

Minimising consumption of paper and consumables

In a nutshell

SUMMARY
It is best practice to: <ul style="list-style-type: none">• implement and promote internal procedures (e.g. paperless procedures such as electronic workflows, e-signatures and electronic archives, no printing of documents for meetings, no printing of newsletters/reports, double-side printing as default option) that help employees and the public to avoid the use of office paper (i.e. copier/printer paper) and consumables (i.e. all material such as pens, pencils, highlighters, notebooks used in offices), thereby reducing demand;• use green public procurement to drive lower impact choices, e.g. low-grammage office paper, longer lasting, refillable products and alternatives with a low environmental impact or low toxicity.
Target group
Public administrations having office-based operations
Applicability
This best practice is broadly applicable to all public administrations
Environmental performance indicators
<ul style="list-style-type: none">• Daily number of sheets^[1] of office paper used per full time equivalent (FTE) employee (sheets of paper/FTE/working day)• Share of environmentally friendly certified office paper purchased in the total purchased office paper (%)• Annual cost of office consumables purchased per full time equivalent (FTE) employee (EUR/FTE/year)
Bencharks of excellence
<ul style="list-style-type: none">• Office paper consumption is lower than 15 A4 sheets/full time equivalent employee/working day• Office paper used is 100 % recycled or certified according to an ISO Type I ecolabel (e.g. EU Ecolabel)

^[1] The number of different sizes (e.g. A4, A3) of paper sheets can be converted to an equivalent number of A4 sheets (e.g. one A3 sheet is equivalent to two A4 sheets).

Description

This best practice is about managing the consumption of paper and consumables in public administration offices. Consumables - often referred to as office supplies in the context of office procurement - are goods used by individuals and businesses that must regularly be replaced as they wear out or are used up. Consumables are in contrast to durable or long-lasting office goods such as computers, printers and furniture. They include:

- Paper
- Writing and stationary supplies, including pens, file folders, adhesives
- Mailing supplies, including envelopes, shipping boxes, plastic wrapping.
- Toner or ink cartridges
- Cleaning supplies
- Commercial bathroom supplies, including soaps, hand towels and tissues

Paper, in particular white A4 copier paper, is often one of the most significant consumables within an office environment. Around 80kg of paper is used per employee per year – equivalent to 30 reams and typically constituting three quarters of office waste produced (ADEME, 2012). Elsewhere it is estimated that the average office worker uses 45 sheets of paper a day, though this could be reduced to 16 (WRAP, 2013).

Managing consumption of paper and consumables includes:

- Implementing and promoting internal procedures that help employees and other building occupants
 - avoid the use of products and materials
 - reuse products and materials, thereby reducing demand
- Using procurement to drive lower impact choices e.g. longer lasting, refillable products and low environmental impact / low toxicity alternatives.

This BEMP includes best practice around reuse of paper and consumables. Best practices for recycling at end of life are covered under best practices on *Managing and minimising waste production*. Catering supplies are covered under best practice on *Minimising the environmental impact of canteens and coffee bars*.






Managing and minimising consumption of paper and card

There are some easy practical actions that can be taken to avoid consumption of paper:

- Where possible, printing should be avoided. Where printing is necessary, printers can be set to print double-sided, two pages to a page of A4. E-mail footers can include a note reminding recipients to “Think before you print”.
- The number of printers can be reduced to a smaller number of centralised printers.
- Employees can be given access codes so printing levels by employee can be monitored.
- A printer can be designated for draft printing, which is permanently loaded with scrap paper (WWF, n.d.)
- Paper with a maximum thickness of 80gsm should be used. It is also possible to use thinner paper e.g. 50 – 70gsm (WWF, n.d.)
- Databases and distribution lists should be kept up to date to ensure no excess correspondence and materials are distributed.
- Scrap paper with a blank side can be reused internally, as can envelopes and files.
- Subscriptions to publications that are no longer required can be cancelled (WRAP, 2013; Ajuntament de Barcelona, 2006).

In terms of type of paper being purchased, the pulp should be unbleached (TCF) and from 100% post-consumer recycled paper. Where recycled paper or paper products are using a proportion of virgin pulp, it should be certified as being from a sustainable source (Siegle, 2013). As a minimum all paper for internal use (e.g. notepads) should be unbleached. Criteria for eco labels used on paper products are shown in Table 1.

Table 1: Raw materials criteria for eco labels used on paper products (WRAP, 2013)

Name of label	Symbol	What the label means
NAPM Approved Recycled		The National Association of Paper Merchants awards the NAPM Recycled Paper Mark to all branded papers and boards containing a minimum 75% genuine paper and board waste, no part of which must contain mill-produced waste.
Blue Angel		Label awarded to paper and board products containing 100% waste paper (minimum 51% post-consumer waste).
Mobius Loop		There are two versions of the Mobius Loop – one denotes whether the product can be recycled, the other its recycled content. When using the latter, the percentage of recycled fibre used appears in the centre of the loop. Where the product comprises entirely recycled fibre, there is no figure. These symbols are often used without authority and in a misleading manner. Always check the basis for using these labels with your supplier.
ECF, TCF and chlorine free		Elemental chlorine free (ECF), chlorine gas has not been used to bleach the pulp during the pulping process. Totally chlorine free (TCF), no chlorine compounds have been used during the pulping or papermaking process. Chlorine free is often used to mean either of the above; ask for clarification from the paper supplier.
EU Eco-label		Specifies maximum limits for discharges to water, emissions to air and energy consumption as well as requiring sustainable forestry management for virgin fibre.
Nordic Swan		Awarded to paper mills meeting minimum environmental performance standards.

Standards for procurement of paper and consumables

EU Green Public Procurement (EU GPP) is a voluntary instrument for public authorities in European Member States which provides processes for sustainable procurement. There are detailed criteria available for copying and graphic paper, cleaning products and services, furniture etc. (European Commission, 2014). Further information on green procurement of products and service in public administration is available in the corresponding best practices. Additionally to the use of EU Green Public Procurement criteria for the purchase of paper and consumables, the EU Ecolabel is an additional tool which could be used when public administrations need to procure products. Information on how the EU Ecolabel for paper and consumables can be introduced in procurement tenders is available in the corresponding best practices.

Managing consumption of consumables

A culture of reducing consumption can be encouraged. One approach is to give employees their own refillable stationary e.g. their own named pens and highlighters (this is recommended by Barcelona City Council in their Green Office Guide, Ajuntament de Barcelona, 2000).

Purchases of products containing PVC such as files should be replaced, for example, with products made of renewable or 100% recycled plastics e.g. polypropylene (PP) or polyethylene (PE). Consumables should be low VOC (Volatile Organic Compounds) or VOC free (including inks, toner, adhesives, cleaning products etc). Low VOC is defined as containing less than 0 – 0.29 VOC per litre.

Where possible, consumables should be accredited by a reputable eco label.

Reuse

A central stationary cupboard could be implemented, even for large buildings. Often unused items are left in one department or desk, when someone elsewhere in the building could be using these and displacing the need for a new order of that product.

Building occupant behaviour

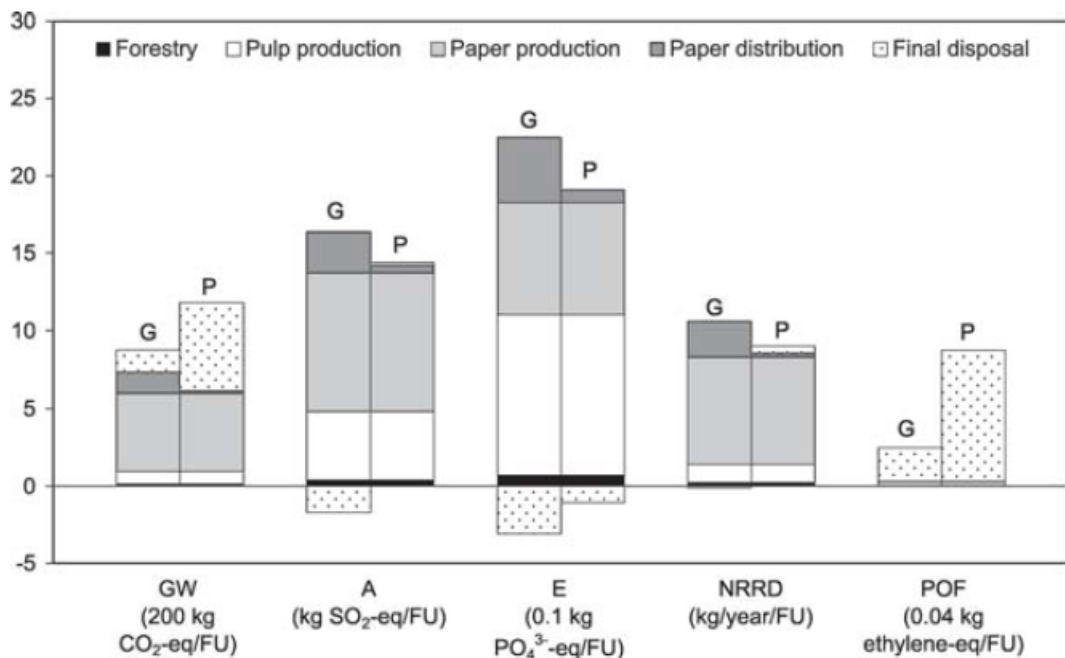
Employees can play a role in minimising the consumption of paper and consumables. Comprehensive guides can be produced for employees to ensure they are choosing the right products (if they are ordering products like stationary) and using these efficiently. Training might be required such as setting computers to print double sided perhaps two sheets to a page. There could be a hub for disseminating information, e.g. at the entrance to a building where these topics are promoted and questions can be answered.

Environmental benefits

There are many environmental benefits to reducing the consumption of paper and consumables. The product lifecycle includes extraction of raw materials, manufacture, distribution and transport, use and disposal at end of life. In most cases there will also be impacts from packaging. The lifecycle impacts are particularly important for paper and consumables as the use phase of the product is relatively short.

Particular problems in relation to non-recycled paper include high consumption of natural resources (timber), water and energy, alongside water contamination and emissions to air (such as organochloride products and sulphur compounds). Emissions produced by bleaching paper are particularly harmful.

Figure 1 shows impact assessments carried out for paper produced in Portugal for Portuguese and German markets. The pulp production phase is particularly harmful in terms of acidification and eutrophication, with the production phase having a major impact in terms of global warming, acidification, eutrophication and resource depletion. Variations by country largely occur at the distribution and disposal phase.



- GW – Global warming indicator
- A – Acidification
- E – Eutrophication

- NRRD – Non-renewable resource depletion
- POF – Photochemical oxidant formation

Figure 1: Impact assessment results. G = German market, P= Portuguese market (Dias et al, 2007, p526)

Implementing actions mentioned in this BEMP will help to reduce impacts to a minimum across the product lifecycle.

Side effects

A reduction in paper files can in some cases result in an increase in digital files and corresponding increase in energy use from server space and screen use. Aside from this, there are no negative cross media effects.

Applicability

This best practice is applicable across all typologies and scales of Public Administration offices across Europe.

Economics

Good management systems for reducing the use of materials help reduce costs. Savings come from avoided purchases and refuse collection costs. Reusing stationary, including paper, and minimising printing can have significant economic benefit. For example, Gloucestershire County Council saved around £29,000 (34,000 euros) by effective demand management of stationary (GPP, n.d. c - see Operational Data section).

Driving forces for implementation

Aside from cost savings, public administrations become more efficient in the use of materials to help ensure business continuity (security of supply) and enhance reputation.

When public administration offices effectively manage their use of materials and consumables, it can play the additional role of demonstrating best practice, for example, visibility that the administration is using sustainable paper for external correspondence. The procurement policy, internal procedures, performance and cost savings can also be made public.

Reference organisations

Barcelona City Council, Spain

Green Office Guide – internal publications which cover reducing impact of paper and consumables, as well as actions which have been taken in the past decade.

Gloucestershire County Council, UK

Initiative to reduce use of paper and consumables, as well as procurement of more sustainable products.

Example of detailed procurement guidelines on paper

Literature

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