CoSN
Leading Education Innovation

THE CTO'S STRATEGIC GUIDE TO SUSTAINABILITY

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As a Chief Technology Officer or IT Director, you are likely managing a large line item in the district budget. With the U.S. EdTech market valued at $30.4 billion in 2024 and expected to nearly double by 2033[1], technology procurement is no longer just about a hardware refresh. It is a critical lever for your district's financial and operational resilience[2].

Sustainability in the IT office isn't just about being "green." It is about buying smart[3]. It means moving away from the "lowest upfront cost" mindset toward a Total Cost of Ownership (TCO) strategy that accounts for the full lifecycle of every device. For example, San Diego Unified, for example, saved $90 million over 12 years simply by prioritizing long-term sustainable initiatives[4].

Breaking the Cycle of "Chromebook Churn"

The biggest hurdle to budget stability is the short replacement cycle of instructional tech. Many budget devices have built-in end dates tied to software support expiration[5]. This "Chromebook Churn" forces IT teams to retire perfectly functional hardware, saddling the district with premature replacement costs and mountains of e-waste. Nationally, doubling the usable lifespan of K–12 devices could save an estimated $1.8 billion.

To help districts address this challenge, the Consortium for School Networking (CoSN), in partnership with SETDA and UDT, developed the Sustainable Procurement Guidelines[2]. This framework offers a menu of options across six pillars to help you build a more durable fleet.

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1 NetworkNurture Hub, "United States K–12 Education Technology Spend Market Size." LinkedIn, 25 May 2025, https://www.linkedin.com/pulse/united-states-k-12-education-technology-spend-market-2rlce/

2 CoSN, "K–12 Environmental Sustainability in EdTech." CoSN, 2025, www.cosn.org/environmental-sustainability/

3 McDonald, Louis. "Procurement That Builds K–12 Financial & Environmental Sustainability." NGLC, 2025, http://www.nextgenlearning.org/articles/procurement-building-financial-and-environmental-sustainability-in-k-12

4 McNeil, Katie. "Building Energy-Efficient Schools: Cutting Carbon and Costs." Verizon Business, 2022, https://www.verizon.com/business/resources/articles/s/building-energy-efficient-schools-can-help-cut-carbon-and-costs/

The Six Pillars of Sustainable Procurement

1. Long Product Lifespan: Factor Automatic Update Expiration (AUE) dates into your TCO analysis. Mandate durability standards like MIL-STD-810H to ensure devices can withstand daily student use.

2. Modularity and Repairability: A broken keyboard or battery should not send a device to surplus. Require vendors to guarantee spare parts and repair documentation for at least five years, supporting in-house repair and aligning with the growing Right to Repair movement [6].

3. Energy Efficiency: Energy is often the second-largest operating expense in schools. Requiring ENERGY STAR or EPEAT-certified devices delivers measurable reductions in utility costs over time.

4. E-Waste Reduction: A circular approach that prioritizes reuse, refurbishment, and responsible recycling keeps hazardous materials out of landfills while preserving residual value.

5. Recyclable and Sustainable Materials: Look for vendors that use high percentages of recycled or renewable content. This lowers the environmental footprint and often enhances device durability.

6. Vendor Sustainable Practices: Move beyond marketing claims. Require vendors to provide verifiable documentation on packaging, supply chain practices, and shipping methods.Short Wins for Immediate Impact

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5 Schleuss, Jon, and Lucas Schulz. Chromebook Churn: The High Cost of the K-12 Tech Revolution. U.S. PIRG Education Fund,2023, https://uspirg.org/edfund/resources/chromebook-churn/

6 "RELEASE: All 50 States Now Have Filed Right to Repair Legislation over Last 8 Years." PIRG, 24 Feb. 2025, http://pirg.org/media-center/release-all-50-states-now-have-filed-right-to-repair-legislation-over-last-8-years/

Short Wins for Immediate Impact

Sustainability can feel like eating an elephant, but you can see results by starting with these four short wins:

• Mandate Energy Standards: Writing ENERGY STAR or EPEAT requirements into your next RFP is the easiest way to show immediate energy savings to your board.

• Invest in Rugged Protection: Spending a little extra upfront on high-quality protective cases can be the difference between a device lasting three years or six [7]. It cuts repair rates drastically and keeps students focused on learning rather than broken hardware.

• Build in Trade-ins: Avoid stockpiling obsolete equipment

• Contractually mandate buyback or trade-in programs. Parma City Schools used this strategy to maximize the value of 6,000 used devices, using the proceeds to fund their next refresh [8].

Every purchase you make tells a story about your district's priorities. By choosing durability and efficiency, you aren't just saving money, you're building a more resilient learning environment for your students.

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7 Learn21. "Maximizing Device Lifespan: A Smarter Approach to Technology Management." LinkedIn, 11 Mar. 2025, https://www.linkedin.com/pulse/maximizing-device-lifespan-smarter-approach-technology-management-1bfgc

8 Tech to School. "Case Studies | Learning Initiatives." Tech to School, 2025, https://techtoschool.com/pages/case-studies

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