Building a Sustainable Digital Future at Harvard: Our Work on Sustainable IT

By the 2024-2025 SSAs from sections F & G

Project Context

The Information and Communication Technology (ICT) sector may feel invisible, but its environmental footprint is far from it. According to the World Bank website, across the literature, ICT accounts for 1.5 to 4% of carbon emissions, a figure expected to rise sharply with the growing demand for artificial intelligence, cloud computing, and blockchain technologies. As digital systems expand and the lifecycle of electronics shortens, how we manage and use technology is increasingly central to our climate response.

As Sustainability Student Associates, we had the pleasure to support Harvard IT with improving its operations, specifically around e-waste management and vendor engagement, in support of university-wide sustainability goals. Through working closely with Jack Sawyer, Business Analyst and Sustainable IT Lead from Harvard IT, we aimed to improve the use and management of digital infrastructure at Harvard in a more sustainable manner.

What We Have Worked On

Over the course of six months, we supported the development of a public-facing e-waste website, which aims to help students, faculty, and staff navigate e-waste recycling, disposal, and vendor options, through:

- Creating a comprehensive content plan for the website that outlines clear structure and messaging for users
- Designing a Figma-based UI/UX wireframe to translate content into a clean, accessible user experience
- Reviewing technical feasibility for various website components to align content needs with platform capabilities
- Developing a resource map of major stakeholders across Harvard that should be engaged for the website launch

We also gathered insights from 13 peer universities in the Ivy Plus Sustainability Consortium, such as Brown University, Columbia University, MIT, on their IT procurement, vendor engagement practices, and use of AI to develop recommendations on how Harvard can improve its sustainable IT policies.

Looking Ahead

As Harvard continues to advance its climate and digital sustainability goals, we hope that the insights that we have provided to HUIT would help lay an important groundwork for broader action. From clarifying recycling resources to building a shared language around digital responsibility, the e-waste website is just the beginning.

We're proud to have contributed to a project that sits at the intersection of climate action, digital equity, and systems design. We are grateful for the opportunity provided to us by the Harvard IT team to help shape a more sustainable digital future at Harvard and beyond.