

SUSTAINABILITY ACTION PLAN

SUSTAINABILITY AT HUMBER

The Humber 2008/2009 Business Plan identifies Sustainability as being one of five values that support Humber's vision and mission statement:

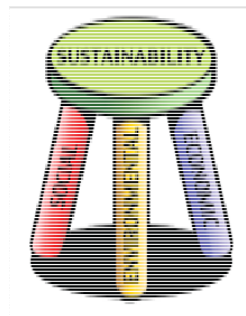
“Sustainability by considering the social and environmental costs and benefits in all of our decision making.”

Many of the key elements of sustainability have long been implemented at Humber. The purpose of this action plan is to bring them together. With a focus on evidence, Humber will track and publish performance indices for past successes as well as for current and future plans and accomplishments.

DEFINITION OF SUSTAINABILITY

The United Nations define sustainability as *“meeting current needs without compromising the ability of future generations to satisfy their needs”*. More comprehensively, it means looking at the issues and problems facing our world with a new perspective one that focuses on three interdependent areas of concern: social justice, economic viability, and ecological preservation.

The most common way to describe sustainability is the 3 legged stool model, with sustainability being the seat, and each leg being social, economic and environmental needing to be equal to hold up the stool. Sometimes this is called the “triple bottom line”



COORDINATION OF EFFORTS

In order to ensure a focused and co-ordinated approach to sustainability at Humber, the action plan proposes a Sustainability Co-ordinating Committee with composition and Terms of Reference as shown in Appendix 1.

The goals of the Coordinating Committee include:

- the creation of a Green Team in each school and department;
- working with representatives from school and department Green Teams to identify initiatives;
- review and prioritize the proposed initiatives and develop goals and implementation plans;
- identifying leaders within each school and department to initiate/lead proposed plans;
- conducting an annual conference for all Green Teams to share and celebrate successes.

PROPOSED SUSTAINABILITY GOALS FOR HUMBER

- Social:**
- Make Humber a Model Sustainable Community
 - Require compliance with ethical and environmental practices
 - Increase Understanding of Sustainability inside and outside the Campus
- Economic:**
- Ensure Ongoing Economic Viability
 - Maintain and Enhance the Asset Base
 - Maintain and Maximize the Utilization of the Physical Infrastructure
 - Market Humber as a sustainable institution to attract students, academics and staff
- Ecological:**
- Reduce Pollution and Greenhouse Gas Emissions
 - Conserve Resources
 - Protect Biodiversity
 - Increase instances of effective waste reduction, reuse and recycling

SOCIAL GOALS:

Introduction:

Having a successful and strong social component is essential to support the ecological and economic initiatives. Sustainable social communities are equitable, diverse, connected and democratic and provide a good quality of life.

Social Sustainability Initiatives may include any of the following:

Diversity and tolerance
Human health and comfort
Safety
Equity
Social inclusion and interaction
Cultural enrichment
Liveable campus
Purchasing
Recreation opportunities
Learning opportunities
Nutrition

Social Goal #1:

Strengthen Humber community's awareness and understanding of sustainability, global citizenship, and civil society through learning, research, and community service.

Action Plan:

- Develop ways to incorporate sustainability into teaching, learning, and research as appropriate.
- Develop coordinated information programs, projects, and exhibits to heighten student, staff, faculty and the community awareness of sustainability issues.

- Develop and promote publication and exhibits, promoting sustainability for audiences both on and off campus.
- Social inclusion and interaction.
- Support initiatives by other groups, i.e. HSF Earth Week, throughout the campus and into the community.

Social Goal #2:

Meet ethical and environmental purchasing standards.

Action Plan:

- Ensure that all Supply Management purchasing continues to be in accordance with the Purchasing Management Association of Canada's and National Institute of Governmental Purchasing Code of Ethics.
- Ensure campus-wide awareness and compliance with Humber's Purchasing Policy and Procedures.
- Increase awareness of Humber's sustainability requirements to the vendor community.

Social Goal #3:

Connect with the larger community to promote sustainability, global citizenship, and civil society through outreach programs, partnerships, and collaborations.

Action Plan:

- Profile sustainability activities by Humber's faculty, staff, and students in the local and national media.
- Keep alumni informed about sustainability and global citizenship initiatives at Humber, and encourage their participation.

ECONOMIC GOALS:**Introduction:**

Having a successful and strong economic component is essential to support the social and ecological initiatives. Sustainability also leads to the responsible management of public infrastructure, and ensures that decisions made today do not create liabilities for future generations. Many of the things we can do to conserve energy also save money. Reducing energy consumption also decreases our liability to future increases in fuel costs and future carbon footprint liability.

Economic Goal #1:

Make the best use of available assets, while maintaining and enhancing the asset base.

- Develop strategies to ensure adequate budgets for maintaining buildings and assets based on life-cycle costing.
- Use energy efficiency projects to finance deferred maintenance projects to create a win-win situation.
- Integrate sustainability into renovations to enhance the asset base.
- Continue to expand energy sub-metering systems to integrate gas and water consumption in order to develop a feedback system for building level performance.

Economic Goal #2:

Control space and infrastructure costs, and reduce deferred maintenance.

Action Plan:

- Complete Campus Planning study to confirm adequacy of spaces for academic growth over the next decade.
- Increase space utilization by at least 5% when renovating existing buildings.
- Develop and implement an equitable space allocation policy to encourage downsizing, the sharing of space, and more efficient use of under-used space.
- Calculate space utilization performance indices.

ECOLOGICAL GOALS:**Introduction:**

Having a successful and strong ecological component is essential to support the social and economic initiatives. Ecological initiatives find ways to reduce pollution, waste, carbon intensity and energy consumption without impacting or even enhancing the comfort of the campus community. Success at achieving the goals will be tracked using industry standard performance metrics.

Ecological Goal #1:

Reduce greenhouse gas emissions and improve air quality.

Action Plan:

- Identify all College greenhouse gas emissions. Develop a plan to reduce them. Include Scope 1 and 2 emissions.
- Develop a plan to establish reduction targets and associated target dates.
- Complete further energy efficiency improvements within existing buildings as applicable.
- Review on a building-by-building basis for the use of geothermal heating and cooling for all new buildings at Humber to reduce CO₂ where practical.
- Consider fuel consumption when purchasing all College vehicles and equipment.
- Encourage the purchase of local products or services wherever practical.
- Track and publish carbon performance indices (i.e. Total CO₂, CO₂/per square foot, CO₂/student).
- Compare carbon intensity of various products.

Ecological Goal #2:

Reduce all forms of waste and improve waste disposal processes.

Action Plan:

- Develop new programs to educate the community about the importance of waste management.

- Set a target for waste diversion.
- Set a target for products taken to the recycling depot.
- Ensure that there is formal tracking and reporting of all disposal of demolition and construction waste.
- Establish clear criteria for the use of recycled materials.
- Reduce waste sent to landfill from institutional construction by at least 50%.
- Introduce an organic composting program.
- Expand programs to reduce amount of hazardous waste (including batteries) generated.
- Develop a recording and tracking process for achievements in reductions in greenhouse gasses due to waste reduction.
- Track and publish performance indices (Total waste produced, % recycled, % diverted)
- Set targets for reductions in hazardous waste.

Ecological Goal #3:

Reduce non-renewable energy consumption

Action Plan:

- Implement further energy efficiency retrofits in existing buildings including lighting, air systems, pumps, kitchen hoods, IT loads, etc.
- Maximize renewable energy passive solar opportunities.
- Invite input by students, faculty, staff and community residents on ways of reducing energy consumption on campus.
- Explore the use of renewable sources of energy such as hydrogen power, micro hydro, ground source heat pumps, and integrated photovoltaic technologies as ways to reduce non-renewable energy use.
- Identify greenhouse gas emission reductions from projects
- Calculate and use past successes to justify future projects.
- Track and publish performance indices (EKWH/sq ft, EWWH/FTE)

Ecological Goal #4:

Building Green Buildings

Action Plan:

- Design permanent buildings that are flexible and adaptable to changing use.
- Make all new institutional buildings 25% more energy-efficient on average than national standard.
- Ensure new building designs consider future conversion to alternate energy sources.
- New building design to consider carbon neutral concept, net energy concept.
- Design new buildings to minimize the use of water.
- Track and publish performance indices (EKWH/sqft, water use, % recycled materials).
- Utilization of recycled materials.

Ecological Goal #5:

Green Building Renovations

Action Plan:

- Reduce construction waste to landfill.
- Develop sustainability standards for renovations.
- Increase energy efficiency of existing space.
- Reduce water use where applicable.
- Encourage multi-use space planning as much as practical.
- Develop innovative projects and designs in each of the neighbourhoods of Humber to show the value of environmentally-friendly design and sustainable building practices.
- Utilization of recycled materials.

Ecological Goal #6:

Reduce water consumption.

Action Plan:

- Reduce potable water consumption by 40% in institutional buildings.
- Reduce irrigation needs through landscape design, composted mulch, and other programs designed to conserve water.
- Track and publish performance indices (total water use/per student/staff).
- Reduce storm water run off through permeable surfaces and green roofs.

Ecological Goal #7:

Reduce paper use and increase FSC content.

Action Plan:

- Reduce per capita purchase of virgin paper by 20%.
- Develop and implement campus-wide protocols for switching from paper to on-line communications for most internal operations.
- Expand options for purchasing paper with recycled content.
- Track and publish performance indices (paper purchases/student/staff).
- Increase the practice of double sided printing.

Ecological Goal #8:

Protect Biodiversity

Action Plan:

- Eliminate the use of pesticides for “cosmetic” purposes.
- Xeriscape grounds, using native and drought tolerant plants, where feasible.
- Switch to “green” cleaning options for custodial work.
- Increase publication and distribution of information for the benefit of all members of the Humber community, including residents, concerning the proper use and disposal of hazardous materials.

Ecological Goal #9:

Ensure that the Humber community understands the value and importance of a healthy ecosystem, and follows the principles and practices articulated in Humber’s policies on sustainable development, environmental protection, and the management of hazardous materials.

Action Plan:

- Plan a series of publications (electronic and print) on Humber’s contributions to research and policy development on the preservation and enhancement of the environment.

Ecological Goal #10:

Reduce Humber’s carbon footprint by enabling positive transit initiatives.

Action Plan:

- Review the transit types, availability, opportunities and potential enhancements for faculty, staff and students.
- Develop a communication tool to encourage car pooling.
- Develop a recording tool to track reductions in carbon footprint
- Create a cycling friendly campus.

SUSTAINABILITY COORDINATING COMMITTEE**TERMS OF REFERENCE**

Approved by _____ Date _____

Mandate:

The mandate of the Sustainability Coordinating Committee is to:

- Coordinate the college's efforts to increase environmental literacy of students faculty, and staff.
- Make campus operations at Humber more sustainable.
- Create a culture of sustainability at Humber.
- Provide prioritized recommendations on such matters to the Vice-Presidents
- Work with various stakeholders to implement approved projects.
- Track and publish successes using defined metrics
- Communicate the work of sustainability committee to the Humber community and beyond.

Committee Structure:

Executive sponsors: Vice President, Finance and Administration,
 Vice President, Student and Corporate Services

6 members consisting of:

- 1 administrative manager from Purchasing and Sustainability Services
- 1 administrative manager from Facilities Management
- 1 support staff
- 1 faculty from a program that relates to sustainability
- 1 member from Marketing and Communications
- 1 student

Staff Support:

- Administrative support will be provided through Facilities Management and Purchasing and Sustainability Offices.
- Depending on the project will call on staff from any areas of the College.

Time Commitment (or maybe Meeting Schedule?):

- Monthly meetings approx 2 hours long