



Professional Procurement:

Office Equipment

Recommendations for executives, persons responsible for procurement and IT

- **The most important standards regarding energy efficiency, environmental impact and quality**
- **Procurement criteria**
- **Free hand procurement**
- **Call for tenders**

That's What It's About Do It the Right Way

The information in this folder should encourage an eco-efficient purchase of office equipment by making aware of consumption costs and environmental impact of particular office equipment. The product category «office equipment» includes multifunctional devices (all-in-one), copiers, printers, fax machines, monitors, computers and notebooks. Further most offices contain appliances, such as refrigerators and coffee machines.

Eco-Efficient Procurement – the Motivation

Hidden costs: The operating costs or consequential costs of electric devices are often underestimated. Apart from the costs for printer cartridges and paper they also include electricity costs. Operating costs are much higher than generally assumed and therefore should be considered in a serious cost evaluation.

Production and operation of office equipment cause emissions, waste and use of energy – and thereby affect the environment and the work place.

Office equipment takes up energy, often very high amounts of electricity. Investigations show, that three quarters of the electricity consumption does not occur during the operation of the electric device but is rather caused during standby and sleep-mode. Thus the consideration of all modes is very important.

Many appliances use electricity at two levels, on the one hand for the regular operation and on the other hand – especially during the summer months – for air-conditioning.

Buy only office equipment complying with the energy- and environmental criteria of topten or the label the Blue Angel and TCO.

Energy saving mode: Ask your supplier for a correct configuration and activation of the energy saving features, also for operation in networks.

Plan the technical infrastructure like servers, UPS and air conditioning carefully. Equipment is costly and may cause high consequential costs.

Procurement and Leasing

Private companies

Simply choose appliances from www.topten.info. Make a call for offers if necessary.

Public services: not according to WTO

Freehand procurement: Choose appliances from www.topten.info

Invitation: Choose appliances from www.topten.info or from «European Energy Award» which follow specific quality and environmental criteria of topten, the Blue Angel and TCO as you can see in table «Procurement Criteria». Collect a minimum of three offers. Reference: www.topten.ch/buero

Public services: according to WTO

Public services: Use criteria from «European Energy Award». Reference: www.topten.ch/buero



The Blue Angel

German eco-label which has high standards regarding office equipment, particularly considering emissions, toxic compounds, waste disposal, user information, duplex printing and the use of recycled paper. However the criteria regarding energy consumption are rather moderate.

www.blauer-engel.de

TCO

Label of the Swedish Association of Employees which has high standards regarding electronic equipment and associated emissions, ergonomic criteria and environmental impact. However the requirements for energy consumption are rather moderate. The number attached to the abbreviation shows the year of the implementation of the specific set of criteria. www.tcodevelopment.com



Procurement Criteria

Product category	Mandatory criteria	Voluntary criteria
	Technical specifications	Award criteria
Multifunctional device, Copier	Selection according to topten: <ul style="list-style-type: none"> ■ Maximum power in sleep mode Inkjet: 5 Watt Laser, LED, b/w: 8 to 20 Watt, Color: 12 to 24 Watt depending on speed ■ Use of recycled paper guaranteed 	<ul style="list-style-type: none"> ■ The Blue Angel ■ Duplex (from 18 pages per minute)
Printer	Selection according to topten: <ul style="list-style-type: none"> ■ Maximum power in sleep mode Inkjet: 4 Watt Laser, LED, b/w: 5 to 13 Watt, Color: 11 to 20 Watt depending on speed ■ Use of recycled paper guaranteed 	
Fax	Selection according to topten: <ul style="list-style-type: none"> ■ Fax using standard paper ■ Maximum power in standby or sleep-mode: 2 Watt ■ Use of recycled paper guaranteed 	
Monitor	Selection according to topten: <ul style="list-style-type: none"> ■ TCO'99 or TCO'03 ■ Maximum power On: 30 to 80 Watt (15 to 24 inch) Sleep-Mode: 2 Watt Off (plug-in): 1 Watt 	
Computer, Notebook	<ul style="list-style-type: none"> ■ The Blue Angel or TCO'05 	
Refrigerator	Selection according to topten: <ul style="list-style-type: none"> ■ Efficiency class A+ or ■ Efficiency class A++ 	<ul style="list-style-type: none"> ■ Efficiency class A++
Coffee machine	Selection according to topten: <ul style="list-style-type: none"> ■ Energy consumption in standby below 50 Watt (average power) ■ Auto-off-Mode can be configured 	
Lighting	Selection according to topten	
Last update May 2006. topten criteria are updated regularly. For further information see www.topten.info		

Many communities and companies buy according to the «Guidelines for Eco-Efficient Procurement» of the «European Energy Award». In this way they make a statement, outwards to citizens, customers and suppliers and inwards to the employees.
Reference: www.topten.ch/buero

topten

Online search tool including listings of appliances, fotos and specifications. topten has a focus on energy efficiency of appliances. The standards and criteria for energy consumption are much more stringent than the ones of the Blue Angel and TCO. topten is supported by public services and private institutions.
www.topten.info

topten.info

Energy Star

International label of the US-Environmental Protection Agency specifying minimum requirements for energy consumption. The criteria are met by most appliances available on the market. Therefore Energy Star does not support the procurement of particularly energy efficient appliances.
www.eu-energystar.org

Energy Efficient Office

Energy saving features: Support your users in the configuration of energy saving features. Tipten standards described at topten.info are recommended. Settings should be checked regularly, especially for multifunctional devices, copiers and monitors.



Switchable connection plug board: All equipment including desk lamps, can be disconnected from the grid by use of a connection plug board. Only in Wake-on-LAN-Systems computers, notebooks and docking-stations are directly connected to the grid.

Timer for central printers and copiers can be used for automatic shut-off and wake-up of equipment (use of analogue timer recommended). The by-pass switch allows printing after regular working hours.



Recycled paper: Use recycled paper for multifunctional devices, copiers and printers. The production of recycled paper uses only one third of energy and water compared to standard paper.

Duplex printing and printing of two sides on one A4 page: Both measures help to save paper and can be combined. Use this setting as your standard.

Air-conditioning: The temperature in server rooms can rise up to 26 °C without affecting the safety of the system. Thus a setting of the room temperature to 26 °C helps to save energy.

Uninterruptible power supply, UPS: Only use UPS for equipment where it is used for safety reasons.



Imprint

Authors: Eric Bush und Barbara Josephy,
Bush Energie GmbH, Felsberg, Switzerland
Editorial and design: Oerlikon Journalisten,
Zurich, Switzerland

Printed on recycled paper with the label
the Blue Angel
May 2006



Reference

topten, Postfach, CH-8050 Zurich, Switzerland



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Office for the Environment FOEN

Publisher

Topten International Group, Paris, France:

www.topten.info

European Energy Award: www.energiestadt.ch

WWF Switzerland: www.wwf.ch

SwissEnergy: www.energie-schweiz.ch

Federal Office for the Environment (FOEN):

www.umwelt-schweiz.ch

Interest Group for Ecological Purchasing

(IGEP), Switzerland: www.igoeb.ch

Schweizer Gemeinde (Swiss Community):

www.chgemeinden.ch

Zurich Municipal Electric Utility (ewz):

www.ewz.ch

Swiss Agency for Efficient Energy Use

(S.A.F.E.): www.energy-efficiency.ch

Supported by Environmental Protection Funds,
Canton of Zurich

