

Virginia Pow
University of Alberta, Edmonton, AB, Canada

Lauren Stieglitz
University of Alberta, Edmonton, AB, Canada

Olesya Komarnytskay
University of Alberta, Edmonton, AB, Canada

Tim Klassen
University of Alberta, Edmonton, AB, Canada

ADVANCING ENVIRONMENTAL SUSTAINABILITY IN ACADEMIC LIBRARIES: A PROCESS-ORIENTED APPROACH

Abstract

The climate crisis poses an existential threat to our planet, necessitating urgent action from all sectors of society, including academic institutions. Libraries, as knowledge hubs and community centers, are pivotal in promoting environmental sustainability and leading by example. This poster shares the work of the University of Alberta Library's (UAL) Environmental Sustainability Working Group and our process-oriented approach to reducing our environmental impact by iteratively developing recommendations based on a literature review, environmental scan and staff survey. This work draws on past experiences and research to envision an environmentally sustainable future for academic libraries.

Introduction

The climate crisis is a global emergency caused by increased atmospheric greenhouse gases, resulting in global warming and climate change. The IPCC's latest climate change mitigation report (2022) highlights major risks for current and future generations, including unpredictable weather, severe impacts on species, food security threats, and adverse health effects. This crisis demands urgent action from all societal sectors, including academic institutions. Libraries, as institutions dedicated to knowledge preservation and dissemination, are uniquely positioned to contribute to sustainability efforts through their operations, collections, and educational initiatives.

We utilized a process-oriented approach that focused on multiple strategies for information gathering to generate evidence-based sustainability recommendations.

The approach includes:

- An environmental scan of sustainability initiatives at academic libraries and universities
- An extensive literature review supporting evidence-based sustainability initiatives
- A survey of U of A Library staff to incorporate stakeholder perspectives

Methods

The UAL Environmental Sustainability Working Group (ESWG) was established in 2023 to develop a list of recommendations on environmental sustainability. The ESWG includes representatives from various library departments, ensuring diverse perspectives and comprehensive coverage of library operations. In addition, the ESWG collaborates closely with the university's sustainability office to align with broader institutional goals and leverage existing resources. The ESWG also actively engages with UAL staff to gather innovative ideas and foster a sense of community ownership.

The ESWG adopted a process-oriented approach to sustainability in academic libraries. This iterative method that emphasizes continuous improvement and adaptability. We gathered information from multiple sources to develop recommendations that built on established practices while adapting based on evidence gathered.

The process-oriented approach included multiple elements:

- Literature review - this review focused on environmental sustainability work in academic libraries, the environmental impact of academic library activities and more general research about workplace sustainability in order to support evidence-based practice.
- Environmental scan - environmental sustainability policies and initiatives were collected from academic institutions and libraries around the world, with a focus on Canada. We also examined the policies and goals of the University of Alberta to strategically align our work with current priorities.
- Staff survey - the ESWG surveyed UAL staff about current sustainability practices, areas of concern and priorities. Engaging stakeholders throughout the process ensures that sustainability initiatives are well-supported and aligned with the needs and values of the library community. It also helps create a culture of sustainability within the institution.

Results

The ESWG developed high three priority recommendations using a process-oriented approach:

1. Continuing the Environmental Sustainability Work: The ESWG should be transitioned into a continuing committee to ensure this work is ongoing, reflecting that sustainability is a process and not a one-time thing.
2. Join the Sustainable Libraries Initiative: Commit to being a member of the Sustainable Libraries Initiative to provide more support for sustainability initiatives within our institution
3. Complete an Energy Audit - Energy efficiency is a significant piece of sustainability and a comprehensive energy audit is the first step to determining the environmental impact of our library.

The ESWG developed further recommendations informed by the literature search, environmental scan and staff survey. These recommendations are wide-ranging and represent an array of opportunities rather than an exhaustive or prescriptive list. These recommendations are categorized into four areas:

- Waste - The reduction of waste as well as recycling and reuse.
- Travel and Events - Reducing the impact of both commuting and professional or conference travel.

- Energy Usage and Conservation - Efforts to reduce energy use and embrace green energy.
- Education and Accountability - Educating and engaging with staff on sustainability as well as accountability and transparency to our community.

Discussion

The UAL ESWG used a process-oriented approach, reflecting that sustainability is an ongoing process. We built upon the initiatives and research of past work to develop a roadmap to a sustainable future. As this work continues, we will continue to evaluate our work, solicit feedback from library stakeholders, and synthesize sustainability developments in the academic sector to improve our approach. Continuous monitoring and improvement ensure that sustainability efforts remain relevant and effective. This iterative approach allows libraries to adapt to changing circumstances and incorporate new knowledge and technologies as they become available.

Conclusion

Academic libraries have a crucial role in promoting environmental sustainability and addressing the climate crisis. By adopting a process-oriented approach, libraries can significantly reduce their environmental impact, lead by example, and contribute to global climate change efforts.

This approach emphasizes systematic planning, stakeholder engagement, and continuous improvement in creating lasting change. This paper provides a framework that can be adapted by other academic libraries, contributing to environmental stewardship in higher education and shaping a more sustainable future.

References

Intergovernmental Panel on Climate Change. (2022). *Sixth assessment report: Climate change 2022: Impacts, adaptation and vulnerability*. United Nations.
<https://www.ipcc.ch/report/ar6/wg2/>