

Sustainability

Algonquin College Academic White Paper

March 2009

Sustainability is one in a series of Academic Area white papers that includes:

- Academic Technologies
- Accommodating Increased Enrolment
- Applied Research
- Apprenticeship
- Community and Business Integration
- College Programming Strategy
- Enrolment
- Internationalization
- Interprofessional Education

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PREFACE

In 2007, Algonquin College began a five-year strategic planning process to re-think its focus and set a direction in line with current trends and future needs. In the context of that strategic exercise, the Academic Division is exploring key questions about the ways the College may sustain its reputation, enhance its educational offering, and deliver that offering consistently across all programs. The following is one of ten papers addressing specific issues that demand forward-looking consideration.

Authors

Jo-Ann Aubut (Co-Chair)

Jim Kyte (Co-Chair)

Adrienne Armstrong

Mark Hoddenbagh

Lisa Shaw-Verhoek

Doug Wotherspoon

Ian Pineau

Rebecca Volk

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EXECUTIVE SUMMARY

As an institution of higher education, Algonquin College has a corporate social responsibility to educate our future leaders on sustainability. Success in today's global economy will require that our graduates are equipped with the knowledge and skills to live, work, and contribute to sustainable communities.

The Algonquin Experience is rooted in student success and weaving sustainability into the curriculum is a vital component. Opportunities to work in the community through outreach experiences (field, clinical, co-op) and advancing sustainability through applied research need to be implemented.

Students today are expecting a commitment to green initiatives and beginning to demand green campuses. If we are to be a leader amongst Canadian colleges, we must undergo a paradigm shift in our culture, attitudes and behaviours. As management guru and self-described "social ecologist" Peter F. Drucker¹ once said, "management is doing things right; leadership is doing the right things."

Algonquin College has taken some very positive and important steps in regards to sustainability, but a greater commitment is required across all facets of the College. The integration of sustainability into program curriculum is only one of the important next steps in the process. We must develop a sustainable financial model to support the ongoing integration of sustainable practices into our operations. In essence, we need not only to espouse our commitment to sustainability, but to enact it by "walking the talk" to establish credibility with our stakeholders.

THE ISSUE

Sustainability is one of the seven areas identified under Section 4.0 – Charting Our Future in the 2008-2013 Strategic Plan. The community supported this focus when it endorsed the statement that, "Algonquin College will embrace the concepts of environmental and financial sustainability for both its program delivery and its operations. The College will build on current "green" practices to create a sustainable environmental footprint and will help prepare students to live, work in and contribute to environmentally sustainable communities".

The plan further identifies four major themes and 21 goals to ensure the focus required for supporting student success. Goal #5 under the Academic Leadership theme states, "Increase the environmental sustainability content in programs". The focus of this paper will be on the Academic Area but we cannot ignore Goal #3 under the Resource Management theme which states, "Implement environmentally sustainable best practices in College operations". The two goals are intertwined so we will touch on operational considerations as well.

¹ Visit <http://www.druckerinstitute.com>

BACKGROUND AND CONSIDERATIONS

The Sustainable Algonquin Steering Committee (2008) succinctly described the current state of the College in their *Sustainability Consultant Request for Proposals*:

“Momentum has been building regarding the urgency to address the pressures that the global community is putting on the environment. Algonquin College has a distinguished history related to concern for the environment and has recently successfully undertaken numerous initiatives to reduce its impact on the environment. Among these is the ESCO contract with Direct Energy to conserve both energy and water throughout the College. Other projects currently underway focus on waste reduction, recycling, optimization of space utilization and integrated pest management. Curriculum development has also seen an emphasis placed on sustainability with several green-focused programs and courses recently introduced.”

These green-focused programs include:

- Green Architecture (Woodroffe Campus)
- Green Business Management (Woodroffe Campus)
- Water and Waste Water (Woodroffe Campus)
- Construction Carpentry - Advanced Housing (Perth Campus)
- Forestry Technician (Pembroke Campus)

The *Sustainability Consultant Request for Proposals* also goes on to state:

“In November 2007, Algonquin College was the first college in Canada to sign the 1990 Talloires Declaration, a 10-point action plan for incorporating sustainability into higher education. The College established a Sustainability Steering Committee in January 2008 - another demonstration of its commitment to making a difference. Sustainability is embedded in the College Strategic Plan 2008-2013 thus further committing the College to action.

Recognizing the urgency to do more sooner, the College is looking for a framework to advance its role related to sustainability and is the final stages of hiring a consultant to guide implementation of best practices operationally and across curriculum.”

Considerations

Al Gore’s documentary, “An Inconvenient Truth”, brought global climate change to the forefront of the public scene and the release of reports by the Intergovernmental Panel on Climate Change (IPCC)² that strongly suggest humanity is having a deleterious impact on the planet’s climate. Environmental, economic and social crises will dominate the world stage throughout the 21st century. Our future leaders are expected to understand and contribute to solving these issues of sustainability.

² Visit <http://www.ipcc.ch/> to see reports

With more than 300 definitions of “sustainability”, there is some ambiguity over what exactly the term means. The best-known definition comes from the Report of the Brundtland Commission³, *Our Common Future*, prepared under the auspices of the World Council on Environment and Development in 1987, which defines sustainable development as that which “...meets the needs of the present without compromising the ability of future generations to meet their own needs”.

While this hints at a number of important principles, it provides little concrete guidance about what to do differently.

For centuries, economics has dominated the world’s decision-making processes. This is often cited as one of the root causes of ecological overshoot. Neoclassic economics does not place any monetary value on protecting life’s necessities, such as clean air and fresh water, and treats pollution as an externality that is not part of calculating “the bottom line”.

To achieve sustainability, we must both value and evaluate the “Triple Bottom Line” (TBL)⁴. This requires a decision framework that includes three pillars: Social (People), Environmental (Planet) and Economic (Profit) measures and targets. Where all three are optimized, Sustainability will be achieved (Ref. Fig. 1). Currently, Algonquin’s Strategic Plan does not address the social pillar.

Our understanding of the interdependence of these complex systems and our ability to act strategically according to that understanding is the key to our future. Each individual human will play an integral part in healing the systems that support life. However, higher education institutions, with their breadth of knowledge and core business of education, are the training arena for future leaders.

As a result, higher education has a particular responsibility to move society towards a sustainable future. Corcoran, Calder, and Clugston (2002, p. 99) eloquently state:

“Colleges and universities are vested by society with the task of discerning truth, imparting values, and socializing students to contribute to social progress and the advancement of knowledge. They have a profound responsibility to impart the moral vision and technical knowledge needed to ensure a high quality of life for future generations. Sustainable development is the current context in which higher education must focus its mission”.

The United Nations Decade of Education for Sustainable Development (UN DESD 2005-2014), supported by the United Nations Educational, Scientific and Cultural Organization (UNESCO), is working to incorporate sustainability throughout higher education operations. In the United States and Canada, institutions

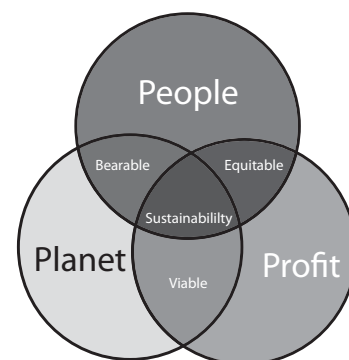


Figure 1: Triple Bottom Line (TBL)

³ Visit <http://www.un-documents.net/wced-ocf.htm> to see complete report

⁴ http://www.greeninnovation.com.au/aboutGreenInnovation_sustainability.html

of higher education are also implementing plans and taking actions that aim to achieve socio-ecological sustainability within their confines. Known as the Campus Sustainability Movement (CSM), it is expanding across the United States and Canada as campuses work towards “greening” their operations and tackling the deeper issues of sustainability within their institutions. These initiatives are taking the much-needed first steps towards sustainability, as well as, sparking conversations and increasing awareness around sustainable development.

The current sustainability initiatives on college campuses have been supported by a number of organizations outside of academia. We can trace the origin of the CSM to the 1990 Talloires Declaration⁵ stewarded by the organization University Leaders for a Sustainable Future (ULSF), “the first official statement made by university administrators of a commitment to environmental sustainability in higher education...it has been signed by over 300 university presidents and chancellors in over 40 countries”. ULSF, created in 1992, is “working to strengthen the capacity of colleges and universities to make sustainability and environmental literacy a major focus of teaching, research, service, and operations” (ibid).

In 1993, Second Nature was created to “help higher education make the principles of sustainability the foundation of all learning, practice, and collaboration with local communities” (Second Nature 2006). Today it “focuses its energy on initiating, advising, and supporting select high-leverage national and regional Education For Sustainability (EFS) activities” (ibid). In 2005, the Association for the Advancement of Sustainability in Higher Education (AASHE) expanded its mission to support any campus interested in sustainability throughout the US and Canada (ibid).

Today, membership in this organization includes 275 colleges and universities and is the resource centre and knowledge-sharing hub for all sustainability-related activities on college campuses. These organizations, and the campuses they support, are the backbone of the CSM. They are leading higher education in the move towards sustainability by inciting and encouraging collaboration, and beginning the process of integration that the industry of higher education needs in order to shift its orientation towards sustainability.

Simply put, higher education has a special role and responsibility. “Education, in short, is humanity's best hope and most effective means in the quest to achieve sustainable development” (UNESCO 1997). If Algonquin College is to be a leader in its field, we must embrace sustainability and set an example for others to follow.

⁵ Visit http://www.ulsf.org/programs_talloires.html

OPPORTUNITIES

Academic institutions are privileged to have the opportunity to exercise corporate social responsibility in educating and positively influencing future leaders. The previously referenced citation that "... humanity's best hope and most effective means in the quest to achieve sustainable development is education" (UNESCO 1997, p.18), highlights the critical role academia must play to advance sustainability. Arguably, academic institutions have been charged with an unprecedented call to action to ensure our planet's sustainability. Rouble (2008) depicts this call to action in a presentation on, "Sustainability – An Integrated Approach" as here captured:



Figure 2: Call to Action

Opportunities to foster a culture of sustainability within academic environments are vast. However, for students to live, work, and contribute to sustainable communities, sustainability must be woven within an academic institution's vision and mission statements, core values, systems operations, and program curricula. In other words, sustainability must be engrained within *The Algonquin Experience*.

The College has taken positive actions towards advancing sustainability as evidenced by its incorporation within the current Strategic Plan. Rouble (2008) references Algonquin's Strategic Plan Linkages with associated TBL opportunities rooted in the common ground of student success. (See Figure 3, page 5).

Over the years, community colleges have demonstrated their ability to quickly and effectively respond to the changing needs of industry. We now have an opportunity to mobilize and be among the academic institutions leading the integration of sustainability within curriculum delivery and systems operations, to ultimately act as global change agents. Algonquin's membership with the Association for the Advancement of Sustainability in Higher Education (AASHE), an organization established in 2006, allows the College to

learn from best practices and initiatives currently underway towards the attainment of a future state that will realize, “sustainability in all sectors of higher education – from governance and operations to curriculum and outreach - through education, communication, research and professional development.”⁶

Strategic Plan 2008-2013 Linkages

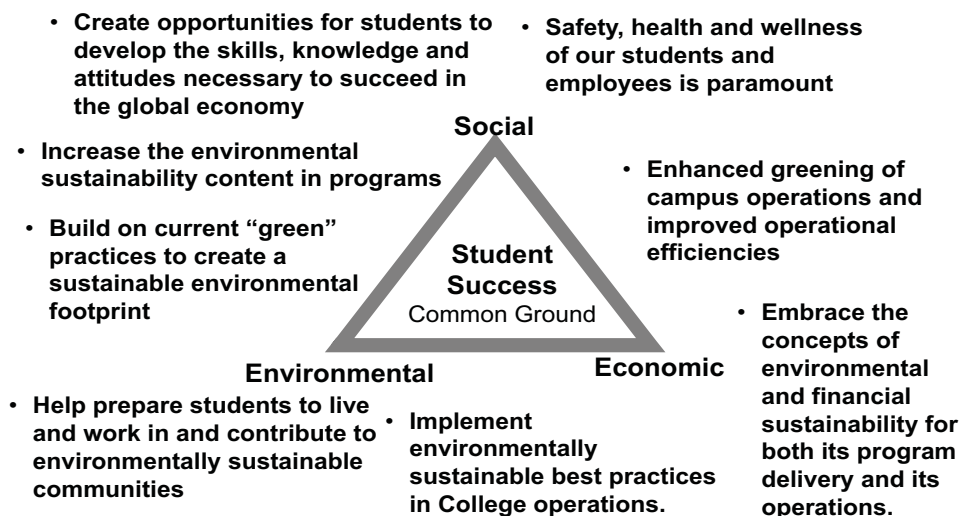


Figure 3: Algonquin College Strategic Plan
2008-2013 Linkages

To successfully implement an integral culture of sustainability within Algonquin we must change behaviours, values, and attitudes.

There are two key opportunities that will assist our organization in realizing these changes. The first is the opportunity to build on lessons learned from previous change management strategies, such as those implemented with the recent adoption of technology, including hybrid delivery and the Course Outline Mapping and Management System (COMMS). Secondly, and most importantly during this time of economic uncertainty, given that both human and operational resources will be required to drive change, we must capitalize on the opportunity to develop an economically-sustainable financial model, whereby a portion of savings resulting from sustainable practices are reinvested to support sustainability initiatives.

⁶ <http://www.aashe.org/about/about.ph>

Options

Ignoring the issue is not an option and would be irresponsible, given the current global state. "Institutions of higher education bear a profound moral responsibility to increase society's ability to create a just and sustainable future." (Cortese 1999, p.8) Algonquin has thus begun taking steps to demonstrate commitment and leadership towards sustainability, as here represented by Rouble (2008 (Figure 4).

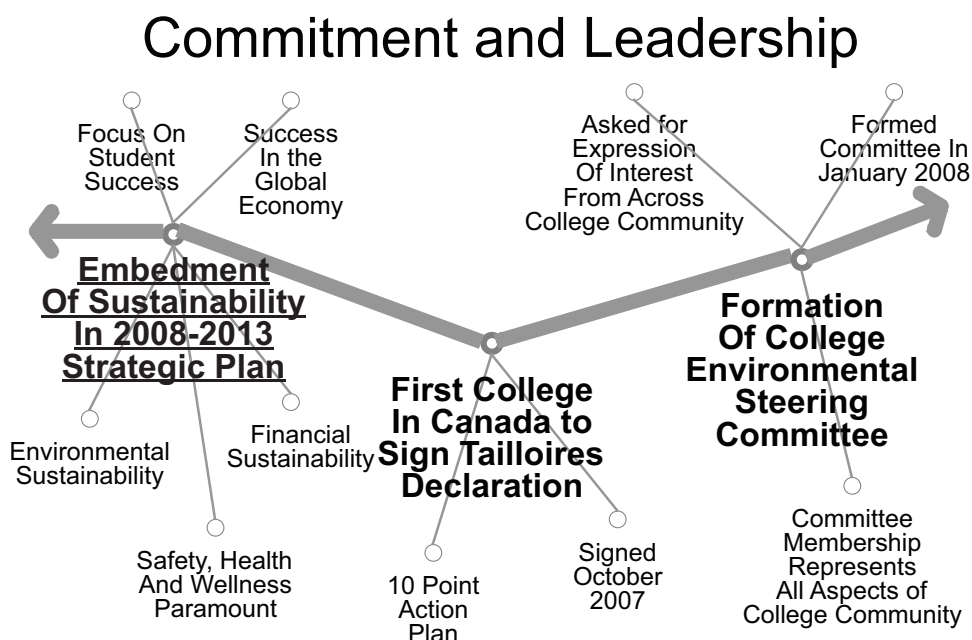


Figure 4: Commitment and Leadership

A dedicated and active Sustainable Algonquin Steering Committee (formerly referred to as the College Environmental Steering Committee) was formed in November 2007. Since its inception, the committee established a 13 point action list (see Appendix 1).

Additionally, potential next steps for the College have been articulated by Rouble (2008) (Figure 5, page 8).

Though numerous actions of significance are identified, ultimately educating staff and students and enabling the embedment of sustainability within curriculum are of paramount importance. Four possible options are proposed to achieve this goal:

1. **Stand Alone** – mandated General Education Sustainability 101 online training course for all students and staff.
2. **General Education Electives** – increase elective offerings available to students.

3. **Sustainability Link to EES or VLO** – threading sustainability throughout all program curricula by embedding it either as a Vocational Learning Outcome (VLO) or an Essential Employability Skill (EES), without the requirement to undertake an online Sustainability 101 type course.
4. **Mixed (preferred)** – whereby students and staff will be required to complete an online Sustainability 101 course, similar in format to WHMIS instruction. Supported by threading sustainability throughout all program curricula by embedding it either as a Vocational Learning Outcome (VLO) or an Essential Employability Skill (EES).



Figure 5: Next Steps

The mixed option is identified as preferred until such time as sustainability becomes inherent to the knowledge and skills base of all entry level college students. This approach will facilitate a paradigm shift in recognition that:

“Developing graduates who help implement a paradigm of sustainability is a crucial need for society, yet educational curricula often do not adequately address this need. ... If we are to achieve a sustainable future, institutions of higher education must provide the awareness, knowledge, skills, and values that equip individuals to pursue life goals in a manner that enhances and sustains human and non-human well-being.” (Cortese, 1999, page.8).

The Centre for Organizational Learning (COL), in consultation with the newly hired sustainability consultant, would both be instrumental in identifying the necessary resources required to provide professional development to guide faculty with curriculum modifications.

Clearly addressing the overarching need for sustainability training within all programs should be a key direction for the College to realize a paradigm shift. Beyond this, Algonquin must also strive to increase its repertoire of program offerings that focus on sustainability and/or green content. This direction is substantiated by economic projections. Green has been coined as the new economic driver. The American Association of Community Colleges (AACC) Community College Times recently featured an article titled, Green as the new economic driver. Van Jones, author of *The Green Collar Economy*, is cited within this article noting that community colleges have a “critical, pivotal and indispensable role” in the new economy (Van Jones as cited in Dembicki, 2008, p.1). The article highlights that the public and policymakers must come to realize that green jobs are not a fad and further quote Jones as stating, “This is going to be a big deal, not a little blip, ...” (ibid, p.10). The green economy will, therefore, drive a demand for more programs with an environmental or general sustainability focus. In light of this trend, the College should consider establishing a cluster of sustainability or green programs.

RECOMMENDATIONS

In addition to endorsing the actions articulated by the Sustainable Algonquin Steering Committee noted in Appendix I, the following recommendations are proposed within Academic Curriculum Integration and Operational “Walk the Talk” categories.

Academic Curriculum Integration Recommendations

That Algonquin College:

- Revise the College’s Vision and Mission statements, and core values to reflect sustainability embedment within *The Algonquin Experience*.
- Develop and implement a formal change management strategy to drive a cultural shift in behaviours, values and attitudes towards sustainability - staff and students have an opportunity to sign a Sustainability Commitment Pledge.
- Educate staff and students and embed sustainability throughout curricula using the proposed mixed option.
- Provide community outreach experiences (field, clinical, co-op) to participate in sustainability practices.
- Establish experiential learning opportunities for program students to assist in operational sustainability practices, i.e. Horticulture students working with Hospitality/Cafeteria Services on a red worm composting initiative.
- Modify the Professor of the 21st Century document to reflect knowledge and skills in sustainability practices.
- Engage faculty and students in applied research studies to advance sustainability initiatives.
- Brand and market the competitive advantage of *The Algonquin Experience* in preparing sustainability leaders for global careers.
- Establish a cluster of sustainability or green programs.

Operational “Walk the Talk” Recommendations

That Algonquin College:

- Establish an Office of Sustainability and develop a sustainable financial model to resource its operation long-term.
- Promote the social well-being of students and staff by providing greater incentives for the Fitness Zone and further general health and wellness opportunities.
- Consider the Triple Bottom Line (TBL) in all purchasing decisions including social aspects such as Fair Trade⁷, i.e. purchase locally, purchase Canadian goods, and purchase goods that do double value by giving back to charity.
- Revisit ancillary services operations such as cafeteria, bookstore, and parking to determine operational efficiencies, i.e. flex parking and other incentives to promote bussing, improve bicycle storage facilities, electronic textbooks/manuals, publishing and printing efficiencies, and e-tests.
- Ensure that air/rail travel requirements are limited and that only fuel-efficient vehicles are rented and car pooling necessitated.
- Consider building a Living Wall⁸ within existing and new buildings.
- Ensure that new buildings are Leadership in Energy and Environmental Design (LEED) Green Building Rating^{®9} Certified and existing building operations reviewed to identify and implement strategies to reduce our ecological footprint.

Table 1 on the next pages presents recommendations with responsible College areas and indication of immediate, short-term or long-term goal designations.

⁷ Visit http://www.ifat.org/index.php?option=com_content&task=view&id=1&Itemid=12

⁸ Visit <http://www.environment.uwaterloo.ca/faculty/green/index.html>

⁹ Visit <http://www.cagbc.org/leed/what/index.php>

TABLE 1: Recommendations with Responsible College Areas and Indication of Immediate, Short-term or Long-term Goal Designations

Academic Curriculum Integration Recommendations	Primary College Areas Responsible	Immediate Goal	Short-term Goal 2009-2010	Long-term Goal 2011-2015
Revise the College's Vision and Mission statements, and core values to reflect sustainability embedment within the Algonquin Experience.	<ul style="list-style-type: none"> • PEC • SA 		<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
Develop and implement a formal change management strategy to drive a cultural shift in behaviours, values, and attitudes towards sustainability- staff and students have an opportunity to sign a Sustainability Commitment Pledge.	<ul style="list-style-type: none"> • PEC • Academic • Business Dev. 		<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓
Educate staff and students and embed sustainability throughout curricula using the proposed mixed option	<ul style="list-style-type: none"> • Academic • Business Dev. 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓ 	
<ul style="list-style-type: none"> • determine the best approach to embed sustainability within curriculum, i.e. VLO or EES threading; 	<ul style="list-style-type: none"> • Academic • Business Dev. 		<ul style="list-style-type: none"> ✓ ✓ 	
<ul style="list-style-type: none"> • review report and recommendations from Sustainability Consultant on best practices for embedding sustainability within curriculum; 	<ul style="list-style-type: none"> • Academic • Administration • Business Dev. 		<ul style="list-style-type: none"> ✓ 	
<ul style="list-style-type: none"> • develop an online sustainability course for students and staff; 	<ul style="list-style-type: none"> • Academic • Administration • Business Dev. 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓ 	
<ul style="list-style-type: none"> • launch and evaluate online sustainability course pilot with students and staff followed by full roll out; 	<ul style="list-style-type: none"> • Academic • Administration • Business Dev. • Student Serv. • SA 		<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓
<ul style="list-style-type: none"> • offer PD for faculty on integrating sustainability within course outlines/course delivery; 	<ul style="list-style-type: none"> • Academic • Business Dev. 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
<ul style="list-style-type: none"> • launch embedment of sustainability within curriculum pilot for select programs identified on a volunteer basis; 	<ul style="list-style-type: none"> • Academic • Administration • Business Dev. • Student Serv. • SA 		<ul style="list-style-type: none"> ✓ 	
<ul style="list-style-type: none"> • evaluate embedment of sustainability pilot and modify processes based on outcomes; and, 	<ul style="list-style-type: none"> • Academic • Administration • Business Dev. • Student Serv. • SA 			<ul style="list-style-type: none"> ✓
<ul style="list-style-type: none"> • develop a mandatory implementation time-line for roll out of sustainability integration within all program curriculum. 	<ul style="list-style-type: none"> • Academic • Business Dev. 		<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓

Academic Curriculum Integration Recommendations (cont'd)	Primary College Areas Responsible	Immediate Goal	Short-term Goal 2009-2010	Long-term Goal 2011-2015
<ul style="list-style-type: none"> Provide community outreach experiences (field, clinical, co-op) to participate in sustainability practises. 	<ul style="list-style-type: none"> Academic Business Dev. 		✓	✓
<ul style="list-style-type: none"> Establish experiential learning opportunities for program students to assist in operational sustainability practices i.e. Horticulture students working with Hospitality/Cafeteria Services on a red worm composting initiative. 	<ul style="list-style-type: none"> Academic Administration 		✓	✓
<ul style="list-style-type: none"> Modify the Professor of the 21st Century document to reflect knowledge and skills in sustainability practises. 	<ul style="list-style-type: none"> Academic 		✓	✓
<ul style="list-style-type: none"> Engage faculty and students in applied research studies to advance sustainability initiatives. 	<ul style="list-style-type: none"> Academic Business Dev. 		✓	✓
<ul style="list-style-type: none"> Brand and market the competitive advantage of the Algonquin Experience in preparing sustainability leaders for global careers. 	<ul style="list-style-type: none"> Advancement Academic 		✓	✓
<ul style="list-style-type: none"> Establish a cluster of sustainability or green programs. 	<ul style="list-style-type: none"> Academic Business Dev. 		✓	✓
Operational "Walk the Talk" Recommendations	Primary College Areas Responsible	Immediate Goal	Short-term Goal 2009-2010	Long-term Goal 2011-2015
Establish an Office of Sustainability and develop a sustainable financial model to resource its operation long-term.	<ul style="list-style-type: none"> Administration Academic Business Dev. 		✓	✓
Promote the social well being of students and staff by providing greater incentives for the Fitness Zone and further general health and wellness opportunities as part of the Algonquin Experience.	<ul style="list-style-type: none"> Administration Student Serv. SA 		✓	✓
Consider the TBL in all purchasing decisions including social aspects such as Fair Trade i.e. purchase locally, purchase Canadian goods, and purchase goods that do double value by giving back to charity.	<ul style="list-style-type: none"> Administration Student Serv. 	✓	✓	✓
Revisit ancillary services operations such as cafeteria, bookstore, and parking to determine operational efficiencies i.e. flex parking and other incentives to promote bussing, improve bicycle storage facilities electronic textbooks/manuals, publishing and printing efficiencies, and e-tests.	<ul style="list-style-type: none"> Administration Student Serv. 	✓	✓	✓
Ensure that air/rail travel requirements are limited and that only fuel efficient vehicles are rented and car pooling necessitated.	<ul style="list-style-type: none"> Administration 	✓	✓	✓
Consider building a living wall within existing and new buildings.	<ul style="list-style-type: none"> Administration 		✓	✓
Ensure that new buildings are (LEED) Green Building Rating® Certified and existing building operations reviewed to identify and implement strategies to reduce our ecological footprint.	<ul style="list-style-type: none"> Administration 		✓	✓

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APPENDICES

Appendix 1

Sustainable Algonquin Steering Committee – 13 Point Action List

In order to position the College, its students and staff as leaders in environmental stewardship and foster a green mainstream culture, the Sustainable Algonquin Steering Committee shall:

1. Advance the College’s commitment to the Talloires Declaration.
2. Develop and maintain a sustainability strategy for the College.
3. Advocate for the success of all approved College initiatives by promoting the inclusion of consideration of environmental sustainability and reduced ecological footprint in all decision-making processes.
4. Develop a communications plan to support and advance the College’s Strategic Plan with respect to sustainability and to promote the relevance of sustainability throughout the College community.
5. Establish high-level baseline, measures and benchmarks to support the tracking of progress with respect to sustainability.
6. Promote the creation of academic opportunities to produce expertise in environmental management, sustainable development and related fields, and to encourage the development of the capability of faculty to teach in these fields.
7. Identify priorities and recommend environmental and sustainability projects and initiatives for budget consideration to support the achievement of the College’s Strategic Plan.
8. Recommend both new and revisions to current College directives, processes and practices in order to align with values associated with environmental sustainability and reduced ecological footprint.
9. Establish and manage task forces and sub-committees to study and recommend solutions to specific issues raised by the College community related to environmental and sustainability issues.
10. Promote opportunities for the College community to raise public, government, industry, academic partners and self awareness regarding the need to move toward an environmentally sustainable future.
11. Encourage the involvement of government, industry, academic institutions and other partners and the College community in research, education and information exchange in order to find solutions to environmental and sustainability problems.
12. Continue to create opportunities for students and staff to engage in activities that lead toward an environmentally sustainable future.
13. Conduct an inventory of College accomplishments to date and publish them as a foundation on which to promote this initiative.

Appendix 2

Sustainability Consultant - Excerpts from Request for Proposals

(Prepared by the: Sustainable Algonquin Steering Committee)

N.B. Specific Curriculum References Highlighted in Yellow refer to p.17

The scope of services envisaged for this assignment will include the following general topics. The intent is that the Sustainability Consultant and the College will work in a collaborative manner, in which the Sustainability Consultant will offer advice and recommendations for acceptance and implementation by the College.

3.1 Identify Trends and Best Practices in Sustainability

- Identify trends most influencing the implementation of sustainability at institutions of higher education, industry and in other areas
- Survey best practices in industry and institutions of higher education in operational areas that can accelerate progress in all College areas such as:
 - Green procurement practices
 - Green building
 - Food services
 - Housekeeping
 - Energy and maintenance
- Explore the benefits and challenges of different institutional structures for sustainability coordinators and offices.
- Suggest best-in-class resources, conferences, partnerships and associations that can assist in accelerating and maintaining a leading position in sustainability.
- Recommend advantages, risks and priorities for various best practices to most advantageously position the College.

3.2 Conduct a Sustainability Assessment of Algonquin College

3.2.1 Establish a Current State Baseline

- Identify key benchmarks and measures to establish a baseline and track progress. These benchmarks and measures should follow industry standards as defined by recognized organizations such as the G3 Guidelines, Global Reporting Initiative, and should be relevant to an institution of higher education. Consideration should be given to the significance of the measure and the resources needed to track it.
- Include a holistic assessment of all aspects and processes of the College related to sustainable development - social, economic and environmental, including an initial environmental review

- Relate measures to allow tracking of progress in meeting the College's commitment to the Talloires Agreement
- Implement a process to conduct an institutional greenhouse gas inventory and complete the current state

3.2.2 *Assist in Articulating a Desired Future-state Vision of Sustainability for Algonquin College*

- Facilitate the creation of a collective long term vision of sustainability for Algonquin College
- Develop and maintain linkages to the Strategic Plan
- Articulate how input to this vision from the college community at large will be accommodated

3.2.3 *Complete a Gap Analysis Between Current and Desired Future States*

- Identify strengths and weaknesses, opportunities and obstacles
- Assist in providing focus and setting priorities for improvement
- Critically analyze solutions to obstacles to achieving sustainability at Algonquin College
- Propose a mechanism for gathering ideas College-wide for priorities and ways to bridge the gap.

3.3 *Assist the College in Articulating an Integrated Sustainability Strategy*

The College is seeking guidance to develop a sustainability strategy that encompasses all aspects of the organization. The Sustainability Consultant will be expected to lead the College through a process that will see it develop its own strategy. The sustainability strategy should, as a minimum, include:

- Foster a culture of sustainability:
 - Create a shared understanding of sustainability among all College stakeholders
 - Conduct a gap analysis related to sustainability awareness among all College personnel
 - Identify strategies for professional development of all personnel related to sustainability awareness and knowledge in their respective areas of expertise
 - Innovate approaches to engage students, faculty and staff and change behaviours
 - Encourage dialogue, cooperation, synergy and innovation among employees
- Articulate a strategic position for the College related climate change and carbon neutrality
- Embed sustainability in Curriculum
- Survey existing practices in other post-secondary institutions
 - Advise on core curriculum learning outcomes
 - identify best practices related to embedding sustainability in curriculum

- Recommend means of deployment of a communications strategy
- Recommend a balance of specific goals and objectives coupled with strategies to empower and mobilize individuals and groups to effect change
 - Starting small opportunities
 - Leveraging of grass-roots initiatives

3.4 *Articulate the Business Case for Sustainability at Algonquin College*

- Identify the competitive advantages and opportunities for the College's mission and bottom line
- Help the College articulate a brand differentiator related to sustainability
- Identify the opportunities and risk mitigation strategies related to a sustainability strategy
- Identify the costs and potential savings associated with a sustainability strategy
- Identify innovative approaches to finance sustainability initiatives
- Identify and catalogue existing and needed business processes and organizational structures that support sustainable success

3.5 *Develop an Action Plan to Achieve the Desired Future State*

- Assist in identifying and quantifying needed commitments and resources in the short term and long term
- Assist in setting short term (2009-2010) and longer term priorities
- Provide an order of magnitude estimate of commitments / resources / timeframes, etc to achieve leadership position

3.6 *Key Deliverables*

- A scan of trends and best practices in sustainability at institutions of higher education and elsewhere.
- A sustainability assessment to establish a baseline with very specific measures and benchmarks to mark progress.
- Assisting the College in articulating its sustainability strategy
- A business case for sustainability at Algonquin College to establish relevance and feasibility
- An action plan including recommended priorities, timeframes and estimated resources needed to achieve a leadership position
- Preliminary assessment and report to provide input into the preparation of the 2009 College budget