

Greening ICT: UNON's Circular Strategy for Sustainable Technology

The United Nations Office at Nairobi (UNON) Information and Communications Technology (ICT) team is actively advancing environmentally sustainable technology practices, integrating eco-conscious solutions into daily operations. Their consistent efforts—from managing laptops and servers to optimizing network infrastructure and audio visual systems—demonstrate a strong commitment to reducing environmental impact and supporting the UN's broader sustainability goals.

Green Procurement

- <u>Eco-Certified Tech</u>: All devices meet ENERGY STAR and EPEAT standards, ensuring low energy use and minimal environmental impact.
- <u>Sustainable Vendors</u>: Preference for suppliers with recycling programs, modular designs, and eco-friendly packaging.

Laptop Lifecycle Optimization

- Extended Use Strategy: Devices are maintained and redeployed for up to 5+ years, with bi-annual performance checks and strategic reassignment to lighter roles.
- <u>Warranty-Driven Efficiency</u>: Defective units are replaced at no cost; out-of-warranty repairs follow strict e-waste protocols.
- <u>Second Life for Assets</u>: Laptops are sold via competitive bidding, maximizing recovery and minimizing waste.

Network Infrastructure

- <u>Upgrade Over Replace</u>: Network devices are selected for firmware upgradeability and modular hardware, extending lifespans to 8–10 years.
- <u>Vendor Partnerships</u>: Long-term software support contracts ensure continued performance without hardware replacement.
- <u>Lifecycle Management:</u> Older network switches are repurposed for low-bandwidth Internet of Things (IoT) tasks—like connecting sensors and smart devices—and retained based on quarterly performance reviews, not age.



Eco-Friendly AV & Conference Equipment

- Modular & Efficient: Audio Visual (AV) systems are built for upgradeability and energy efficiency, with automatic power-down modes and remote support tools.
- <u>Extended Lifespan:</u> Preventive maintenance aims to stretch AV equipment use from 7 to 10 years.

Sustainable Printing Solutions

 Green Printing Contracts: Request for Proposal (RFPs) require double-sided printing, recycled cartridges, and digital workflows that cut paper use by up to 50%.

Implementation Framework

- <u>Performance-Based Evaluation</u>: Quarterly and annual reviews focus on operational capability, not age.
- <u>Internal Capacity Building:</u> Staff are trained in software optimization and advanced troubleshooting to support extended lifecycles.
- <u>Strategic Inventory</u>: Spare parts and refurbishment programs ensure maximum reuse of components.

Environmental & Financial Impact

- <u>Laptop Lifecycle Extension</u>: Reduces annual procurement by ~20%, cutting costs and e-waste.
- <u>Network Strategy:</u> Software-first approach could lower tech replacement costs by 25–30%, while maintaining performance and reducing environmental impact.

Long-Term Sustainability Vision

• UNON ICTS is setting a replicable model for sustainable ICT across the UN system. By prioritizing software upgrades over hardware replacement and embedding sustainability into every phase of asset management, UNON advocates for operational excellence and environmental stewardship together.