

GREEN UNIVERSITY COMMITTEE
UNBC's Green Strategy Discussion Paper
28 November 2008

PURPOSE OF DOCUMENT

This paper presents ideas/options related to UNBC's green strategy for consideration by the Green University Committee (GUC). It builds off discussion at a meeting held by a subgroup of the GUC on 21 November 2008 and the following documents:

- Bill McGill's "Statement of Green Objectives for UNBC"
- Annie Booth's "Report on Public Engagement on Greening the University"
- Shelley Rennick's "Current recycling, sustainability and energy management activities on campus"
- "Climate change statement of action" signed by Presidents of BC colleges and universities, including UNBC
- "Green University Principles" compiled by Rob van Adrichem and Danielle Smyth
- Summary of comments at an International Coffee Hour on 14 November 2008 sponsored by the International Studies Students Association with a theme of "UNBC as a sustainable campus in a global community".

This discussion paper is divided into the following nested elements:

- preamble and context
- green vision
- green objectives (to achieve the vision)
- green strategies, targets, timetables, procedures (to achieve the objectives).

PREAMBLE

UNBC is located in one of the world's most magnificent natural settings – naturally beautiful British Columbia. It is also situated in the midst of one of Canada's major centers of resource extraction – timber, minerals, oil & gas, and fish. Regrettably, it is also situated in an area experiencing environmental degradation – local air quality, water pollution, solid waste disposal, ecosystem degradation, and climate change. As a result of the confluence of natural setting, resource extraction, and degradation, UNBC has naturally emerged as a small but powerful leader in teaching and researching the full scope of human-environment interaction, and putting what we learn into practice to achieve sustainability. This is the foundation upon which we, as Canada's Green University, can build.

UNBC'S GREEN UNIVERSITY VISION

- To make UNBC a more sustainable campus, realizing that being 'green' is not an end-point, but rather a perpetual process of improving sustainability in all facets of our operations as we build upon our collective past and adapt to future technology and knowledge.
- To engender a 'spirit of sustainability' in the UNBC community (alternative wording: encourage and nurture a green culture / norms; prepare environmental citizens)

- To become a model of sustainability for communities and organizations in Northern British Columbia
- To strive to improve on our national and international reputation for excellence in teaching and research in the environmental / ecological / sustainability fields
- To achieve campus carbon neutrality.

UNBC'S GREEN OBJECTIVES / STRATEGIES

Note:

- = objective (to achieve the vision)
- = *strategy, target, timetable, or procedure(to achieve the objectives)*

WHOLE CAMPUS

- To define “sustainability for UNBC”
- To develop and maintain comprehensive, publicly accessible sustainability inventory / database
- To develop monitoring and assessment mechanisms
 - *install real time, online monitoring with results fed to a central, public location*
- To solicit, formulate, and foster activities that promote sustainability in 3 spheres
 - Green living
 - Green teaching
 - Green research
- To initiate, support, coordinate, engage in the generation of knowledge and implementation of action
- To foster links between UNBC and governments, organizations, and the people of northern British Columbia
- To achieve carbon neutrality
 - From “climate change statement of action” ¹ signed by Presidents of BC colleges and universities:
 - *“exercise leadership by reducing emissions of greenhouse gases in collaboration with our communities”*
 - *“develop measurable targets using research and science”*
 - *“develop achievable and practical plans to achieve reduction targets”*
 - *“put in place rigorous assessment and measurement procedures”*
 - *“fully disclose and be accountable for our actions”*
 - *conduct a greenhouse gas (GHG) inventory and develop GHG reduction targets that are consistent with provincial government legislation*
 - *set targets and develop an institutional climate action plan*

¹ <http://www.tupc.bc.ca/publications/Final-TUPC-Climate-Change-Action-Statement-Mar-11-08.pdf>

- *make action plans, inventories, progress reports, etc. publicly available for review and comment*
- *assess carbon offsets possibilities in the north (eg, invest carbon offset funds for UNBC work-related travel into Northern BC projects)*

TEACHING

- To facilitate, encourage, and coordinate environmental / ecological / sustainability instruction and learning opportunities at UNBC
 - *Senate should document environment and sustainability-related courses and academic programs and identify gaps/opportunities*
 - *Course assignments that tackle ‘green university’ issues should be compiled as resource guides, e.g. to guide UNBC policy changes or innovations.*

RESEARCH

- To become a world leader (alternative wording: Mecca) for graduate students, postdocs, and visiting scholars in the environmental / ecological / sustainability fields
 - *Office of the Vice-President Research documents current environmental / ecological research and identify gaps/opportunities*
 - *Increase number of scholarships and fellowships for graduate and undergraduate students in the environment / ecological / sustainability fields*
 - *Offer grants for innovative student-led research initiatives, both applied and theoretical*
 - *Increase funding for student “green projects”*
 - *Sponsor appropriate speaker series and other events.*
- To conduct research relevant to Northern BC
 - *Engage with regional communities and research funders to identify and address gaps in knowledge and determine research needs aimed at environmental/ecological, economic, social, and cultural sustainability*
- To construct a new building dedicated to environmental / ecological / sustainability research.
- To become a “climate change in the North” center of excellence.

ADMINISTRATION / FINANCE

- To incorporate sustainability principles in all university operations (specifically, campus planning, procurement, investments, decision-making, assessment, and reporting)
- To utilize green accounting (e.g. natural capitol, carbon offsets)

FACILITIES

- To ensure all future UNBC building meet and exceed the LEED Gold standard
- To maximize and conserve native landscaping on campus grounds
- To compile, acknowledge, and support current initiatives undertaken by various administrative units and offer support for future initiatives.

COMMUNICATION

- To achieve high level of environmental / ecological / sustainability awareness and networking throughout the UNBC community
 - *Incorporate sustainability education into student/employee orientation programs and student residence programming*
 - *Increase dissemination of information on what university has and has not done*
 - *Increase profile of Green University Committee*
 - *Create a “green space” on campus serves as hub of environmental / ecological / sustainability information*
 - *Put a “green monitor” (or display of some sort) at Student Union entrance where everyone wants for the bus that gives green information, announces green events, etc.*

CAMPUS SECTORS

ENERGY

- To maximize energy efficiencies of present UNBC energy systems
 - *Conduct an energy audit, and identify areas of energy savings*
 - *Increase efficiency of electricity use (i.e. campus lighting, heating/cooling residence, hot water, and mechanical/pumps)*
 - *Institute green education/awareness programs for occupants of residence halls and for the UNBC community in general (eg, shutting off lights).*
 - *Institute a system of penalties, where feasible, for energy waste*
 - *Student training on green practices as part of the ‘rules of residence’*
- To replace fossil fuel sources with renewable energy sources (solar, wind, biomass)
 - *Explore the potential for solar energy on roof of residence halls, wind power on Cranbrook Hill, geothermal energy for building climate control, solar hot water on campus, etc.*
- To develop a northern sustainable energy demonstration and research facility

FOOD

- To maximize local and organic food on campus
- To improve vegetarian and vegan options at the cafeteria
- To minimize food waste and throw-away service items
 - *Use creamers and milk jugs instead of individual plastic containers*
 - *Minimize food packaging*
- To construct an on-campus greenhouse, expand on the composting and the outdoor student garden, consider development of a non-student community garden
- To institute a green tax on bottled water
- To add drinking fountains to buildings

GREENSPACE AND ECOSYSTEMS

- To connect green space and sustainability planning for ecosystems on UNBC endowment lands, research forests, and reserve lands

- To value local ecosystem services and promoting natural areas in decision making process
 - *Promote awareness of and teaching about the health, water and air purification, non-timber organic resource, timber resource, and nutrient cycling benefits of local ecosystems*
 - *Promote local educational and scientific research in adjacent forests*
 - *Seek new potential for outdoor recreation, eco-tourism, and other promotional activities highlighting the natural beauty of UNBC and adjacent lands*
 - *Encourage community, education, and research based ecoliteracy programs through Forests for the World and adjacent lands*
- To implement measures to reduce unaccounted waste in parking lots, including cigarette butts and litter left after major events.

TRANSPORTATION

- To achieve carbon neutrality for non-public transportation to and from UNBC as a workplace
 - *Conduct a comprehensive transportation survey*
 - *Institute higher parking fees*
 - *Extend U-Pass to all UNBC students, staff, faculty*
 - *Create and promote better and more accessible Ride Share program, for holidays as well as carpooling networks for everyday activities*
- To achieve carbon neutrality for work-related travel by UNBC staff and faculty
 - *Conduct a survey of work-related travel and the cost of buying carbon offsets*
 - *UNBC should generate its own carbon offset projects where possible*

WASTE MANAGEMENT (Reduce, Re-use, Recycle)

- To reduce consumption (The biggest gains in improving sustainability are linked to reducing consumption of new goods and services. Our first priority should be to consider all mechanisms to reduce consumption.)
- To reuse materials to the maximum degree feasible
 - *Document current reuse and consider extending to other areas*
- To recycle to the maximum degree feasible
 - *Improved current recycling efforts*
 - *The UNBC waste audit results provide a great launching point for improving recycling, as well as for informing the other 2 'R's'.*
- To increase efficiency in reducing, reusing, and recycling materials with the goal of achieving a zero waste circular system modeled after nature
 - *Develop waste management and recycling policies which include expectations of waste management and janitorial staff, laboratories, and food services contractors*
 - *Institutionalize current compost program and divert compostable organics from the campus waste stream (~26%)*
 - *Increase opportunities for reducing, recycling, and reusing materials*
 - *Eliminate plastic bags and reduce other packaging*

- *Ban the sale of disposable beverage cups or implement a meaningful financial penalty for their use*
- *Emphasize maintenance and longevity increasing the lifespan and utility of infrastructure to reduce the flow of materials into landfill (e.g. e-waste)*

- *Institute education/awareness programs to promote the 3 R's (reduction, reuse, recycling) in residence halls and in the university in general*
- *Institute a system of penalties, where feasible, for energy waste*

- **To reduce paper waste in copying**
 - *Make double-sided printing default for all copy machines and computer printing*
 - *Make double-sided option cheaper for students – currently it costs for 2 pages to print 1 page*
 - *Use 100% post-consumer paper*
 - *Explore increased use of electronic submission and grading of papers*