SUSTAINABLE PROCUREMENT FACTSHEET – PRINTER



This factsheet provides practical guidance for humanitarian procurement and programme teams to source printers more sustainably and from local suppliers. It highlights key considerations throughout the product lifecycle:



Before buying | Choosing the right printer | During use | End of life | Alternatives

1. Before buying

Sustainable procurement starts with a clear assessment of needs. The following questions can guide procurement policies and decisions.

Do we need new printers?	Can we repair it?	Can we buy refurbished?
• Is the current printer still functional and meeting operational needs? • Can maintenance, cleaning, or replacement of consumables restore performance? • Can printing needs be reduced, shared, or consolidated? • Could one multifunction printer replace several devices?	• What component is causing the failure, and is the required spare part available locally? • Can the faulty component be replaced without replacing the entire printer? • Is a qualified technician available? • Is repair more cost-effective than replacement?	• **Refurbished printers** can come from corporate fleet take-back programmes, distributors/wholesalers, or equipment replaced during fleet renewal. • **Open-box printers** can originate from customer returns, cancelled corporate orders, or surplus/overstock.

2. Choosing the right printer

These tables help integrate sustainability into your printer procurement. **Table 1** includes ready-to-use technical specifications for BOQs, and **Table 2** provides supplier evaluation criteria for procurement assessment. The "Impact" column reflects each criterion's importance to the environmental footprint (climate, water, waste).

Table 1. Criteria for sustainable printer procurement

Criteria	Impact	Sustainability guidance
Durability, lifetime & repairability (spare parts)	High	Long service life with **replaceable critical components** (printheads, drums, fusers, rollers, transfer belts, waste-ink pads); modular design allowing upgrades and repairs; spare parts available for 5–8 years after discontinuation. 
Firmware & software sustainability	Medium	Long-term firmware and software updates provided to maintain security, compatibility, and functionality throughout the printer's expected lifetime.
Consumables efficiency	Medium	High-yield consumables that minimise waste; compatible with refillable, reusable, or remanufactured cartridges/toners; default settings minimise unnecessary colour printing and toner/ink use.
Energy efficiency & consumption	Medium	Recognized **energy-efficiency certifications** (e.g. ENERGY STAR®, EPEAT Gold where relevant), documented annual energy consumption, and automatic sleep/standby modes enabled by default.  
Paper efficiency	Low	Automatic duplex printing enabled by default; compatible with recycled or sustainably certified paper (FSC/PEFC) without loss of print quality or reliability.

Table 2. Supplier criteria

Criteria	Impact	Sustainability guidance
Repair & local maintenance services	High	The supplier shall provide access to local repair and maintenance services through qualified technicians, including preventive maintenance, fault diagnosis, and repair interventions to maximize uptime and extend product lifetime.
Spare parts availability	High	The supplier shall document spare parts availability (supported components, duration after discontinuation, lead times, indicative costs), with a minimum availability period of **5–8 years after model discontinuation** recommended.

Warranty & supplier commitment	Medium	The supplier shall provide a warranty period proportionate to the expected operational lifetime of the equipment. Warranty coverage shall clearly specify included components, repair conditions, response times and service level commitments.
Take-back & end-of-life management	Medium	The supplier shall provide equipment take-back and ensure reuse, refurbishment or certified recycling of end-of-life printers where feasible. Verify whether used cartridges can be collected, refilled, remanufactured or recycled.

3. During use

- Configure **automatic duplex printing** and black-and-white mode as default settings to reduce paper and toner/ink consumption.
- Use **print preview, page selection, and digital workflows** to prevent unnecessary prints and reprints.
- **Consolidate printing volumes** where possible and avoid maintaining underused devices.
- Enable **energy-saving settings** (sleep/standby modes) and switch off printers outside operational hours.

4. End of life

Ensure **traceability** by confirming with the receiving organisation how equipment and components will be reused, recycled, or treated.

- Use approved **take-back schemes or certified recycling channels** where available/ For local solutions, contact the **WREC** or **hulo** in the country.
- Remove sensitive data before transfer or disposal.

Key principle: Reuse → Refurbish → Recycle → Dispose as last resort.

5. Alternatives: cost and environmental analysis

Table 3. All contexts: environmental benefits of recommended alternatives

Availability of these alternatives must be verified with local suppliers.

Alternatives	Key benefits
Refurbished printer	Extends the life of existing equipment, avoids the environmental impact of manufacturing a new printer, and can significantly reduce acquisition costs.
Remanufactured printer	Restores equipment to near-original performance through industrial-grade component replacement, offering reliability closer to new models while reducing material and manufacturing impacts.

Open-box printer	Keeps almost new equipment in circulation and avoids unnecessary loss of product value.

Table 4. Lebanon: cost and environmental analysis of available alternatives

The purchase price of a new printer is only one part of the total cost. A full Total Cost of Ownership (TCO) assessment should include consumables, energy consumption, maintenance, spare parts, repairs and expected lifetime to evaluate the real cost over the equipment lifecycle.

Based on supplier assessments, **refurbished printers may cost around 11% less than new models**. These options should be assessed based on remaining lifetime, refurbishment quality, warranty, repairability and lifecycle costs to ensure long-term value and reliability.

Conventional technical specification	**Sustainable technical specification**
New printer. Typical warranty 1 year, extendable to 2–3 years for business-class or wide-format models.	Refurbished or open-box printer, sold with up to 2 years' warranty and 1 year of free support. Refill toners available.

6. References and resources

This factsheet is based on a project's market assessment in Lebanon, drawing on supplier questionnaire responses, technical observations from site visits, and available guidance on sustainable products and services relevant to the Lebanese context in 2026. For more information, as well as the methodology used for price comparison, total cost of ownership, and the simplified LCA, please refer to the following document: *Appendix 1 - Price comparison & environmental analysis methodologies.*