100% from 1 January 2016.

#### **12 Creation of ecofunds**

The actors each create an ecofund of their own.

These ecofunds are financed out of the reimbursement of the CO<sub>2</sub> and VOC levies and out of further reimbursements of monies in connection with environmental incentive levies, provided that these are not to be used by law or under a performance agreement for other purposes, or from other financing sources. The ecofunds finance measures in the energy or environmental sector.

Indicator: % of reimbursed environmental incentive levies that flow into the ecofund

Target: 100% (by 2020).



## Action area mobility

### 13 Integration of mobility management

The actors implement structures and processes for regular assessment and effective management of employee mobility in terms of their environmental impact.

Indicator: % of employees for whose business divisions a mobility management system has been implemented.

Target: 100% (by 2020).

### 14 Central information and booking platform

The actors provide a central, web-based information and booking platform that allows easy access to planning and decision-making tools, guidelines and other information on service offers from the mobility sector.

Indicator: % of employees having access at their workplace to a mobility information platform.

Target: 80% (by 2020).

### 15 Encouragement of mobile-flexible forms of work

The actors enable forms of work that allow employees with suitable job profiles to choose, as freely as possible, their time and place of work (e.g. at home, when travelling, at other company sites). This includes equipping them with the necessary devices (e.g. mobile devices with remote access to the corporate network) and creating the cultural preconditions by picking a central theme in management and staff development.

Indicator: employees who regularly use mobile-flexible work forms as a percentage of all workers with a suitable job profile.

Target: 30% (by 2020).

### 16 Promoting work hubs

The actors provide work hubs at which employees from other sites or other companies and organisations can work temporarily. In addition, they create the cultural preconditions for working at work hubs.

Indicator: % of suitable office locations with workstations to which in-house or outside employees from other sites have access.

Target: 100% (by 2020). In addition, reviews are conducted of the extent to which premises can be opened reciprocally within the Confederation: exemplary in energy plan.

### 17 Promotion of video and web conferencing

The actors' employees have access to video and web conferencing or, as applicable, corporate collaboration solutions, which make personal exchanges possible over great distances.

Indicator: employees who regularly use video / web conferencing as a percentage of all employees with a suitable job profile.

Target: 30% of the workforce, 70% of the employees making several international business trips per year (by 2020).

### 18 Incentives for using public transport (PT)

The actors ensure that employees can be reimbursed through expenses for business travel with PT even if they use season tickets they have paid for themselves, and that the expense regulations do not give them any incentive to use their own car. The use of private cars requires approval from one's superior in keeping with clearly-defined criteria, and is only reimbursed with a cost-covering per-kilometre rate.

Indicator: expenses reimbursement for using PT, rules for use of private cars, kilometre rate.

Target: expenses reimbursement of the PT ticket price based on the half-fare travelcard, even if self-paid PT season tickets are used, clearly-defined criteria for using private vehicles, km rate for private cars, max. CHF 0.64 per km.

### 19 Providing or co-financing PT season tickets

The actors encourage the use of PT for business and commuter journeys by providing a half-fare railcard and / or by making a financial contribution to other PT season tickets (zone, point-to-point or network-wide season tickets).

Indicator: minimum contribution to PT season tickets for employees.

Target: all employees are entitled to a half-fare travelcard or a corresponding company contribution to a PT season ticket.

### 20 Criteria for choosing mode of transport

The actors introduce a guideline with clearly-defined travel distances for rail or air travel as well as criteria for using video and web conferencing and corporate collaboration solutions. They provide a simple decision-making tool and cover all international business travel reimbursed via the expense accounts or the travel agency.

Indicator: proportion of air travel to destinations that can be reached by train from Basel, Zurich or Geneva in a maximum of five hours.

Target: less than 20% (by 2020).

### 21 Active parking space management

The actors charge for employee parking spaces at usual market rates and allocate them using clear criteria such as level of service by PT at place of domicile, time difference between using a private car and PT to travel to work, working hours, participation in car sharing agencies and / or energy efficiency of the vehicle. New sites are planned

with a minimum number of parking spaces.  
Indicator: proportion of parking spaces with clear allocation criteria and usual market rates.  
Target: 100% (by 2020).

## **22 Provision of bicycle parking spaces**

The actors provide covered and secure parking spaces for two-wheelers and the associated infrastructure (changing rooms with showers). Minimum requirements are, for example, that the spaces should be covered, be near the entrance or have structures to which the bike frame can be padlocked.

Indicator: % of sites (> 100 employees) with a number of bike parking spaces to match demand, as per minimum requirements.  
Target: 100% (by 2020).

## **23 Provision of bicycles and e-bikes**

At larger sites, the actors provide self-rental bikes and e-bikes for mobility between nearby sites (e.g. PubliBike stations, company bicycles).

Indicator: % of sites (> 100 employees needing this service) with access to self-rental bikes.  
Target: 100% (by 2020).

## **24 Criteria for procuring energy-efficient vehicles**

The actors apply clear energy-efficiency criteria such as the energy label when procuring vehicles. For all new vehicles (incl. delivery vans), the fuel consumption / CO<sub>2</sub> value is weighted as an evaluation criterion with at least 15% in the benefit analysis.

Indicator: % of newly-procured cars with up to a max. of five seats in energy efficiency class A, not counting all-wheel-drive vehicles, intervention vehicles such as ambulances and goods transport vehicles.  
Target: 100% (by 2020).

## **25 Eco-driving training courses for frequent car users**

Employees who drive more than 20,000 km a year for business are trained every three years in eco-driving course. In the case of employees who use the company fleet, the employer supports privately-attended eco-driving courses with a 30% contribution to costs.

Indicator: % of employees driving more than 20,000 km a year who have attended an eco-driving course in the last three years.  
Target: 100% (by 2020).

## **26 Promoting the use of car sharing agencies**

The actors provide information on and access to their own or an outside car sharing agency for arranging lifts and to carpools in commuter and business traffic.

Indicator: % of employees who depend on the car to travel to work and who have access at their workplace to a car sharing agency (prerequisite: a sufficiently large number of employees).  
Target: 80% (by 2020).

## **27 Joint use of a company carpool**

The number of business vehicles is reduced by inter-departmental use of carpool vehicles. A vehicle management tool is introduced and used regionally.

Indicator: average length of time for which company vehicles are used (not counting intervention vehicles such as ambulances).

Target: Vehicles used for < 2 hours per day are incorporated into the vehicle pool.

## **28 Provision of charging stations for electric vehicles**

Parking spaces at larger sites are equipped with charging facilities for ordinary electric vehicles, for example electric cars, electric scooters and e-bikes. In new buildings, plans must ensure the subsequent installation of charging stations for electric vehicles.

Indicator: % of sites (> 500 employees) with charging facilities for electric vehicles.  
Target: 100% (by 2020).



## Action area data centres and Green IT

### 29 Full cost accounting of energy efficiency in procurement

The actors assess and select for a predetermined specification their IT infrastructure according to the total cost of ownership (TCO) approach, including energy consumption. Energy consumption must be disproportionately overweighted here, unlike with the purely TCO approach.

Indicator: % of the IT appliances evaluated according to the description of measures in new calls for tender.

Target: 100% from 1 January 2015.

### 30 Specifications for new servers and new data centre hardware

The actors systematically call for joint state-of-the-art specifications when procuring new servers and further data centre hardware. The state-of-the-art specifications are based on existing labels (for example, 80 PLUS Gold-Label or ENERGY STAR Programme Requirements for Computer Servers) or standards.

Indicator: % of compliant servers and further hardware in the data centre in new calls for tender.

Target: 100% from 1 January 2015.

### 31 Highly energy-efficient data centres

The actors implement the most energy-efficient concepts and technologies in the data centres' infrastructure systems (ventilation, cooling, uninterrupted power supply, lighting).

Indicator: average PUE value (power usage effectiveness) over all of the data centres. The PUE value is defined as the ratio of the total electrical energy consumption of the data centre to the energy consumption of the IT equipment.

Target: < 1.3 by 2030. (In new and larger data centres, smaller PUE values are expected, while best efforts are expected in smaller data centres).

### 32 Pushing passive cooling solutions in data centres

The actors push the use of energy-efficient passive cooling solutions without cooling machines by using the air-conditioning range permissible for servers as per current standards. As a first measure, in existing data centres with conventional cooling, the cold operating temperature is raised to at least 26 °C.

Indicator: 1st part: existing data centre surface area with temperature > 26 °C; 2nd part: data centre surface area with extended temperature range or with passive cooling.

Target: 1st part: 100% from 2015; 2nd part: 33% by 2025, 66% by 2035.

### 33 Encouraging server virtualisation in data centres

The actors aim for a high server capacity utilisation. To this end, increasing reliance is placed on server virtualisation and on memory technology (SAN) in the storage area.

Indicator: percentage share of virtual servers: number of virtual servers / (number of virtual + physical servers).

Target: > 85% (by 2020).

### 34 Bundling of data centres/ outsourcing of IT services

The actors check potential for increasing energy efficiency as part of data centre consolidations.

Indicator: checked potential.

Target: 100% by the end of 2015.

### 35 Monitoring and evaluation of new technologies

The actors monitor or evaluate new technologies with energy-efficiency potential and operate a technology board within the Confederation: exemplary in energy initiative.

Indicator: number of technologies evaluated.

Target: at least 1 per year.

### 36 Promotion of waste heat recovery

The actors promote the feeding of their surplus heat from civil IT production into district heating grids, provided that suitable heat customers exist and a contractor is prepared to take on the project in full. Financing, planning, construction and operation from the heat production site are a matter for the contractor.

Indicator: % use of surplus waste heat.

Target: 50% by 2030 (data centres of > 250 sq. m.).

### 37 Promotion of economy mode at computer workstations

The actors ensure that, when not in use, computer workstations switch to the idle state after a predetermined time.

Indicator: % of workstations with active power management.

Target: 90% by 2015.

### 38 Promotion of energy-efficient printing solutions

The actors optimise the number of printers per employee and implement modern printing solutions in the office area, such as the follow-me-printing function. As a result, printer operation is optimised and paper and power can be saved.

Indicator: no. of employees per printer; kg of paper

per employee.

Target: 100 employees per printer or at smaller sites a maximum of 1 printer by 2020; 5 kg of paper per employee per year (= approx. 1000 A4 sheets) by 2020.

### **39 Promoting re-use of appliances**

The actors promote re-use of old, but still-serviceable, equipment by passing on old PCs to specialised companies, aid agencies or by giving them to employees. Equipment that has to be disposed of is processed only by certified recycling companies. (In order to ensure energy efficiency, the actors can define additional criteria, for example that only equipment less than 8 years old should continue to be used.)

Indicator: guidelines for recycling no-longer-used equipment are available.

Target: 100% by 2015.

**You will find a detailed description of the measures at [www.exemplary-energy-climate.ch](http://www.exemplary-energy-climate.ch).**