



Framework agreement for printers for German federal agencies and institutions

Federal Procurement Office of the German Federal Ministry of the Interior

- Purchased printers 40% more energy efficient than Energy Star
- Federal framework agreement for an estimated 33,800 printers for €20 million
- Total Cost of Ownership (TCO) calculation main driver for efficiency



Compare tender: (Benchmark)

- 12,304 tCO₂ / 4 years
- 2,103 toe / 4 years

GPP 2020 tender: (CO₂ emissions)

- 7,635 tCO₂ / 4 years
- 1,305 toe / 4 years

Results:

- 4,669 t CO₂ and 798 toe savings for the duration of the contract (4 years)

Tendered Contract

- Public Tender of the Federal Procurement Office of the Federal Ministry of Interior for printers, published in July 2014
- Federal Framework Agreement for an estimated 33,880 printers for various federal agencies.
- The agreement includes a total of 7 printer classes, which differ according to the technology (inkjet or laser printer, MFP), B/W or color printer, the printing speed and the paper size.
- Duration of contract : 24 months with the option of two-fold extension of 12 months each
- Value of contract: € 20 million (incl. VAT)



Procedure for procurement

Technical specifications

- Functional definition of specific devices in printer classes (workstation-/workgroup- printers, multifunction printer).
- Must meet the following standards:
 - Energy Star Program Requirements for Imaging Equipment Version 2.0.
 - Must meet the criteria of the Blauer Engel (RAL – UZ 171¹).
 - ECMA-370 Standard: TED-The Eco Declaration (4th edition, June 2009)²
- Compatible with recycled paper according to DIN EN 12281.
- Duplex function must be default mode.

Verification: *Products carrying the labels were deemed to comply. As an alternative, test documentation, or self-declarations were also accepted. The purchaser reserved the right to carry out tests to assess compliance.*

Award criteria

- Awarded on the basis of the most economically advantageous tender (MEAT)
Financial evaluation based on total costs of ownership, i.e. the costs incurred by the contracting authority during acquisition, use and disposal. This therefore included, the cost of consumables, energy costs and the cost of the warranty extension, in addition to purchase price.

¹ See: <https://www.blauer-engel.de/en/products/office/energy-saving-and-low-pollutant-printers-and-copiers>. In addition to energy consumption (where the requirements are the same as Energy Star), Blauer Engel also has requirements on recyclability/reparability, paper saving functions, substance emissions and noise.

² This is a Type II (self-declaration) ecolabel: <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

Contract conditions

- The contract includes maintenance and support for the printers. All product components must be provided with the CE-Mark. Replacement parts must be available for a minimum of 5 years.
- Take-back and recycle/disposal system for both the machines and ink/toner cartridges. Hazardous substances: separate collection and disposal at authorised waste disposal facilities.
- Responsible management: compliance with general laws to protect the environment and local regulations.



3

Criteria development

The criteria were based on the Guide for the product-neutral specifications of printers, Version 1.1³ and the templates for the bid and evaluation of IT services (UfAB V, Version 2.0⁴).

Results

The tender has resulted in significant energy savings. The purchased devices are, on average, about 40% more efficient than the current Energy Star standard. The main reason for this result is the use of the Total Cost of Ownership (TCO) method for determining price, which demonstrates the clear financial advantage of purchasing more efficient devices.

The savings come not only from the energy efficiency of the individual devices, but also because different devices are provided for different job requirements.

Devices from seven Printer classes are offered in the framework contract. The majority (85% of the estimated volume) of the equipment consists of B/W printers with a low average print speed, which consume considerably less power than the colour MFPs.

	CO ₂ emissions (t CO ₂ e/ 4 years)	Energy consumption (toe/ 4 years)
Low Carbon Solution (GPP 2020)	7,635	1,305
Benchmark	12,304	2,103

³ www.itk-beschaffung.de/zu-den-leitfaeden/drucker.html

⁴ http://www.cio.bund.de/Web/DE/IT-Beschaffung/Ufab/ufab_node.html
http://www.cio.bund.de/SharedDocs/Publikationen/DE/IT-Beschaffung/ufab_v_version_2_o_final_pdf_download.pdf?__blob=publicationFile

Energy saving (toe)	798
CO ₂ -Savings (t)	4,669

Calculation basis

- Energy savings and the reduction of carbon emissions were calculated for the 33,800 printers estimated to be purchased over the 4 year contract period.
- It is assumed that the devices will be used for 4 years.
- As a benchmark for comparison, equipment complying with the current Energy Star standard was used for each class of printer– the procured equipment consumed about 40% less energy than this standard.



Potential for improvement

In the future, the award criteria for energy efficiency could be given more weight.

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About GPP 2020



GPP 2020 aims to mainstream low-carbon procurement across Europe in support of the EU’s goals to achieve a 20% reduction in greenhouse gas emissions, a 20% increase in the share of renewable energy and a 20% increase in energy efficiency by 2020.

To this end, GPP 2020 will implement more than 100 low-carbon tenders, which will directly result in substantial CO₂ savings. Moreover, GPP 2020 is running a capacity building programme that includes trainings and exchange. – www.gpp2020.eu

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