



**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](http://www.topten.info). Make a call for offers if necessary.

#### Public services: not according to WTO

**Freehand procurement:** Choose appliances from [www.topten.info](http://www.topten.info)

**Invitation:** Choose appliances from [www.topten.info](http://www.topten.info) 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.info/pro](http://www.topten.info/pro)

#### Public services: according to WTO

**Public services:** Use criteria from Topten.

Reference: [www.topten.info/pro](http://www.topten.info/pro)



#### 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](http://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.

[www.tcodevelopment.com](http://www.tcodevelopment.com)



## Procurement Criteria

Product category	Main criteria Topten	Purchase and call for tenders	
		Mandatory criteria	Voluntary criteria
Laser: Printers and Multifunctionals	<ul style="list-style-type: none"> <li>■ TEC (kWh/week, depending on printing speed)</li> <li>■ Use of recycled paper guaranteed</li> </ul>	see topten.info	The Blue Angel Duplex printing
Inkjet: Printers and Multifunctionals	<ul style="list-style-type: none"> <li>■ Power Sleep</li> <li>■ Power Off</li> <li>■ Use of recycled paper guaranteed</li> </ul>	see topten.info	The Blue Angel
Fax	<ul style="list-style-type: none"> <li>■ Power Sleep/Standby</li> <li>■ Use of recycled paper guaranteed</li> </ul>	see topten.ch	
Monitors	<ul style="list-style-type: none"> <li>■ Power On (depending on size)</li> <li>■ Power Sleep</li> <li>■ Power Off</li> <li>■ TCO'99 or TCO'03</li> </ul>	see topten.info	The Blue Angel
Computers, Notebooks	<ul style="list-style-type: none"> <li>■ Energy efficiency</li> </ul>	Energy Star	The Blue Angel, TCO'05
Refrigerators	<ul style="list-style-type: none"> <li>■ Efficiency class A++</li> </ul>	see topten.info	
Coffee Machines	<ul style="list-style-type: none"> <li>■ Auto-power-down function</li> <li>■ Electricity consumption Ready</li> <li>■ Power Standby/Sleep</li> </ul>	see topten.info	
Lighting	<ul style="list-style-type: none"> <li>■ Luminous flux (depending on lamp type)</li> <li>■ Power Standby</li> </ul>	see topten.ch	Minergie
Lamps	<ul style="list-style-type: none"> <li>■ Efficiency class A</li> <li>■ Switching cycles</li> <li>■ Lamp lifetime</li> <li>■ Color rendering</li> </ul>	see topten.info	

**Communities and companies buy increasingly according to Topten. Examples are ICLEI – Local Governments for Sustainability – and «European Energy Award». In this way they make a statement, outwards to citizens, customers and suppliers and inwards to the employees. Reference: [www.topten.info/pro](http://www.topten.info/pro)**



### 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](http://www.topten.info)

### Energy Star

International label of the US-Environmental Protection Agency specifying minimum requirements for energy consumption. The criteria are met by many appliances available on the market. Therefore Energy Star has rather the role of a minimum energy requirement. [www.eu-energystar.org](http://www.eu-energystar.org)



## Energy Efficient Office

**Energy saving features:** Support your users in the configuration of energy saving features. Topten standards described at [topten.info](http://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.



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