

## **Report on Public Engagement on Greening the University**

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### **Introduction**

A public engagement exercise was undertaken at the invitation of the Green University Committee. This was undertaken during October and the first two weeks of November 2007 by Annie Booth.

Initially the plan was to hold six focus groups (FG), two with members of the Faculty Association, two with CUPE members and two with UNBC students. After discussion, the focus groups expanded to include Dr. Sharon Cochrane's public consultation initiative around the draft revisions to the UNBC Master Plan, an initiative with considerable overlap with the Green Committee's interests. Focus groups were two hours in length, with the Green initiative taking the first hour and the Master Plan taking the second hour. At Sharon's urging a focus group was also added to include Exempt Staff.

Recruitment was varied. To attract faculty, the Faculty Association was asked to send an invitation by email to its member list. Presentations were made at CASHS and CSAM College Council meetings. CUPE and Exempt staff were recruited through their respective leaders through an email invitation to attend the focus groups. Graduate students were invited through the Graduate Student Society (GSS) email list and undergraduates were attracted through an article in Over the Edge and through public posters.

Attendance at the first CUPE and first Faculty focus groups was nonexistent. A few staff were recruited at the time of the second FG. Eventually a third lunch hour FG was added. In total 14 CUPE staff attended. For the second faculty focus group 9 people attended. Seven Exempt staff attended their focus group. The two student focus groups attracted 16. The focus groups were taped (with participants' knowledge) but have not been transcribed. Results were derived as summaries of the discussion.

It became clear that a different approach might be required to broaden public engagement. I decided to circulate the focus group questions as a survey through email. The faculty were emailed through College mailing lists, CUPE through the CUPE list, the Exempt through their list, and graduate students through the GSS list (contacting undergraduates through email was deemed too difficult). People were given the choice of either returning the surveys by email or through campus mail if they wished anonymity. This action generated a reasonable response rate. In total 59 surveys were returned by the

deadline. In addition 27 other responses by people offering ideas were received (although some individuals submitted a couple of responses). The majority of the non-anonymous responses were from faculty members, but there was reasonable representation of staff, administrators and graduate students.

Both the focus group script and the survey consisted of seven questions:

- 1. What is your reaction to UNBC trying to become a Green University?**
- 2. One of the goals is to be sustainable. How do you think UNBC should define sustainability for itself?**
- 3. One idea being discussed is seeing sustainability in terms of teaching/learning, research and living green. What are your thoughts on this organizing idea?**
- 4. What are some of the things you'd like to see the university do to make UNBC a greener operation? Both short term and long? Cheap and expensive?**
- 5. What are your ideas for involving the university community? How do we get people involved?**
- 6. How do we best communicate with people about sustainability? What would get peoples' attention?**
- 7. Any last ideas or comments**

Finally, on two separate days, Sharon and I set up tables in the Wintergarden with displays on green issues and the Master Plan. We did receive some written responses from this effort which are included in the data analysis.

### Data Analysis

The survey produced extensive data, some people wrote several pages, far more than had been planned for. Due to this result, and the desire to produce a report quickly for the Green Committee's consideration, data analysis has been more cursory than I prefer. I am therefore only attaching brief summaries of the results and attaching as well the full data for the Committees review if it wishes. As the responses were often detailed as well as highly thoughtful, much would be lost in any summary (although I have provided some sampling of quotes in my summary) and I highly recommend at least a quick scan of the responses.

I have split out responses between the focus groups, surveys/comments and notes collected at the two tables. I have not looked at frequency or representativeness of responses except in the most cursory way. I have chosen to remove any identifying

features from the analysis and so am not distinguishing between faculty, CUPE, Exempt or students. It should be kept in mind however, that I believe that the majority of surveys and comments were returned by faculty. This is somewhat compensated for by the fact that there was better attendance at the staff and student focus groups. However, it would appear that more effort might be required to more comprehensively assess student and staff responses.

As the responses were often extensive, I have done a preliminary sort to group similar ideas together. This was particularly important for Question 4.

As the answers to Questions 5 and 6 produced similar responses, they have been combined for purposes of analysis. Similarly, responses to Question 7 often produced responses that fit into other questions and were incorporated in these areas.

I have split this report in to two sections. The summaries appear first. The data compilations follow.

## **Summary of Responses to Question 1. What is your reaction to UNBC trying to become a Green University?**

People in surveys and in the focus groups were generally supportive of the idea of UNBC becoming a green university. Many saw this as an idea whose time had come, indeed was overdue. Others were clear this move is simply an inevitable one in today's world.

*I strongly support that idea knowing how important it is for people to preserve our natural environment. I believe it is our responsibility to take good care of our nature so that we can give them to our future generations. Also the idea would align well with UNBC's image as a university for the northern community*

*I think it's great. When I first heard about the idea, I thought it was an exciting way to promote being Green but using UNBC's natural strengths around teaching/learning and research – the University's core business. It's a natural fit in that perspective. However, when people think Green, they think recycling, reducing greenhouse gas emissions, etc. While UNBC may participate in some of those traditional programs, we need to increase the awareness around what we're already doing there and what we plan to do. Otherwise, our statement of being Canada's Green University TM runs the risk of being dismissed immediately as promotional hogwash.*

A number noted that they thought this would become a useful recruitment tool for students, that many would be attracted to a campus with such actions and ideals. This was stressed in both the student focus groups as an attractive combination with UNBC's natural setting as a major selling point for prospective students.

There was a very high number of survey respondents indicating concern over the premature nature of trademarking UNBC as Canada's Green University. To some extent this was reflected in the focus groups as well. While these respondents did not object to becoming more green as an institution there was considerable concern over the gap between the label and the reality. Several indicated fear that if UNBC did not move quickly to make the label a reality it would become a laughingstock in the educational community. These individuals often noted how far ahead of UNBC other institutions were in achieving a campus greenness.

*Our society is being faced with the greatest threats we have ever faced and so we have no choice but to become Green. However, we have an obligation to make sure that this actually means more than a promotional sales pitch, which is where I think we are now. Being Green needs direction and clarity. This is a very big responsibility and people from around the world will be looking to us to set an example. We have a long way to go towards Green leadership. We are the best and the brightest and so our Green University should be the absolute best model of sustainability, which is what I believe people associate with being green. The*

*gravity of the situation requires more than incremental change if we are going to catch up to the incremental effects of climate change and the biodiversity crisis.*

*I fully support this initiative, as long as the university "puts its money where its mouth is." In other words, I would not wish to be involved in a mere public relations or advertising scheme. The fact that we are already calling ourselves "Canada's Green University" troubles me, since I believe we need to earn that moniker*

A large number also indicated that they were cynical about this initiative. The cynicism reflected a concern that this initiative was a "greenwash," or a ploy by administration to make the university better than it was for recruitment purposes.

*Great idea, but only if meaningful. We need Green not token Green (a sort of denim green). Anything less and I become one of the cynics. Meaningful requires initiatives that take us beyond recycling and composting to significant measurable and mentionable results.*

*I think that it's a good idea, but it seems to me that it has unfolded as a "top down" initiative. I'm not sure how many folks really feel invested in the initiative, in part, I think that reflects a sense that this is just another slick recruitment proposal coming out of the Presidents office with little consultation to see if there is really grass roots support (or substance, for that matter). Honestly, I think that it's a little embarrassing. The President declares that UNBC is now Canada's Green University, while a lot of us are out here scratching our heads going "What?"*

*I suspect the lack of attendance at those sessions may be rooted in cynicism. This university is so obviously brown, and the administration's grasping at an inappropriate slogan seem so obviously cynical, that faculty don't want to be seen to be aiding and abetting.*

*Disbelief and disappointment as to the top down nature of this process! I am also disappointed that the moniker does not reflect current reality by any means! A final note is that I agree that this self-imposed designation could be of significance in recruiting students (although not as important as perhaps thought by upper administration), but that if lip service is paid to this issue, then it could very easily blow up in UNBC's face. That is, the impact of failure would be much more negative than the positive impacts from successful would be positive.*

While cynicism is perhaps an inevitability in a university setting, such responses suggest that a key requirement for this initiative to succeed is to move quickly, and to be seen to be moving quickly, to green UNBC's operations to warrant the trademark. Further, addressing the concern that the initiative is only topdown is important. UNBC is highly

unusual in that the initiative does come out of senior administration. At most Canadian institutions the greening movement largely originates as a bottom up effort often in the face of administrative indifference. This reversal of circumstance at UNBC should be capitalized upon, but faculty/staff concern about being left out of decisions are ignored at risk.

**Summary of Responses to Question 2. One of the goals is to be sustainable. How do you think UNBC should define sustainability for itself?**

This question worked far better, in the sense of generating response, in the survey than in the focus groups. People were quite general in their responses during focus groups. It is worth noting that when presented with a definition later in the group during Sharon Cochrane presentation on the Master Plan there was general consensus on the definition included in the plan (environmental, economic, social/cultural).

As is perhaps inevitable in an academic setting, the survey responses were often somewhat technical in their direction right down to citing and quoting from references. In asking this question I had been hoping for a sense of how to frame what this university might strive for in sustainability, reflective of its small size, northern setting, etc., things to include within the definition. However it turned in to something of a catchall category for people's ideas.

That said, there are some directions emerging as to how this university might define sustainability for itself.

*We should begin by assessing the way other institutions and persons have defined it, and then we should acknowledge these sources in our creation of our own definition. Given that there will be no finish line, it should reflect the dynamic and continuous aspects of being sustainable, it is a process not a goal. It should encompass all aspects of the Units operations and indicate a continual striving for measurable improvements.*

*To me sustainability is about lasting power. However, universities, like economies, are encouraged to measure their success in terms of new buildings and exponential growth over the short term. A sustainable university should be one in which growth is not accepted as a universal good or the only measure of success, but where growth is managed to make sure that glittering new buildings are not damaging our long-term viability as a species. UNBC should consider its footprint carefully, and new initiatives should be subjected to sustainability analysis just as they are subjected to budgetary analysis.*

*I think the definition of sustainability for UNBC is to have the ability to preserve its surrounding environment as in the beginning of its establishment. Not many universities around the world are enriched with natural environment as seen at UNBC and UNBC should make efforts to strengthen the longevity of its environment.*

*I suppose there has to be some mention of finances in the sustainability discussion, so the Greening of the University must be financially sustainable.*

*I think we have a real opportunity to showcase the 'small is beautiful/sustainable' angle.*

*Sustainable development is...modeled after nature as a diversified, responsive, and evolving society that is self-engendered to yield prosperity, resources, and capital for future generations of the UNBC community to continue on its moral mission of educational philosophy.*

*While the issue of climate change has drummed support for the notion of sustainability, it is vital to recognize that human induced climate change is only one part of the picture of sustainability. Virtually all measures of bio- and cultural diversity are in steep decline. This is a much bigger problem than is generally realized and our moral imperative to address this problem is stated clearly in UNBC's motto, 'En Cha Hunà - "respecting all forms of life".*

**Summary of Responses to Question 3. One idea being discussed is seeing sustainability in terms of teaching/learning, research and living green. What are your thoughts on this organizing idea?**

In the surveys people were split in their response to this organizing idea. On the negative side, respondents cited a lack of clarity of the concepts:

*It's clear that we could do research ABOUT green topics, but how we do our research in a "green way" is less clear to me. Similarly, it's clear how to teach ABOUT green issues (and I do this in whatever ways seem possible within the course material), but I'm less clear about how to teach in a "green way".*

A couple indicated a concern that the focus on "green" not be forced upon faculty or be used to disadvantage "non-green" fields.

*To the extent that this adds to the longstanding differential advantage of the NRES group on campus in terms of resources, priorities and attention I am opposed to it. The environment is an important issue, but not the only one that we are here to address.*

*Don't we have enough AVIs?! I think that some degrees and programs already use the social construction of sustainability in a meaningful way, but I also think not all programs can or should be forced to have the concept of sustainability as a central organizing concept for their delivery of courses or research.*

A slight majority of respondents favored this organizing idea.

*I think this fits perfectly with our institution, since we are a University, the best way we can enact change is through education. Leading by the example of living green would be an amazing way to inspire others.*

Another felt that efforts included within this frame needed recognition.

*We need to rethink how we measure the 'productivity' and 'impact' of faculty so that there are rewards for this type of innovation rather than barriers and penalties. We need to provide students with tangible alternatives to the degree treadmill/paper chase model of higher education.*

Others cited the integration, and the appeal to the entire community as a key part of this framework.

*I think the knowledge and learning aspect is good, it tells you “how” and “why” and spreads the word through teaching and makes the university campus an experiment in itself – the living green, making it happen, implementation aspect is a little more challenging. We need incentives to implement green living.*

*It is an excellent idea - we all need to live what we learn and teach. As a staff member I'm not sure how involved I could be with teaching and research, however everyone can live green*

Finally, one respondent was sufficiently inspired by this framework and proposed and developed a Green Constitution for the university to consider.

I think that we need a Green Constitutions. Here are a few ideas to start:

- § UNBC shall demonstrate institutional practices that promote sustainability, by being transparent in our waste and efficiency of renewable and non-renewable resources. We will take stock and inventory of our 'Green Capitol' as a better indicator of our sustainable practices through an accounting system that measures both natural, social, and monetary capitol for the full range of sustainable practices to take effect.
- § Removing the tension that exists between economic and environmental stability; rather a vibrant and prosperous economy is sustained by a healthy environment.
- § Promoting health, productivity and safety of the University community through bioneering design and long-term planning in the architectural design of our campus. We will build with products that last for seven generations.
- § Enacting measures to increase efficiency and use of renewable resources.
- § Recognizing that clean air, food, and water and access to an intact natural heritage is essential for sustainability to have any meaning or purpose for generations to come.
- § Eliminating all non-recyclable waste and reducing essential non-recyclable hazardous materials, both in our operations and our suppliers. For the waste that cannot be eliminated, there will be a transparent and efficient process to recycle these products.

- \$ Enacting measures to conserve biodiversity on campus and in northern environments. We shall increase the native diversity on campus through sustainable landscape initiatives.
- \$ Encouraging environmental enquiry and institutional learning on the notion of sustainable communities.
- \$ Exporting our sustainable Green practices to the larger community.
- \$ Educating and become a leader on the issue of sustainability as we develop systematic planning tools for socially and ecologically responsible decision making in respect of the cultural heritage of northern environments.
- \$ Responding to the challenges ahead through accountable Democratic initiatives that involves and listens to the voice of the community.

**Summary of Responses to Question 4. What are some of the things you'd like to see the university do to make UNBC a greener operation? Both short term and long? Cheap and expensive?**

This question generated an enormous response. People participating in this engagement effort are highly creative and thoughtful on efforts they would like to see UNBC focus on in moving towards becoming a Green University. I have roughly sorted responses into categories, but if the Committee is looking for ideas on how to proceed, it is well worth while reviewing the suggestions in detail.

**Reduce, Reuse, Recycle**

While the need to improve substantially UNBC's recycling efforts was repeatedly emphasized, a considerable amount of attention was also paid to reducing the amount of waste generated in the first place. There was substantial support for reducing the amount of paper generated, through use of efiles, through moving to more initiatives such as Webreq, and by doing more with less. Reusing paper was a popular suggestion. Others, such as distributing Orientation and Registration material on a reusable data stick, or only posting syllabi on the internet spoke to the goal of paper reduction. Requiring double sided copying was raised repeatedly.

*I think UNBC should look at the waste on campus (paper, toner, etc). There is probably tons of paper that should never have been printed. We have millions of dollars invested in technology – why are we still printing file copies and sending hard copy memos internally? UNBC can't possibly produce its own supplies but we can definitely cut down immensely on the use of them*

When it came to recycling, people wanted better facilities and a greater range of items recycled. Missing or badly labeled recycling bins were cited. The desire to add plastic and newspapers to the list of recyclables came up. Having drops where people could bring their household recycling was popular as was increasing recycling options in the residences. Better education efforts on what could be recycled was also stressed. Finally recycling computers, furniture and packing was stressed.

*Let people know what happens to all the recycling. I hear myths all the time that stuff isn't being recycled – just being dumped into a landfill somewhere. Let's make sure this isn't a myth. Make recycling local.*

Composting became a separate category. Generally people wanted more of it in more of the buildings. Notes of caution were raised about the need to be consistent and frequent

in its pick up (and one request was made to relocate the garden from behind residence). In counter, students in particular cited the need for better university support for an entirely voluntary effort. Both funds and perhaps labor (such as having the janitorial service help collect compost) was suggested.

*I would love to see composting buckets in the offices, most of our office garbage is lunch related or paper, we have recycling boxes why not composting. Also, in the washrooms, can we be recycling paper towel.*

*Perhaps the PIRG composting effort can be better funded? They were having a bake sale last week to raise funds for a new composter. On the grand scale, this can't be an expensive thing for UNBC to fund and it would support a very grass-roots, local student green initiative.*

### Purchasing

There was some interest in encouraging purchasing policies that required only recycled content products be purchased. Recycled paper was cited repeatedly as a necessity.

### Energy

Energy use and consumption attracted a great deal of response. Generally, responses addressed either conservation or alternative energy use. There was a widespread perception that UNBC needed to be much more active in reducing its energy consumption. Education was deemed to be a major component of this, with suggestions for displays and email notification on energy consumption. A surprisingly high number of people wanted to know how much energy the University used, and all wanted to know how much their conservation efforts would net in terms of savings.

Unnecessary lights being left on attracted a huge amount of attention, along with computers left running. People pointed out several ideas for education, including stickers reminding people to turn things off, security leaving notes, and re-instating automatic shut offs (with the option of keeping individual offices on) after 11 pm. Several people wanted outside lighting turned off during the day. Reducing heating and cooling was also raised.

*The lights in many faculty offices are on overnight and weekends. I have personally contacted facilities, operations, and maintenance about this, and have neither received a reply, nor witnessed a change.*

*Every light switch on campus should have a small sign beneath it informing the user to 'turn me off' when finished*

The residences were often cited as being particularly wasteful.

*Demonstration rooms in residence should be equipped with water and energy use metering so that students can begin to link various activities (e.g. showers) with consumption. Eventually, students could get energy rebates if conservative use results in lower usage.*

The use of alternative energy sources was raised repeatedly with considerable support for investigating the suitability of geothermal (heat pumps), wind and solar.

### Cafeteria

Not surprisingly, the cafeteria and its satellite (Starbucks and Tim Hortons) were roundly criticized for the massive amount of waste generated. Many called for an outright banning of Styrofoam on campus, and many urged the availability of real plates and silverware.

*Please please please can someone tell the catering company to quit using Styrofoam and plastic dishes and cutlery?? It was a mockery to our institution when the grad student welcome party harped on UNBC's "green" status and proceeded to serve the students with disposable dishware. It would be wonderful if we could make the campus a Styrofoam-free environment*

*The cafeteria packaging is a shameful disgrace – the waste generated from plastics, Styrofoam, paper cups, and wasteful plastic creamers must be halted*

A few respondents raised concerns over utilizing local and organic products where ever possible.

*Invest in/hire a food service company that strives to use local products (BC at least) – also promoting local business. Maybe thinking about only buying beef and beef products from organic farms, which release fewer units of Carbon and Methane per animal*

There was some support for utilizing a fee to encourage people to bring their own cups (the current 5 cents was deemed to low).

*Provide a larger incentive to use your own coffee mug for coffee (5 cents too little!). In conjunction with this, food services should be minimizing waste and utilizing local agricultural food products for lower GHG emissions and supporting local producers*

The cafeteria was particularly hard hit during the focus groups. This area seems to be a sore spot for many individuals particularly over the last year as they have noted the amount of packaging increasing.

### Transportation

Transportation choices also attracted heavy response. Again, this roughly broke down into advocacy for alternatives to the car, improving the bus service, and dealing with the inevitability of cars.

There appears to be support for encouraging biking to campus. Two things were raised as concerns in encouraging this activity: the lack of safe, protected storage for bikes and the need for free shower facilities to deal with the consequences of biking. Making both available was raised by several individuals including in contacts outside the surveys and focus groups.

*Encourage bicycling to school by giving incentives (discounts on food?), or free access to lockers and showers for students/ faculty who bicycle-commute. Sponsor free breakfasts at least once a year for students and staff who use healthy transportation such as bicycling, walking, or taking the bus. Have coffee and bagels at the bottom of the hill, or a breakfast for cyclists in the summer garden.*

Other ideas including promoting teleconferencing to reduce travel and carbon offsets when travel was unavoidable.

*So have the university undertake agreements with municipal and regional governments to identify where ecosystem restoration and afforestation is needed, so that we can contribute to LOCAL carbon sequestration and showcase it. Let's make all our institutional and grant-sponsored travel revenue neutral, and just*

*add the "Carbon tax" to the administration/overhead fees charged for grant administration.*

There was a great deal of support for improving and encouraging the use of City bus service. Students in particular support a Upass or subsidizing student bus use to encourage ridership. Some noted that it was cheaper to park a car than to ride the bus. Others were concerned about routes and urged the university to work with the City in organizing routes that attracted the majority of people.

Finally, people addressed the need to deal with the cars that would be inevitable in spite of addressing the first two issues. There was a great deal of support for increasing parking fees as a method of encouraging alternative transportation. Better support for car pooling was also urged. Limiting idling cars was raised as was support for people parking hybrids.

*Encourage car-pooling by giving reduced parking to carpoolers (or higher fees to single-person car users). Reduced parking rates for hybrid vehicles is also something I've seen*

*Canadians have the highest carbon emissions per capita in the world, and nearly all of this is from tailpipes of cars or airplanes. It would cost money, but to offset all of the travel University employees do, or all the big trucks going out on research trips, we could buy carbon credits or have tree-planting days. )*

### Facilities

A wide variety of ideas were raised for improving overall campus operations. Building green buildings, improving the residences and general support for making UNBC a Green Community were cited. A few respondents raised the issue of reducing water use and promoting graywater recycling. Protecting wildlife in our use of the campus was raised a number of times, particularly moose, birds and amphibians.

*Look at ways to improve the use of our facilities. This campus must be one of the most expensive campuses to heat--the amount of atrium space is remarkable. I imagine that the efficiency of this costly infrastructure cannot be changed significantly at this point, but perhaps the university should adopt a policy that future expansion needs to meet a certain standard of environmental stewardship*

*A top-rated sustainably designed demonstration building on campus. A green plan for future development will be essential - sustainable design and features in*

*new buildings needs to get greater billing so that they don't get cut at the last minute.*

Residences were also raised as an area needing attention:

*Make the residence a green community. Appoint green monitors and leaders within residence. Train incoming students on the consequence of their actions that damage of the residence and increase costs to them and the environment. I believe that we can instill a sense of responsibility among students and the few that feel a sense of responsibility will monitor those that get out of hand. Have a strict and heavy handed policy for those that abuse their responsibilities - eviction. Harvard University, for example, has incorporated as part of its Greening initiative "The Graduate Green Living Program (GGLP) is a peer-to-peer education program that promotes sustainable living in graduate school residence halls and apartments." Make our residence a sustainable green community with cheaper smaller housing options. Students are minimalists. I know that I would have been happy with something as big as a closet space for a cheap price as a student. I did live in a closet for a while, it was cheap, and it allowed me to pay for my tuition. Why do we make residence so expensive? We can make it cheap and green.*

### Landscaping

There was support for making campus landscaping more sustainable and for using low impact fertilizers and herbicides.

*Let's re-invigorate our natural lands and promote the diversity within them. This is a natural laboratory a place of education and it is what made many of the students come here in the first place. Help naturalists promote this as part of our Green legacy. Get rid of lawns on campus and return these areas to natural habitat where native species can exist.*

**Summary of Responses to Question 5. What are your ideas for involving the university community? How do we get people involved?**

**Summary of Responses to Question 6 How do we best communicate with people about sustainability? What would get peoples' attention?**

This question generated responses that roughly fell into four categories, “caveats” or concerns, ideas for communication, “seeing”, ideas for activities for engaging people, “doing”, and the need to make greening worthwhile to people, “incentives”.

“Caveats” raised stressed the fact that it was difficult to engage people who felt that they were not included in processes and who felt overworked.

*But I think the main thing is for people to feel that their participation actually matters and has the potential to have some impact on future plans and actions.*

*There needs to be recognition that faculty (and I assume other staff) are already working to the max. Taking on more work in regards to sustainability has to be taken into account as a workload issue. The time devoted should be acknowledged and recognized. The plain truth is that there is just too much to do around here...so lack of response, for example, with the focus group idea should not be taken as lack of interest but rather that everyone is already going flat out. We need to find the ways to incorporate sustainability plans into our day-to-day work/lives such that it does not become an ordeal, but rather something that is do-able and, equally important, that seems do-able in terms of people's time issues*

Efforts to engage people will have to incorporate a recognition of costs in terms of time, energy and not overly burden people or feel coercive in nature.

In terms of “seeing” or communicating several ideas were offered. One key idea was to show people, in concrete terms, what either UNBC produced on an average day or the concrete outcomes of sustainability measures. Real demonstrations or concrete evidence was seen as the most persuasive method of engaging people in participating.

*One final idea is to make this quantifiable. To be able to update us on how we're doing, how much paper have we recycled this year and what can be done with that much recycled paper, how much compost has been created. What is the estimated saving a month or year on utilities. By keeping the broader community even loosely updated, I think the university community would be able to own the*

*idea and so would feel more of a responsibility to be involved. Perhaps we could even set goals for different areas to have something to work towards both short term and long term.*

Another focus was on providing clear and easy implement able ideas on greening that was easy to access. Suggestions included email tips, a green tip on the UNBC website, posters, tables with information in public areas, ideas posted in public areas where people wait (coffee lines, elevators) and other means of communication. Reminder stickers in offices about turning off lights, computers or recycling were recommenced. . Letting people know how to easily be green was considered crucial.

“Doing” included ideas on colloquia and presentations on greening, featuring green research and including the green initiative updates in townhall meetings.

A number of activities were suggested such as recycling rallies, bike days, increasing student participation and support for on-going student driven activities such as PGPIRG. Starting green contests were a particularly popular suggestion, including contests between Departments, between different units and between universities. The focus groups also suggested contests, especially between students in the residences. Recognizing the contributions of individuals through a “green award” was much discussed at the focus groups.

The considered message was to make efforts visible and easy to access. A visible Sustainability Office reflects this concern for visibility.

Finally, a number of individuals stressed the need for incentives to do good. Saving money is only meaningful if the community sees a concrete rewards such as the savings going towards scholarships or more faculty positions. Focus group participants liked the ideas of offering residence fee reductions proportional to energy savings or waste reductions.

*Reward and honor those who are engaged.*

**Responses to Question 1. What is your reaction to UNBC trying to become a Green University?**

**Focus Groups**

if trade marked should make it easier for groups like PIRG, lets put our money where this is focused

a lot of initiatives are by students at other universities but have to move in this direction being Green is a bold statement at this stage

not near the number of green products in use

UNBC not seen as a green university

cafeteria is the most talked about, lots of packaging, its about group psychology pushing people to see it as norm

concern about being premature in labeling UNBC green - you look around there's a lot that's not green

concern about community following our lead

Green is good idea, opens u to criticism if we do things not green obviously

see parking lot full of cars hard to say we're green

jumped in Green without walking the talk

should be green

agree with greening effort but must be seen to be

exciting for students but if we don't follow through

with more awareness will be more student interest

good to see UNBC use for recruiting

would attract students, lots of students interested, but need to reach out to less interested students

laughed when heard about Green University as other universities have taken more active stance - experience trying to organize things with university i.e. recycling was very hard good first step - need more students participating in effort

thinks students will see this as positive

## **Survey**

Very positive! Universities are in many ways communities ... and though usually lacking our own means of producing food and fuel, we tend to be a slightly more like-minded and progressive (or so we like to think) segment of society. We thus have a RESPONSIBILITY to not only advocate but implement sustainable solutions wherever possible.

This is an excellent initiative. Branding UNBC as a Green University makes a lot of sense given that people are generally placing more value on environmentally friendly products and services. We are also situated quite well given the number of Canada Research Chairs located at UNBC which are involved in "green" research and the popularity of our existing environmental programs. In light of our natural surroundings, Northern mandate, and current economic diversity issues, the Green University initiative just seems to feel right. I think a Green University brand will have universal appeal regardless if a student is looking for an environmentally focused degree or something like computer science. On one hand, the environmental student will be charged by the focus, while the computer science student might still appreciate the good fuzzy feelings about the university. This may also help attract student from the lower mainland and other larger centers who may have a heightened appreciation for environmental and sustainability issues. Even if the comp sci major doesn't find the Green brand appealing, they probably won't adversely affect their decision to come here.

Wonderful, great recruitment and retention tool

Super idea, Since UNBC is the brains of the City, it must be the leader

Positive. I think we should do our part in preserving the environment. The environment affects our health and futures.

I think this initiative also has the potential to attract students to UNBC. Given the choice, I would have gone to a Green rather than non-green university as a student.

I think it is a fantastic idea and I am excited that UNBC is willing to take this step publicly (which generally means we will actually have to live up to it)

Great branding tactic

I like the idea, I hope it can work.

We must do it – there is no other option.

I think this is a good idea, but we will have to project the idea a lot clearer to the university community as a whole.

I strongly support that idea knowing how important it is for people to preserve our natural environment. I believe it is our responsibility to take good care of our nature so that we can give them to our future generations. Also the idea would align well with UNBC's image as a university for the northern community. So, greening the university would be a good way to raise the awareness of students and make UNBC look better. One possible drawback would be perhaps the cost (for students paying tuition and extra fees?).

Our society is being faced with the greatest threats we have ever faced and so we have no choice but to become Green. However, we have an obligation to make sure that this actually means more than a promotional sales pitch, which is where I think we are now. Being Green needs direction and clarity. This is a very big responsibility and people from around the world will be looking to us to set an example. We have a long way to go towards Green leadership. We are the best and the brightest and so our Green University should be the absolute best model of sustainability, which is what I believe people associate with being green. The gravity of the situation requires more than incremental change if we are going to catch up to the incremental effects of climate change and the biodiversity crisis. We must usurp these problems to survive.

Excitement: We claim to be green, let's make that real. There is an opportunity to really position ourselves as leaders.

It's about time! Don't reinvent the wheel, what's done in other institutions?

If this is really going to work (and I think that it could, as we do have a pretty environmentally thoughtful group), there needs to be some thought put into how to engage people meaningfully in something that really matters. To me, this seems to be mostly about marketing at this point, and I'm not willing to support that approach.

I think it is a very worthy goal. I feel that past efforts have been mostly in name, to fit an image of a Green University, but that a true Green institution has immeasurable value to students, faculty, and employees who want to do their part to protect this world, rather than add to its destruction. My first reaction when I hear that UNBC wants to become a Green University is that we're jumping on a bandwagon, without really putting much effort forward to change.

I think it's wonderful but would like to see some communication about it in relation to what we can actually do to make UNBC greener.

Sounds great to me. We must "walk the talk" however, otherwise this will blow up in our faces. We should use this as an opportunity to promote what we do in education and research in this area i.e. NRES suite of programs should be promoted as a cohesive package in a systematic way. This will take planning and resources to do effectively, and it could help with enrollment issues we have in these programs at present. I recommend creating a temporary position in the President's office to do this, and seconding a faculty member to take up that position for a couple of years. The position would need to be supported with a budget, and should develop measurable outcomes. (Sort of like the Dean of Enrollment Management position that was initially created.)

Overall, I think it's a great idea and will work only if everyone is on board. However I have my own ideas on how this might be implemented and what it means – others might have a different view.

This is a potentially great initiative and we have a lot in place already but if the university enters into it (well, I guess they already have), it better be real and for the long haul. If the targets are oversimplified or only based on what is already going on (without pushing for continuous improvement), then people will not take it seriously, either within the university or outside of it.

I think the initiative is a step in the right direction, although it sort of portrays the idea that UNBC was not at all environmentally focused prior to the initiative, which is not true.

I think it is a good idea, now we need to Green Prince George and the rest of the world.

Great idea, but only if meaningful,. we need Green not token Green (a sort of denim green). Anything less and I become one of the cynics. Meaningful requires initiatives that take us beyond recycling and composting to significant measurable and mentionable results. Although, there are still plenty of little things to be done: get rid of the disposable sugar and cream packets in the cafeteria!

I feel that most people are tired of trivial efforts. If we set lofty goals and at least come close to meeting them then local and non-local folks will start to listen.

I think it's great. When I first heard about the idea, I thought it was an exciting way to promote being Green but using UNBC's natural strengths around teaching/learning and research – the University's core business. It's a natural fit in that perspective. However, when people think Green, they think recycling, reducing greenhouse gas emissions, etc. While UNBC may participate in some of those traditional programs, we need to increase the awareness around what we're already doing there and what we plan to do. Otherwise, our statement of being Canada's Green University TM runs the risk of being dismissed immediately as promotional hogwash.

Surprise. It will be a difficult challenge as I don't believe that UNBC is in a good position to make this claim at this time.

I think other Universities are miles ahead of us in this initiative. Having said this, UNBC has a unique opportunity to become a leader in this community.

The vital, difficult leap is from a proclamation of 'green' to substantive action. UNBC can be a leader in this effort, but much work is needed.

Surprised. I think it is a good idea; however I think the announcement was too soon relative to what the University supports to date. I was surprised to learn that there is no heat pump for the Sport Center, for example. Is there even a solar panel on campus? My biggest concern is that the media will do a story on us and show how 'un' green we really are.

A very exciting idea, but a head's up from administration would have been more useful than the bombshell/read about it in the Citizen approach. It seems we are putting the cart before the horse, here. I am a bit concerned that we are exposing ourselves to sharp and embarrassing criticism by making a bold statement about being Canada's Green University before we can back this up with tangible evidence and/or a solid plan in place.

I think it's a big commitment and it won't be an easy one. To do this properly and efficiently, there will have to be a lot of changes made here on campus and it's so hard to get more than two people to agree on anything that this could end up being a project from Hell!

I think it's great. However, faculty, staff and students should have been involved in discussion about this initiative prior to it being announced. It is not a good process when employees and students find out about a major initiative by reading the local newspaper. It was an unfortunate start in my view.

I fully support this initiative, as long as the university "puts its money where its mouth is." In other words, I would not wish to be involved in a mere public relations or advertising scheme. The fact that we are already calling ourselves "Canada's Green University" troubles me, since I believe we need to earn that moniker (in the way, for example, that UBC might be said to have already earned such a moniker by decreasing annual carbon emissions by 8,000 tons according to a recent article in the Globe and Mail).

When President Cozzetto first announced the green initiative to the press last June (I think it was), I was enthusiastic, and began to wonder what his plans were to achieve this daunting goal. The recent Globe and Mail article on UBC's impressive greening work showed me that we at UNBC we still have a lot of work to do. But while I agree with President Cozzetto's strategy of trade-marking the "Green University" slogan (so that we may adopt it in usage once we have truly earned the title) I am rather disappointed to see that we are already advertising ourselves as "Canada's Green University." Don't we need to prove that we are such a university by first earning the title? Or do we simply call ourselves a "Green University" and hope people believe us?

I think that it's a good idea, but it seems to me that it has unfolded as a "top down" initiative. I'm not sure how many folks really feel invested in the initiative, in part, I think that reflects a sense that this is just another slick recruitment proposal coming out of the Presidents office with little consultation to see if there is really grass roots support (or substance, for that matter). Honestly, I think that it's a little embarrassing. The President declares that UNBC is now Canada's Green University, while a lot of us are out here scratching our heads going "What?"

I suspect the lack of attendance at those sessions may be rooted in cynicism. This university is so obviously brown, and the administration's grasping at an inappropriate slogan seem so obviously cynical, that faculty don't want to be seen to be aiding and

abetting. I won't attend a session, but here are some suggestions that have occurred to me:

I am enormously cynical about the motivations behind this move and about the degree of commitment. I am also cynical about the timing of the initiative, given that voices were pushing for sustainability in building practices BEFORE the Med School, T &L, and NSC were built. On the other hand, I think attention to sustainability is absolutely critical. Moreover, I have no doubt that truly becoming a "Green University" would have tremendous appeal to a large pool of prospective students.

I think that before the university was branded as a Green University, it should be in compliance with a model "Green" university.

I support it but I'm sadly cynical because it has the earmarks of an opportunistic marketing ploy by an administration desperate for ideas and good news.

I am looking at documents dated 1997 in which UNBC is referred to as having a "Green" perspective and direction. The performance evidence indicates that our ability to move in this direction has been compromised by budget realities and organizational commitment. I wonder if this has changed to the level necessary to make these initiatives successful.

Who decided this? What changes will be implemented? Should we not implement 'green' changes BEFORE we call ourselves this? (e.g. recycling programs, composting financially supported by UNBC (NOT a third party group doing this for UNBC), motion sensor lights in classrooms so that lights are not left on all day).

Disbelief and disappointment as to the top down nature of this process! I am also disappointed that the moniker does not reflect current reality by any means! A final note is that I agree that this self-imposed designation could be of significance in recruiting students (although not as important as perhaps thought by upper administration), but that if lip service is paid to this issue, then it could very easily blow up in UNBC's face. That is, the impact of failure would be much more negative than the positive impacts from successful would be positive.

I am worried about the "branding" rush without any substantial changes or programs to increase the university's sustainability. I think UNBC has to prove its green label by stepping up and really leading the nation in terms of its initiative. This will involve money and personnel commitment.

First reaction is unfortunately a cynical one, that this is a PR stunt, and that UNBC is jumping on the “green” bandwagon for the sake of the name only, and the attention that it brings. Normally one would expect any sort of title to be claimed or awarded AFTER significant accomplishments in the field had been achieved. (i.e. if UNBC was already obtaining a high percentage of it’s energy from renewable, even “on-site” power generation, using entirely recycled material on all conceivable fronts, zero waste production, etc.) Granted, I’m new to the university, but I’ve had to search for evidence of the advertised “greening”. The list of accomplishments on the website, while commendable, doesn’t particularly stand out from what other organizations and even some industry seems to have also done.

I think it is great idea! I am a little skeptical of how we’ll become green after the fact. My impression is that being a truly green university requires that it be planned into the construction and design of the buildings. Where do we get the money to make our physical plant systems more efficient and environmentally friendly with limited budgets as it now? What are we doing already besides having recycle bins?

**Responses to Question 2. One of the goals is to be sustainable. How do you think UNBC should define sustainability for itself?**

**Focus Groups**

Focus on Northern Sustainability

northern perspective important, lots of sustainable issues, agriculture, permaculture  
emphasis first Nations background in this effort

make most of academic ideas on sustainability, buildings sustainable

need to identify specific challenges we face, i.e. we have a poorer transportation system  
in community

all groups need to be contributing to sustainability

more sustainable buildings less waste

must be integrative in how this is pursued

look at long term impacts on the university and its policies in environment

recognize nature being so close, we are encroaching on their territory how do we affect  
wildlife on campus

**Surveys**

UNBC should strive to be fiscally responsible in perpetuity, while trying to serve the growing needs for knowledge development and proliferation. Linked to financial sustainability is being sustainable in terms of recruiting and retaining students – we need to improve our relevance to the real world. This is especially true in light of the increasing opportunities for our current and prospective students outside of University (trades, apprenticeships, certifications, good paying industry jobs not requiring a degree). Beyond financial sustainability, we may want to look at being self-sufficient in terms of our consumption of resources like electricity and water for knowledge development and proliferation. Linked to financial sustainability is being sustainable in terms of recruiting and retaining students – we need to improve our relevance to the real world. This is especially true in light of the increasing opportunities for our current and prospective students outside of University (trades, apprenticeships, certifications, good

paying industry jobs not requiring a degree). Beyond financial sustainability, we may want to look at being self-sufficient in terms of our consumption of resources like electricity and water.

Lowest possible ecological footprint in terms of resource consumption: energy, materials, transportation, food, etc. Emphasis on bioregional sourcing, recycling, carbon offsets, energy efficiency, minimizing unnecessary travel.

Ideally, it would be nice if UNBC, as an institution, could be “carbon-neutral”, or work towards a minimal ecological footprint for the infrastructure – an empirical goal would be a tangible thing towards which we could all work.

Sustainability should be defined in the same context as it’s used in natural resource studies, i.e. meeting our present [energy ,material, etc.] needs without compromising the needs of future generations [or cohorts of students, as the case may be].

We should begin by assessing the way other institutions and persons have defined it, and then we should acknowledge these sources in our creation of our own definition. Given that there will be no finish line, it should reflect the dynamic and continuous aspects of being sustainable, it is a process not a goal. It should encompass all aspects of the Units operations and indicate a continual striving for measurable improvements.

I think it’s very important to make teaching/learning and research the foundation of the sustainability definition. That’s what we’re about – teaching students and conducting research. In the meantime, it’s important that the University not be hypocritical. We would also need to include campus operations and the overall corporate lifestyle/culture (nothing Orwellian, but something that would encourage and promote a green culture for students, faculty, and staff).

We need to reduce campus carbon emissions—and work to reduce other related carbon emissions—by undertaking relevant infrastructure projects, etc. We need to consider the effectiveness of our recycling programs and other waste control and reduction strategies.

Small, continual changes, rather than big “shocks to the system.

Living green is an important venture in my life so working for a university that is/will be focused on this concept as well would be very exciting. I would support this idea completely and believe it would attract students to our campus that are looking for a school that is willing to make the environment a priority

UNBC should define sustainability as supplying with necessities of teaching and learning about environmental issues and pursuing valid discussions and research on what the average person can do to help. We should lead by example in the community by implementing a few initiatives on going green and making "noise" about it. Advertise.

To me sustainability is about lasting power. However, universities, like economies, are encouraged to measure their success in terms of new buildings and exponential growth over the short term. A sustainable university should be one in which growth is not accepted as a universal good or the only measure of success, but where growth is managed to make sure that glittering new buildings are not damaging our long-term viability as a species. UNBC should consider its footprint carefully, and new initiatives should be subjected to sustainability analysis just as they are subjected to budgetary analysis

How about defining sustainability in terms of starting to develop and use alternate sources of energy for heat and lighting. Check out the alternate energy source that the Gitksan have patented that they were gifted by a US physicist that didn't want his invention used by NASA. It is a way of making energy from breaking down water into hydrogen and oxygen that is different from hydrolysis. Because it is so innovative it has not been developed so far - but why not get UNBC profs in physics and chemistry and environmental planning and business interested in making it a reality? To check this out contact Don Ryan.

I think the definition of sustainability for UNBC is to have the ability to preserve its surrounding environment as in the beginning of its establishment. Not many universities around the world are enriched with natural environment as seen at UNBC and UNBC should make efforts to strengthen the longevity of its environment.

I think it's a good one, especially if there are ways to incorporate sustainability into our every day lives, at home, at school, or at work. In terms of research, perhaps there could be an initiative to prioritize a certain component of research activities for funding if they're considered "sustainable" or "green".

Always difficult to get started – For me the issue is balance – If we do not balance the competing interest on any issue in my experience the initiative fails.

I really think that we also need to redefine what "Green" means to us.. GS

Definitions of sustainability abound. However, most definitions of "sustainability" seem to share at least two things in common: (1) they are all anthropocentric (unless the human component is removed from the picture); and, (2) they all speak of an ideal process or state. Based on these two observations and on the seminal work of Ackoff and Emery (1972), the only operational definition of sustainability to this day is:  
A Socio-Ecological Process Characterized by Ideal-Seeking Behaviour

Ideal-Seeking Behaviour:

Behaviour characterized by the DESIRE and the ABILITY (i.e., opportunity & resources),

to progress toward a common ideal by choosing a new goal when one is achieved (or the effort to achieve it has failed)

to sacrifice a goal for the sake of an ideal.

IDEAL: An unattainable state or process (in a given point in time/space) but endlessly approachable. Only ideals serve as appropriate guidelines within a context of uncertainty and complexity because only ideals are time-free, hence, intrinsically adaptive in themselves (Emery, 1993). The four universal ideals are: (1) Homonomy; (2) Nurturance; (3) Humanity; and, (4) Beauty (Ibid).

Sources: Ackoff & Emery, F., 1972; Emery, M. 1997

I think we have to pick something and start with that. I readily admit I am not recycling conscious. I had a big wake up call this spring when my son started to save bottles and cans for a fund raiser. I laughed a bit, we don't drink pop or beer in our house so how many could we possibly accumulate. Well, the answer was an entire garbage container in 2 weeks. I think most people would be shocked if they quantified it. For example, I have 3 teenage boys. We go through 4 litres of milk every 2 days – that is 183 plastic containers I am sending to landfill each year. That's a lot of plastic. Shameful, really.

So, to encapsulate, I think we should continue to expand our campus in the terms of energy efficiency, doing no harm and we should try and use our "power" to bring education and process of recycling to PG.

Well, true sustainability would include no reliance on fossil fuels, which are not always going to be here. I doubt there is a way for UNBC to be completely sustainable. We can decrease our negative impact on our environment, though, so that the projects we begin in our movement towards a Green University will continue to reduce waste (and carbon emissions), recycle products, re-use goods, and ensure that the University contributes to a healthier planet for the next generation; rather than a sickly one.

I suppose there has to be some mention of finances in the sustainability discussion, so the Greening of the University must be financially sustainable.

Sustainable means 'able to be maintained at a certain rate or level', which is time dependent. Is UNBC going to exist indefinitely? The definition of sustainable will have to change given rates of resource extraction, resource availability, international commerce and trade etc. For example, what might be deemed sustainable paper use could change with increasing pressure on the forestry industry.

Why is 'sustainability' a UNBC goal? 'Sustainable' seems to be used carelessly as an environmental buzz word.

get PGPIRG, NUGSS, GSS and administration involved to brainstorm their ideas – I think that these types of groups represent larger bodies on campus – I think it is key to have a brainstorming session

Oh lord, the whole concept of sustainability is basically impossible to define generally, as it has so many different meanings depending on the context; temporal and spatial differences are also evident. But in this context, sustainability might best relate to "efficiency". For example, efficiency in terms of power/energy consumption, efficiency at recycling, efficiency at transportation to UNBC.

I don't think we will ever be able to obtain true sustainability. However, even moderate changes are welcome. Too many people drive to campus for starters. The University should really try to offer incentives for people to use alternative transportation.

I borrow the following definition of sustainability that has had extensive use:  
"Sustainable development is...development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

(World Commission on Environment and Development, Our Common Future, 1987)

This definition can be tailored to us as an education institution, for example:

Sustainable development is...modeled after nature as a diversified, responsive, and evolving society that is self-engendered to yield prosperity, resources, and capital for future generations of the UNBC community to continue on its moral mission of educational philosophy.

On a broader note, there is a long list of socio-economical factors that must be addressed for sustainable practices to have an effect. While the issue of climate change has drummed support for the notion of sustainability, it is vital to recognize that human induced climate change is only one part of the picture of sustainability. Virtually all measures of bio- and cultural diversity are in steep decline. As Canada's Green

University we must recognize and educate on the gravity of the problem. Our natural heritage is being lost, under represented, and undervalued for its life-sustaining contributions and so the effect of losing services rendered toward our social well-being is being felt. Our mission is moral as we boldly meet these challenges that threaten our climate, our culture, our biological heritage, and future generations to come. The diversity of life on Earth, including the variety of genes, species and ecosystems, is an irreplaceable natural heritage that is crucial to the sustainable development of community well-being. Hence, being Green or sustainable is more about tackling the overall issue of the biodiversity crisis, than it is about reducing Greenhouse gases or recycling waste. This is a much bigger problem than is generally realized and our moral imperative to address this problem is stated clearly in UNBC's motto, 'En Cha Hunà - "respecting all forms of life".

As Canada's Green University we represent an elite group of educational institutions. To achieve sustainability, we can not only become Green ourselves, but we must export this initiative, because, we are not isolated.

I think we have a real opportunity to showcase the 'small is beautiful/sustainable' angle. The region we serve may well have to start thinking about a future that involves maintaining smaller scale economic activities. E.g., perhaps this will be a region of 200,000 people in 2050 (vs. 310,000 today), so let's try to envision how best to make this happen. The university should lead by example here and accept that we cannot expect to 'grow' the university in terms of new programs and larger student and faculty numbers. Better that we consolidate what we have, and selectively target new program and degree opportunities that are resourced primarily through existing resources.

That the efforts we make to promote education and lifelong learning include a component that recognizes the need to protect and enhance resources for future generations, not just for present and short term need; that we build on our natural "natural laboratories" of the local biodiversity / bio regions to model and further alternatives to "business as usual"; I would like to see UNBC reclaim the university's traditional role as training leaders for society, and less of the business of degree granting

Hire more trades/service people to do more work in-house = pride, savings on environment.

We are in a winter city; make an example of us for the rest of the community (solar power, maybe a wind mill "on the hill" could blow away the pollution in the city bowl!

I don't think there is a hard and fast definition of sustainability that an institution can adhere to. It has to do with assessing the ecological footprint of a place and community and responding issue by issue to the ways it can be improved. Sustainability has to do with a system but the university 'ecosystem' is constantly evolving. You begin with lists: greenhouse gases, energy consumption, plastics, waste, practices of consumption, the shipping of products onto campus, recycling, packaging,

Absence of waste – “waste” is a verb. Energy efficiency and resource recovery. A closed loop – this is an ideal that can't be reached and goes beyond sustainable because ecosystems can be net providers of services. It is, however, and appropriate target. Our challenge is not to exceed ecosystem capacity to provide services. Ecosystem means all sorts of things – including social systems and economies. In the end: waste not, want not.

We should seek to undertake as broad a range of sustainable activities/ways of working and living as possible. Sustainability should be an issue/question posed in all our work and new initiatives.

I think sustainability is something that has to be worked toward, in small steps. Eliminating as much paper as possible, and ensuring there are recycling bins accessible (for instance, there is no longer a recycling station on the second floor of the Administration Building, so recyclables need to be carried down to the first floor which is inconvenient when everyone is busy). It would also be useful to ensure all lights are turned off when at all possible, such as when classrooms and meeting rooms are not in use. How about “lights off when not in use” stickers by all the light switches to remind us to turn them off (if that doesn't happen automatically, which it may).

GHG neutral in our operations. Maximize opportunities to reduce waste, recycle everything in a very public way, optimize energy efficiency in all operations. This should affect everything from food services (no more disposable containers, beverages) to the physical plant, etc.

I think that sustainability for the university would mean to target a minimal net negative impact on the environment with respect to its footprint, energy consumption, air quality impacts etc.

Depends on what you're talking about. For example, if you're concerned with sustainability in 'energy use and consumption', then this goal may not be very realistic. However, creating gardens and landscaping projects that are more sustainable is a goal that we can work towards. So I'm not sure how you could define 'sustainability'

Start thinking about car pooling, turning off the lights, turning off computers, recycling, garbage removal, stop smoking on site - if restaurants can do it why can't a large educational institution. These are very smart people - why are they so stupid when it comes to smoking.

As you know, there a million definitions and interpretations of "sustainability" with just as many folks stating the word is an oxymoron. I suggest a phrase or term that is more tangible. For example, why not set measurable targets for reducing our ecological footprint? Some examples include garbage, GHGs, and energy consumption. Measurable indicators and target areas can be reported on and assessed by external parties (e.g., Green Board of Directors). When we achieve measurable milestones we can tell the world!

At first glance, the idea of “sustainability” in teaching and learning seems a bit questionably rhetorical to me. The best way to sustain teaching and learning, one might say, is simply to work toward increasing student enrollment, since without students no university can be self-sustaining. But such a goal would not necessarily involve a “greening process” (although admittedly we might attract some students by actually becoming a “Green University”). I do think that the university would benefit from a greening of the curriculum across disciplines. In my college (CASHS), there are already profs with environmental studies expertise working in English, History, Psychology, etc., so the greening of the curriculum is arguably already under way. The idea of “living green” is a good one.

Sustainability, in a university environment, should be held to the strictest standards of all, as we are hoping (and claiming) to be an example to all. As close to 100% self-sufficient as possible should be the goal. When close to nothing is “coming in” (i.e. power, materials), “generated” (pollution – from processes such as power generation, and also due to the people driving all their cars up here, etc.), and “going out” (garbage, waste, sewage, etc), we’ll know we’ve succeeded.

**Responses to Question 3. One idea being discussed is seeing sustainability in terms of teaching/learning, research and living green. What are your thoughts on this organizing idea?**

**Focus Groups**

educating people , a lot of waste, but same people keep doing the same thing

lot of students do recycling

support to enable people to reduce waste

need to work on community as well compared with other cities

education and bring it home

how incorporate greening into our lives, i.e. recycling, composting to get people thinking about greening

how can we teach green without living green

can teach all you want but if not taking it seriously, its not going to work - link teaching to living

live our ideas - too many mixed messages

make green part of our culture,

teach green

living green connects nicely with our teaching

but look at trash in cafeteria after teaching our course, this is a major disconnect

**Surveys**

“Negative”

Too vague.

I personally think that this will all fall out of the over-riding objectives in point #2. Once the infrastructure and regulations are in place to govern point #2, the impact on the human activities will be automatic. Again, my personal belief here, but this (my point #2) is the method with the greatest impact and the greatest chance of success. Approaching it from a people-first perspective (teaching/learning, research, living) relies too much on the efforts of individuals. After all, what percentage of people are responding to this survey, or participated in the focus groups? Just a comment on the reality of the lives we all live, and the priorities we all have. Coercion then becomes the necessary but unpleasant result (unpleasant for both sides), and tends to stall the entire process. All that can be done on the “people” front is by way of education, to simply inform the people of what is being done, and why and how.

I suppose I am unsure what this means. I am in the green research and teaching area, but I wouldn't want to see my colleagues at a disadvantage if they worked in less green subject areas (e.g., commerce/business). I have no problem "selling" the excellent environment type research and teaching we do at UNBC

To the extent that this adds to the longstanding differential advantage of the NRES group on campus in terms of resources, priorities and attention I am opposed to it. The environment is an important issue, but not the only one that we are here to address.

I would like to know the definition of the terms and their implications before I committed one way or another.

I feel somewhat cynical about this idea, only because the term "green" is so elastic that it can become meaningless. If being "green" means subjecting what we do in every area to environmental analysis, I'm for it.

This idea is so narrow and so limiting that I wonder if it is implemented what impact it will have on research and development. Is it possible to create the initiative as a focus stream rather than the only focus.

If we are going to take a leadership role as green and differentiate ourselves as green I don't see how we can waste our position as a “best” research school. We shouldn't limit ourselves to our own students though, we could work with elementary schools (some kind of partnership), they are all teaching “green” to kids so it would kind of be like working with the converted

Don't we have enough AVIs?! I think that some degrees and programs already use the social construction of sustainability in a meaningful way, but I also think not all

programs can or should be forced to have the concept of sustainability as a central organizing concept for their delivery of courses or research. Besides, as previously noted, the socially constructed concept of sustainability means quite different things within different disciplines (e.g., economics versus forestry). Would it be worthwhile to have one or more interdisciplinary 'sustainability' courses that each degree program would have to include in their curricula? This might be a tough sell in some disciplines/programs, and there is still the problem of how to define sustainability in an interdisciplinary context.

I must admit, I'm not sure what it means to teach/learn and research green. It's clear that we could do research ABOUT green topics, but how we do our research in a "green way" is less clear to me. Similarly, it's clear how to teach ABOUT green issues (and I do this in whatever ways seem possible within the course material), but I'm less clear about how to teach in a "green way". I suppose one thing could be using the web and computer more for handing in assignments and undertaking readings, etc. rather than relying on paper. But I know it's much more than that...I'd be interested in hearing ideas from other faculty, staff and students about their ideas....multiple heads better than one and don't really have the time/luxury of reinventing the wheel..

#### "Positive"

This organizing idea is definitely important to the ideal growing at UNBC. To buy into the project you have to be taught why and how to living green. We have been looking at the art of pedagogy for some time now. We have much progress still to make with regard to new electronic teaching methods and knowledge dissemination. Various projects are underway to address this issue, but there appears to be a lot of strategic talk and planning and very little doing. Technology isn't a means to a competitive advantage at this point – if we don't get serious about getting up to speed in a hurry we will soon find ourselves at a competitive disadvantage with those educational institutions that are more in tune with what students are demanding. We need someone to drive an electronic knowledge creation and delivery strategy. Focus groups, committees, and strategic partnerships definitely do have their place, but let's also DO something.

I think all of the above will be crucial to making our university green, in addition to the physical aspects of making the university green.

I think teaching/learning/research should support UNBC and its idea of going green. Putting more emphasis and developing programs devoted to raising the sustainability of natural environment would be a good idea.

I think this fits perfectly with our institution, since we are a University, the best way we can enact change is through education. Leading by the example of living green would be an amazing way to inspire others; however it is neither easy nor cheap, and the reality is that many people would have to give up some level of ease in their lives.

It is fine to start – but like all things, it must be re-evaluated as the Green University plan is set into motion. I suggested a mission statement to the committee, but now I think that we need a Green Constitutions. Here are a few ideas to start:

- § UNBC shall demonstrate institutional practices that promote sustainability, by being transparent in our waste and efficiency of renewable and non-renewable resources. We will take stock and inventory of our 'Green Capitol' as a better indicator of our sustainable practices through an accounting system that measures both natural, social, and monetary capitol for the full range of sustainable practices to take effect.
- § Removing the tension that exists between economic and environmental stability; rather a vibrant and prosperous economy is sustained by a healthy environment.
- § Promoting health, productivity and safety of the University community through bioneering design and long-term planning in the architectural design of our campus. We will build with products that last for seven generations.
- § Enacting measures to increase efficiency and use of renewable resources.
- § Recognizing that clean air, food, and water and access to an intact natural heritage is essential for sustainability to have any meaning or purpose for generations to come.
- § Eliminating all non-recyclable waste and reducing essential non-recyclable hazardous materials, both in our operations and our suppliers. For the waste that cannot be eliminated, there will be a transparent and efficient process to recycle these products.
- § Enacting measures to conserve biodiversity on campus and in northern environments. We shall increase the native diversity on campus through sustainable landscape initiatives.
- § Encouraging environmental enquiry and institutional learning on the notion of sustainable communities.

- § Exporting our sustainable Green practices to the larger community.
- § Educating and become a leader on the issue of sustainability as we develop systematic planning tools for socially and ecologically responsible decision making in respect of the cultural heritage of northern environments.
- § Responding to the challenges ahead through accountable Democratic initiatives that involves and listens to the voice of the community.

All good ideas. We need more initiatives like the landscape projects that engage faculty, students and community groups. We need to rethink how we measure the ‘productivity’ and ‘impact’ of faculty so that there are rewards for this type of innovation rather than barriers and penalties. We need to provide students with tangible alternatives to the degree treadmill/paper chase model of higher education.

We need public and sustained discourse that is respectful, mutual and leads to improvement and change that is apparent and rewarding. Again, I see this as a crucial and leading role for UNBC. Not just regionally or provincially but nationally. I would also like to see the university take advantage of local ideas and solutions to support a greener organization. For example, in some of my classes, students have developed intriguing, possible and achievable ideas – to see this explored and implemented would not only heighten our capacity for sustainability it would surely make us a much more attractive proposition for potential students, something that can not be overlooked when almost every other college is becoming a university or university affiliated institution.

They do all connect in various ways. How do the programs on campus reflect the changing lifestyles and ethical decisions of students? How does the university take a leadership role in refocusing attention on the environmental issues that pervade? How do our teaching practices adapt to the changing reality of an anti-consumer society?

Broadly, it sounds good. This is a huge question that requires specific discussion with regard to the work that each of us does.

I think the knowledge and learning aspect is good, it tells you “how” and “why” and spreads the word through teaching and makes the university campus an experiment in itself – the living green, making it happen, implementation aspect is a little more challenging. We need incentives to implement green living.

It is an excellent idea - we all need to live what we learn and teach. As a staff member I'm not sure how involved I could be with teaching and research, however everyone can live green

**Responses to Question 4. What are some of the things you'd like to see the university do to make UNBC a greener operation? Both short term and long? Cheap and expensive?**

**Focus Groups**

be clear that what we do do is really better for the environment - stay away from the quick fix that is more destructive

Reduce, Reuse, Recycle

janitors replace garbage bag even when not full, waste of money

don't use trash can - compile with other staff for joint bin

recycle - there's lots of waste created

improve recycling - make it clearer

reduce trash bins to reduce waste

don't have space to deal with recycling waste properly

consistency between home and work - i.e. limiting what you can throw away

recycling for things on campus - encourage home recycling

missing recycling bins in newer buildings, need to get on this

University of Victoria department has no paper cup rule

recycling less important, focus on reduce production of waste

reduce paper use through more computer use for document storage

didn't buy mechanism to make double-sided copying the default

how change peoples demand for copies of everything

need server for document scanning to reduce paper use, storage of e files

paper reduction - some servers are missing to facilitate this

put things on web rather than handouts

need to be conscious of little things like photocopiers don't do double sided students notice

give out registration and orientation material on data stick rather than paper

reduce plastic

increase opportunities to recycle - support composting better

improve composting support pirg

accommodate activities like composting

Need much better support for PIRG composting - paid employee or support from janitorial - need official support for work with cafeteria

composting needs better staffing

if alternative "surcharges" could work; helps modify behavior

### Purchasing

Should have rule saying recycled paper or post consumer

### Energy

better control system for lights, i.e. automatic turn off at 11 pm, always lots left on

reconsider use of air conditioning

double doors at all entrances to reduce heat/cooling loss

turn off computers and monitors

being carbon neutral

Could security turn out lights on rounds

look at energy usage - all stuff left running

turn off computers

energy savings very important

reduce leaving computers left running

energy demand from computer server room, better use of air circulation

scope for savings in the Greenhouse/EFL i.e. better energy generation

better facilities measurements and better info on

bigger demand for heating and cooling

### Cafeteria

Offer options - take disposable plates as convenient - provide plate drop at T & L rather than walk all the way back

deal with waste in cafeteria

need local products as much as possible

use biodegradable in cafeteria

push re-usable mugs at cafeteria

charge people to encourage conservation some sort of consequence for poor actions

focus on cafeteria too much waste, increased in last year badly

huge amount of waste but could see immediate change get rid of Styrofoam

biodegradable plastics

increase use of own cups increase reduction for bringing cups

need better food choices in cafeteria - should focus on local and organic and better choice - must let company know this

better surcharge on not bringing own mug

### Transportation

better bus service and encourage people to use transit

partner with City as much as possible to encourage transit use - i.e. free pass for a couple of weeks, bus times aren't posted make this as easy as possible

improve bus service - student pass

semester upass included with tuition

better bus service

parking too cheap, improve public transportation

bus passes with orientation

transportation is a key issue improve busing system

need better bus services, esp after regular hours

everyone should have a Upass

subsidies for buses, no incentive to take bus

raise parking fees to subsidize the buses

support better bike facilities

improved bike racks on buses

no shower to encourage people to walk or bike

add Sports Centre membership

shuttles up the hill rather than individual cars

poor walking trails, must encourage walking

encourage car pooling

increase cost of parking

parking lot only used for one purpose, add multiple use

### Landscaping

sponsors for better landscaping

reforestation of university land

### Facilities

study costs of facilities products

buildings are in bird flyway - what is our impact on birds and wildlife - how do we mitigate; if have green university it is thinking about our impact on wildlife

better integrative management

better partnerships with other organizations like City focus on air pollution

build with recycled and green materials

### **Notes From Tables**

buses every 15 minutes

Recycling spot for milk containers on campus

Newspaper recycling

Hire person to collect recycling

UNBC taxi service

Reuse posters

Less plastic in cafeteria

Underground access ways to all buildings

Paper recycling more prominent

Eliminate disposable dishes

Improve bus service

Increase funding for compost

Insulate windows with drapes at night

Less plastic in cafeteria

Recycling and compost in admin building

Recycle plastics not accepted at Regional District

Incandescent light bulbs

Turn off lights and heat in Sports Centre

Purchase fleet of hybrid vehicles for research and university travel that faculty/programs buy into

No Styrofoam in cafeteria - use dishes at all meetings

Car pooling from different areas of the City

Fix distilled water taps that drip all day.

## **Surveys**

Reduce, Reuse, Recycle

First we need to do an assessment and figure out where we fall short and prioritize from there. Some things to consider measuring might include: area of forest removed from university expansion vs area planted; amount of composted garbage vs total compostable garbage; level of recycling electronics; etc.

All support assistants should have a scanner on their desk. There is no need to copy every document and file it. It could be scanned and saved electronically. And the cost of a scanner is reasonable. I can store the contents of two 5-drawer filing cabinets on 20 CD's. That's a lot of paper, file folders, hanging files, file cabinets that don't need to be purchased. You can get a few scanners for the price of a file cabinet. I have already begun this process in my office. I have moved from two 5-drawer and one 3-drawer to two 2-drawer cabinets. That also means I don't need to buy & store all those supplies either which not only saves the environment but saves the program and university money

As I mentioned at the beginning, I don't know how this would work for teaching and learning, but I have a good idea of how it 'should' work for all the support personnel and possibly the instructors as well. We have been programmed to want to read a piece of paper and hand out course outlines, and have paper exams and fill out forms for course evaluations – these could all be done on-line. And if people really want paper copies, why is there so much printing left unclaimed at every printer  
Less photocopying and more online reading for courses as far as texts and supplemental reading  
Reduce the amount of paper that is used,

encourage students to submit assignments on used paper (write on the unused side)

Encourage (require) all papers, articles printed, handouts in classes to be double-sided.  
10) Double-sided printing options should be available on the printers in the library (they are not).

Fully fund a paperless office project. Our photocopiers have scanning capabilities, but we don't have the disk space or systems in place to adequately manage such an initiative. There is a great deal of internal demand for this, but no money.

Try to use less paper

UNBC invitations, etc should be sent electronically

Copiers should have double sided default

Ask if UNBC Update could be sent electronically

Yellow course forms online

More initiatives like Webreq to reduce paper

less paper

encourage more offices to print double-sided documents through the use of printers that are capable of this feature

I think UNBC should look at the waste on campus (paper, toner, etc). There is probably tons of paper that should never have been printed. We have millions of dollars invested in technology – why are we still printing file copies and sending hard copy memos internally? UNBC can't possibly produce its own supplies but we can definitely cut down immensely on the use of them

Find ways to reduce paper waste.

reduce email printouts,

change all printers copiers to double-sided.

Encourage profs to allow double-sided reports, or reports printed on used paper (one side has been previously used, but the other is pristine)

Fund the ITS project for digital imaging to drastically reduce paper, ink and energy consumption related to printed documents

Recycling all recyclables i.e.: cardboard, bottles, etc.

Increase recycling to include newspapers, etc.

More recycling bins

Newspaper recycling

More support for PIRG

Better recycling

Residence recycling

recycle paper & cardboard rigourously

recycle, donate old computers

More recycling, including computers and other equipment

Improve the recycling bins – they are poorly labeled.

Let people know what happens to all the recycling. I hear myths all the time that stuff isn't being recycled – just being dumped into a landfill somewhere. Let's make sure this isn't a myth. Make recycling local.

reverse the garbage-recycling paradigm so that there is one communal garbage in a central area and recycling bins in every office

Join plastics recycling initiative in Williams Lake or Quesnel

Improve waste recycling esp Styrofoam packaging

ramp up the recycling program

Improve info regarding what can and cannot be recycled

bring in better recycling facilities (either on campus or through the city - at the moment, you cannot take plastic containers or glass jars to the local recycling stations) - maybe work with PGPIRG on this one?

Put better recycling methods in practice, e.g.: newsprint, envelopes, all paper, not just bond.

Put out more recycling containers in student areas. There are no recycling bins in the Teaching Lab at all, have a small recycle box in each office, rather than 1 per program.

A lot of paper is thrown away in office garbage cans simply because people do not wish to travel down a couple of hallways each time they want to toss out paper

having a recycling center on campus was a really good one. This would make it so much easier for the students and would encourage a lot of faculty/staff to undertake this. Not to mention our NSC users and spectators

FAR better recycling programs (e.g. glass, cardboard, bottles, soup tins, etc...), incentives to recycle (e.g. contests or something), public education about recycling (e.g. presentations),

One area in the community where an environmental initiative is sorely lacking is recycling. In larger cities like Edmonton, recyclables are picked up, and as a result, almost no one throws them out with the trash. I don't know if there's any way UNBC could get involved in or do anything about that. Even just give out information?

Create a fully functional and measurable recycling program for residence.

Recycling: a) Can we get glass recycling. b) Can we get more recycling boxes around campus. c) Can we get better guidance as to what can go into the paper recycling boxes. I am sure people put non-recyclable material in the boxes.

battery recycling drop-off on campus. PGIRG has done this in the past but appear to have stopped. It is something this city, and the University in particular needs

re-label all recycling bins that are in the hallways - no one knows what the different holes are for & ask the cleaning staff to please put the label side facing out when putting them back after emptying them

I create an area where students can recycle paper & flattened cardboard that is obvious & accessible

ask offices & departments what they do to recycle & share that info with others  
can this kind of stuff be done?:

more composting opportunities – perhaps one in every staff lunch room.

Composting. Sell any compost not needed to sustain UNBC landscaping

Compost more.

Emphasize composting

Compost plants from events

More composting

I would love to see composting buckets in the offices, most of our office garbage is lunch related or paper, we have recycling boxes why not composting. Also, in the washrooms, can we be recycling paper towel.

Perhaps the PIRG composting effort can be better funded? They were having a bake sale last week to raise funds for a new composter. On the grand scale, this can't be an expensive thing for UNBC to fund and it would support a very grass-roots, local student green initiative.

composting that is not ONLY done by a third party on campus, waste-reduction in the cafeteria

Focus on reducing waste by sourcing materials that minimize waste. Waste recycling, particularly organic waste should be composted. Other wastes should be recycling, but emphasis should be on reducing waste at the front end.

Reduce plastic/paper wastes

Reduce incoming waste from companies. Make a binding resolution that all incoming products must meet our green requirements, such as reduced package size, and reduced shipping distance

Weigh and account for our trash by volume. Our genetics facility goes through a tremendous amount of plastic waste. How can this be reduced? How can it be recycled?

I think we should make our waste disposal volumes and contents transparent to the public – publish this on the web. Let's get a consultant to help with this

Get rid of the paper towels in the bathroom and don't switch to the hand blow driers which seem worse for energy consumption. I'm sure there is some research on the most sustainable way for people to dry their hands.

Train cleaning staff on the means and ways to reduce trash disposal. They should understand clearly how the labs work and even have tours with the waste disposal manager so that they are comfortable and knowledgeable in dealing with waste. Increase wages according to their level of training and marked improvement on measured waste reduction Perhaps we start with packaging (plastics, in particular) of food and other goods sold and distributed on campus.

Maximize opportunities to reduce waste, recycle everything in a very public way, optimize energy efficiency in all operations. This should affect everything from food services (no more disposable containers, beverages) to the physical plant, etc.

Less disposable materials in labs

Expand student reciprocity shelf for exchange

Furniture -- why do we have such expensive, new furniture? It is very hard to get used furniture into one's office.

### Purchasing

Outlaw non-recyclable materials from being sold on campus

Bookstore should carry only recycled paper products, refillable pens; free cloth bags

Use recycled paper in copiers

recycled paper only

Do we use 100% recycled paper for all copiers and printers? Make every piece of paper on campus a 'green' piece of paper – requiring a certain percentage of recycled content for all paper on campus

is ecologically more friendly -- chalk or whiteboard markers

Bookstore should carry only recycled paper products, refillable pens; free cloth bags

## Energy

### “Conservation”

Why do we insist on having uniform indoor temperatures all year round? Most of us have sweaters at home that are usually too warm to wear indoors in winter! Let's make it an institutional policy to set thermostats at 22 oC for the summer, 18oC for the winter, and maybe 20oC for the shoulder seasons (however defined).

Ensure personal desktop computer systems and monitors have their energy savings features enabled. Turn off lights and other electronics, etc, before going home. Is there any way to measure electricity usage per office/area and publicly report that?

Can we provide monetary incentives for implementing effective energy / cost savings programs?

reduce energy usage in buildings

turn more lights off at night!

Energy meters on every building as a minimum. We need base-lines for all buildings from which to substantiate and monitor the efficacy of energy-efficiency improvements in the future.

Efficiencies in heating/cooling to reduce energy use (and probably save \$\$ too).

Add a second layer of plexiglass or glass to windows in high locations to reduce heat loss.

Perform a heat loss calculation on the university to identify where the areas of greatest heat loss are occurring. Purchase a FLIR camera for facilities so that all building exteriors and interiors can be examined in infrared to identify high heat loss areas.

Turn down heat on weekends, turn off lights

Path from university to parking lot has lights on 24 hours, add light sensor

Turn off idling computers or put on a timer

find methods to make our physical building more environmentally friendly. I would love to see the fluorescent lighting be replaced by something that is still efficient but a more natural light with less glare.

Turn off lights

Demonstration rooms in residence should be equipped with water and energy use metering so that students can begin to link various activities (e.g. showers) with consumption. Eventually, students could get energy rebates if conservative use results in lower usage.

investigate the issues with the campus heating/cooling system (most office space is either

extremely hot or extremely cold, it is difficult to achieve a comfortable temperature; with multiple offices on a single thermostat, some will be hot and others will be cold - this cannot lead to efficient heating/cooling)

Too many lights are left on – very wasteful. Install sensors/switches that turn lights off

The lights in many faculty offices are on overnight and weekends. I have personally contacted facilities, operations, and maintenance about this, and have neither received a reply, nor witnessed a change.

Every light switch on campus should have a small sign beneath it informing the user to ‘turn me off’ when finished

A commitment should be made by staff to turn off computers when they are not in use- this would be an easy change

motion sensor light activation in the classrooms & bathrooms to prevent lights being left on all day, NOT leaving computers on all day,

Turn off lights at night.

Turn off computers at night.

Send out reminders or have building energy managers that go through each building at night to remind everyone to turn off their electrical appliances and lights each night.

I've asked about fume hoods, which consume a massive amount of energy to run. The fume hoods are running 24/7, but are used intermittently. I've been told that the problem with switching them off when not in use is that volatile chemicals are stored in the cabinet underneath and because they are dynamically linked to the campus air flow. This sounds like a design flaw – we are using an incredible amount of energy to draw air through a huge system for a few bottles in a cabinet. I've researched this a bit and other universities have been investigating more efficient fume hood designs. I believe we could either seal the cabinet or think of a better design – I'm not an engineer, but I'm certain that even I could fix this problem. A quick fix, however, that is being adopted elsewhere is promotion among students to shut the hash when they are finished. Harvard University even held a 'Shut the Hash' contest with a lab monitoring system in place. They calculated a \$50000 savings in energy from this approach alone.

Fund student green initiatives – LOTS. This also includes starting up a graduate student research program that is aimed at improving our energy efficiency. Listen, respond, listen, respond.... i.e. evolve.

audit other energy using system: lights on timers/motion sensors, equipment fully shut off, alternative lighting (the atrium lights on all night!)

Get rid of that damn big screen TV in the cafeteria that is always on and nobody's watching. Big screen TVs waste an exponential amount of energy compared to their smaller counterparts.

Turn out the power on campus for 30 minutes so that people can reflect on what they are doing for a green environment. Recently France turned off the lights on the Eiffel tower toward this end – we should follow suit.

Green energy and buildings (mid term); zero emissions (long term); Embark on an energy efficiency metric (joules per person; joules per hour etc). Include energy and resource recovery efficiency into curricula. In short: Energy Efficiency and Resource Recovery. Remember "waste" is a verb.

Energy-efficient heating/lighting, etc

GHG neutral in our operations.

I know that in the offices and labs (at least in the new lab building and the TLC), there seems to be no way of turning off the heat/air conditioning. In the summer especially, when we're not going to be around for a while there seems to be no way of turning off

the air conditioning. Maybe that is the best use for the building as a whole (to have them all on?), I don't know, but if we could somehow be informed about the best place to set the dial (or a way of turning it off), that would be a small change

There are exterior lights that are on 24 hours a day.

Some of the ring road lights have no caps on them so we send too much light upwards where it is only pollution.

My office in the library had 2 light switches so I could choose to only use one light. My new office has one switch so I can't minimize my lighting. I will probably bring in my own lights to deal with this.

Are computers turned off when the labs are closed? Is it actually energy efficient to do so or does startup take more energy

Turn off lights

Program thermostats for heat savings at night

Relocate EMS to ground (save elevator trips)

“Alternative Energy”

On-site power generation to remove the reliance on grid power. I'm assuming that's the big one, although I don't claim to know where the greatest environmental footprint factor lies. This can involve power from biomass, or geothermal for any new building construction.

use alternative energy – renewable, non-polluting – if there is such a thing

Develop alternative modes of heating and electricity: geo-thermal energy, a windmill? hydro/heat – we should be looking into solar power, even if only for half the year. The financial savings would be phenomenal once a system was in place.

Using geothermal heat pumps for heating a cooling.

Utilizing micro hydro for the water that flows by the University, there is a large amount of potential energy that could be captured.

Put up some solar panels, even if there are only a few at least it can be claimed that we have some. Do the same with same with wind capture.

I would like to see the university find long term sustainable utility sources, perhaps geothermal for heat. I realize that is an expensive venture but we know UNBC is here for the long term so why not plan for that.

The use of geo-thermal power and "green" industrial chemical supplies as a start.

Wind power generation on UNBC grounds. b. Solar power generation on campus

Think about better modes of heating and lighting. (By the way I know someone in Vancouver who has invented a much better basalt or florescent light bulb that uses a lot these energy but he doesn't have the connections to get it created. Any suggestions?)

Develop secondary power using wind or solar

Reduce energy use (fossil fuel). Promote use of active and passive heating, Install heat pumps though this would be expensive now (not sure why one didn't think about this with the new buildings on campus).

Solar panel/wind energy. Wind energy has its problems with birds flying into the turbines, so this needs to be accounted for.

reconsider heating system in terms of efficiency and energy source

solar panels at strategic points for specific uses in designated buildings

How about alternative power sources? That would be a big investment, but would likely save us money in the long run.

alternative power sourcing. Look into getting small windtowers and solar panels mounted on the roof of the various buildings. As I outlined in the pamphlet I gave you, there are several companies who specialize in diversified green energy supplementing to take places like UNBC off the grid. If you need the contact information for the company again, I will send it over. If we had small 150 KW wind towers on the top of the library building, it would give not only power, but a visible evidence of the commitment for going green. I work pretty closely with several wind companies, I am sure I could potentially get us some backing (I had one company OFFER to put a 2MW wind turbine up on campus so I could study how birds react to these things!).

things to do: use of any solar power-I realize this costs \$ to set up...

putting the lights in the Student Services & other hallways (the round globe ones on the yellow pieces of metal) on photocells? - they are on all day every day & could probably be on just when the hallway gets dim

### Cafeteria

reduce the plastic bottles and packaging in the cafeteria and store

cafeteria should be environmentally friendly

no more Styrofoam/plastic in the cafeteria

Remove Styrofoam from campus

Replace Styrofoam coffee cups with paper

Cafeteria offers only real plates, silverware, etc. add fee if people want disposable with notice explaining

Provide a larger incentive to use your own coffee mug for coffee (5 cents too little!). In conjunction with this, food services should be minimizing waste and utilizing local agricultural food products for lower GHG emissions and supporting local producers  
Have more incentives to reduce "Tim Horton's cups" and Styrofoam from the cafeteria

The Coffee centres could make their coffee grounds available to faculty, staff, students who want them for gardens (as does Starbucks) or they could be used for university gardens.

Please please please can someone tell the catering company to quit using Styrofoam and plastic dishes and cutlery?? It was a mockery to our institution when the grad student welcome party harped on UNBC's "green" status and proceeded to serve the students with disposable dishware. It would be wonderful if we could make the campus a Styrofoam-free environment

The cafeteria packaging is a shameful disgrace – the waste generated from plastics, Styrofoam, paper cups, and wasteful plastic creamers must be halted

The cafeteria could use some green initiatives as well. The use of disposables is not desirable—a means of encouraging people to use their own plates/utensils etc would be good

Less packaging in the cafeteria and other food service areas

institute a policy with the cafeteria that they STOP using Styrofoam cups and plates and plastic utensils. If they refuse. don't renew their contract

Different way of Tim Horton's Roll up the Rim? Replace with scratch and win

Real plates in cafeteria

No paper plates on campus

Work towards eliminating use of paper and Styrofoam cups on campus. Increased discounts for those that bring their own cups. Increased charges for using a cup.

don't serve very much meat on campus; meat consumption is one of the most environmentally unfriendly things one can do—and this is apart from any ethical concerns

Invest in/hire a food service company that strives to use local products (BC at least) – also promoting local business. Maybe thinking about only buying beef and beef products from organic farms, which release fewer units of Carbon and Methane per animal

Add labels to food sold on campus that indicate the amount of energy required to produce this food

Feature local foods and drinks at all schmoozing events: why do they have Coors Light available but not Pacific Western Brewery's Canterbury beer?!?.

Buying locally produced food and materials as much as possible, to reduce emissions from shipping.

Mandate organic foods into the cafeteria. Get rid of the burgers and fries! Bring in the healthy organic local meal options. Being green also means having healthy students living green. Why are we stuck in the paradigm of using one catering company – a monopoly? The Soil Association of America has recently called on the American Food

Standards Agency to change its stance in light of recent research showing that organic food is healthier. Organic foods contain higher levels of nutrients and anti-oxidants. This is no longer myth, but published scientific research supports these findings.

buy locally as much as possible to prepare food in the cafeteria

### Transportation

“Promote Alternative”

Faculty get free passes to fitness center as per CUPE

promote state-of-the art distance education and conferencing to reduce physical travel: subsidize and train every faculty member to have desk-top web conferencing ability and lecture delivery options.

Ok, we still will travel, we sometimes like to travel, and the dedicate time and added perspective from going somewhere else is often good: so have the university undertake agreements with municipal and regional governments to identify where ecosystem restoration and afforestation is needed, so that we can contribute to LOCAL carbon sequestration and showcase it. Let's make all our institutional and grant-sponsored travel revenue neutral, and just add the “Carbon tax” to the administration/overhead fees charged for grant administration.

promotions for alternate transportation

Better bike facility with security camera, covered

Bikers can shower somewhere?

Secure bike facility

I would like to see UNBC deal with how people get here every day, which surely must increase our footprint immensely. UNBC needs to advocate for, and perhaps even approach funders for, increased flexible

I would like to see UNBC become truly human-power friendly, with a secure indoor bike lockup for cyclists and shower rooms for those who bike, walk, ski, or run to work

reduce travel where possible (shrink the size of individuals' carbon footprints)

Encourage bicycling to school by giving incentives (discounts on food?), or free access to lockers and showers for students/ faculty who bicycle-commute. Sponsor free breakfasts at least once a year for students and staff who use healthy transportation such as bicycling, walking, or taking the bus. Have coffee and bagels at the bottom of the hill, or a breakfast for cyclists in the summer garden.

Build covered areas for bicycle storage.

The University is car-centric, in that many facilities are not available up “on the hill”. Students who live on campus need to leave to grocery shop, do their banking, send letters, etc. It would result in far fewer emissions to have a handful of people driving to work at these services on the hill, than students bussing or driving down each time they need to utilize the post office or bank.

We must put our money where our mouth is! But any expensive solution would impact, inter alia, the number of staff and faculty. Would staff and faculty and their unions/associations support such a significant move? But if we are going to use the ‘Canada’s Green University’ moniker, UNBC should definitely become more green.

Hold competitions for reducing the burning of fossil fuels to and from the University. Have bike or walk up the hill days with prizes. Keep a log-book at security where people can sign in that they biked or walked up the hill and at the end of the year, people who biked or waked up the hill the most get recognized

Promote teleconferencing rather than travel for conferences.

Think about families and children in transportation. I believe a major focus on this has to involve the limitations of families who need to transport their children to daycare or school at odd times that conflict with bus schedules and routes. This needs lots of attention.

Promote local business to reduce transport.

Promote and guide research to be local. Make it a goal to reduce the amount of air travel for conferences by reducing conference travel funds unless alternate modes of transportation are sought.

I’ve always felt a gondola would be nice – allow people to park bikes at the base of the hill and ride up in the morning. Is this green? It’s an alternate transportation idea.

Simple, quick and easy: Free Parking at the bottom of the hill and hybrid shuttles up it; raise on campus parking at the same time so people can have a choice but pay more for the one that has hidden cost.

free shuttle up the hill, from College Heights, Hart, and Downtown, often, well-maintained

Showers available to cyclists?

Free access to sports centre to encourage healthy people who can then walk or bicycle instead of using a car?

“Bus”

Improve transportation, especially busing. Blend course schedules with transportation schedules so that we optimize use of buses.

Make it a policy that all students and faculty get UPasses (and are charged for them), and increase parking fees to encourage bus use and car-pooling. At present, I would be still be forced to drive (the bus route I was on was cancelled a few years ago), but perhaps the UPass would revive some bus routes.

transit options (increased routes on conventional buses, the introduction of mini-buses, incentives for car pooling, etc.).

The University Pass bus agreement needs to be implemented.

Work closely with the city of Prince George on increasing usage of public transport

I stopped using the bus when my route switched from being 1 bus to needing a transfer. Even when the 10 minute trip took 45 minutes by bus I was willing to do it if I didn't have to transfer. I can't afford risking missing a connection and missing class.

Better transit options, especially to areas like the Hart that aren't well served at the moment

Revisiting the ideas of each student having to buy a bus pass (and increasing service to UNBC) through their registration fees might be one answer.

“Dealing with Cars”

Less parking spaces and more public transit, serious car pooling

FREE parking for car poolers

Change the definition of a carpool to a minimum of two people, not the current three ([http://www.unbc.ca/assets/policy/facilities/parking\\_car\\_pool\\_program.pdf](http://www.unbc.ca/assets/policy/facilities/parking_car_pool_program.pdf)). I don't think anyone is taking advantage of this because it's too restrictive.

Free parking for hybrid vehicles

No idling policy for cars

don't charter large buses for events (either for use as in-town shuttles or for travel out of town)

Encourage car-pooling by giving reduced parking to carpoolers (or higher fees to single-person car users). Reduced parking rates for hybrid vehicles is also something I've seen. Canadians have the highest carbon emissions per capita in the world, and nearly all of this is from tailpipes of cars or airplanes. It would cost money, but to offset all of the travel University employees do, or all the big trucks going out on research trips, we could buy carbon credits or have tree-planting days. )

The president should drive a Prius not an enormous truck. Lead by example. It was his idea in the first place to be a "Green University". Put your money where your mouth is.

higher parking fees to reduce people driving to campus, encourage car pooling, etc...

Car-pooling.

Place an air-hose at the parking stalls with an air pressure gauge reminding people to fill up their tires as a way to reduce fuel usage.

Increase parking fees, while improving transportation options. This includes an early and a late bus. I have to be here at 7am and there is no bus, otherwise I would take it. Sometimes I ride my bike, but it's tough to go up that hill @ 6:30am every day of the week.

penalize drivers, get people out of cars

use biodiesel in university vehicles

Parking is incredibly cheap on campus. What incentive to people have not to drive when the cost is minimal? That said, I think the price hike would have to be VERY substantial to offset the inadequacies of the PG bus system.

Car pooling. How is it encouraged? Are there parking discounts for 2 or more people traveling together?

Doing more to encourage students, faculty and staff to carpool might also be worthwhile (e.g., free parking).

No idling cars on campus

#### Facilities

even generate some of our own food, electricity, heating resources? Might be difficulty for the main campus, but at least the research forests should be exclusively heating with wood, and we should have a few wind turbines and solar panels on our tallest roofs.

Replace aging toilets with low flow toilets

Get rid of light pollution by putting shades on campus lamps. Install high-efficiency lighting systems

Use a grey water recovery system to flush toilets with.

No smoking on campus to protect landscaping

Reduce light pollution – measure current output and light emissions; new capital projects include light emissions assessment, look at light alternatives, advertise these measure

Make it a policy to use porous parking surfaces. I have talked with Hans Schreier at the Institute for Resources and Environment at UBC. He has assured me that porous parking surfaces would be feasible in our climate.

TRU has many low-flow toilets and no-water urinals. I would think this should be considered here.

Look at ways to improve the use of our facilities. This campus must be one of the most expensive campuses to heat--the amount of atrium space is remarkable. I imagine that the efficiency of this costly infrastructure cannot be changed significantly at this point, but perhaps the university should adopt a policy that future expansion needs to meet a certain standard of environmental stewardship

A top-rated sustainably designed demonstration building on campus. A green plan for future development will be essential - sustainable design and features in new buildings needs to get greater billing so that they don't get cut at the last minute.

Use environmentally friendly products for cleaning.

I'd also like to see the residences be more eco-friendly. This could be as simple as introducing a recycling program for household wastes (not just pop cans and paper) on campus, but there is also tremendous potential (I think) for solar panel installation to power the building.

Improve the student's individual living environment to make it more supportive and aligned to their needs. In my view "Green" can be a measure of fit between the student's environment and the student special and social needs

Future building developments should have a stronger emphasis on green technology.

Build a building with gardens on top. Invest in solar power and look into wind power

Build up rather than out. I see that the Green pages promoting that our buildings don't go above the tree line. This is vanity. What's more important? Blocking the view of trees or cutting more trees down for urban sprawl? I think urban sprawl is clearly the bigger problem

Make the residence a green community. Appoint green monitors and leaders within residence. Train incoming students on the consequence of their actions that damage of the residence and increase costs to them and the environment. I believe that we can instill a sense of responsibility among students and the few that feel a sense of responsibility will monitor those that get out of hand. Have a strict and heavy handed policy for those that abuse their responsibilities - eviction. Harvard University, for example, has incorporated as part of its Greening initiative "The Graduate Green Living Program (GGLP) is a peer-to-peer education program that promotes sustainable living in graduate school residence halls and apartments." Make our residence a sustainable green community with cheaper smaller housing options. Students are minimalists. I

know that I would have been happy with something as big as a closet space for a cheap price as a student. I did live in a closet for a while, it was cheap, and it allowed me to pay for my tuition. Why do we make residence so expensive? We can make it cheap and green.

Build more effectively. Our lab buildings are terrible for efficiency – it's like there was very little forward thinking in the planning process. The rooms are designed all wrong for effective laboratory operations which leads to an inefficient use of space. Here's an American organization devoted to laboratory design efficiency (<http://www.labs21century.gov/>). I like some of the suggestions they list.

Adopt Bioneering principals into our future building designs (<http://www.bioneers.org/>). Provide local services on campus so that people don't have to travel. This should be studied effectively. What services do people need most and what services can we offer that would most significantly cut down on travel? I like to think that a food delivery truck to residence would be more efficient than independent travel of all students down the hill to purchase groceries. Set limits. When will the project be done? Do we keep building ad infinitum? The project must be completed because unlimited growth of the buildings and pavement around campus is unsustainable.

Build animal tunnels along roads – amphibians get squished on the roads by the campus all the time. The ponds have oil in them and are treated like icky places on the side of a road. I think the ponds should be protected and promoted as biological laboratories that provide a natural and healthy service to our community. This is a great place for the kids in the daycare to learn about ecology. I have several grants to initiate a northern amphibian monitoring outpost and intend to promote this part of biodiversity in our lands, but there are many other critters that need our attention – lets build around the notion of ecosystems in our community.

Purchasing better equipment/materials/furniture which would last longer (means less manufacturing, service, or transportation costs). Stop the throw-away mentality, including Food Services.

Water usage:

- a) The toilets on th 2nd floor of the West TAL building have automatic sensors. They regularly either don't flush at all or they flush 2 to 3 times per visit.
- b) The medical building has low flush toilets. Why can't we?

collection of rain / grey water for watering hanging plants & trees

Add drinking fountains on campus

Focus on outdoor activities and trail expansion/improvements

### Landscaping

Only perennials/low mow/low water

Use environmentally friendly products for fertilizing, weed control etc.

Continue with landscaping using indigenous plants that tolerate our climate  
community garden for res? Hmm. That sounds better than it would likely be to  
implement/maintain. Then again, don't we already have a compost garden?

McGill has communal organic garden spaces for students

Reduce the amount of grass on campus, and plant attractive low-maintenance (with a  
preference for native and near-native) trees and shrubs to make the campus attractive.

The campus has a built-in-a-clearcut appearance

Promote our natural landscape better. The greenhouse was built right on a path that  
students used to travel to go to FFTW when I was an undergrad. Now that path is rarely  
used in comparison and the forest is being fragmented. Let's re-invigorate our natural  
lands and promote the diversity within them. This is a natural laboratory a place of  
education and it is what made many of the students come here in the first place. Help  
naturalists promote this as part of our Green legacy. Get rid of lawns on campus and  
return these areas to natural habitat where native species can exist.

Reduce pavement and cement on the grounds – make the paths and trails more  
conducive to natural and sustainable landscaping

Community garden and greenhouse, methane powered;

I liked the 'free trees' you gave out this fall. A lot of individuals, including myself have  
lost trees due to the pine beetle. I know the website: [lovetrees.ca](http://lovetrees.ca) is a BC based business  
and gives out trees for school projects for free (in the fall, I think).

Could you provide people with more information about where to access trees and  
sustainable plants? At the booth you had set up, they simply gave out the trees, but you

could use the opportunity to give out information about garden sustainability, the offset of CO<sub>2</sub> by planting trees, etc. and places where people can go to get more information.

Plant more on campus

Green landscaping

let the forest invade the campus – in a planned way (short term – perhaps help it along with some shrubs etc). Enhance emphasis on reduction in use of energy, minimize release of nutrients, chemicals etc to the environment through enhanced resource recovery, reduce use of energy-expensive (or fossil-fuel expensive) products.

**Responses to Question 5. What are your ideas for involving the university community? How do we get people involved?**

**Responses to Question 6 How do we best communicate with people about sustainability? What would get peoples' attention?**

**Focus Groups**

include in employee recognition for efforts

recognize effort even if only nominated

localized role models

acknowledge individual efforts

green student of the year - rewards for people practicing green

add green award

having an info table on greening once a month with green tips

outreach at our other sites on green activities, i.e. hospital or BMO

Add Displays on Green at City Hall to educate on the Green University

add a display Table, maybe have actors on green initiatives

**Green Mascot**

Put a Sustainability Office in a highly visible location

have visible sustainability office with demos and lots of education

have a green day with different groups

2 x semester have green day

Green Day would be good

have a green day, include community

we need a day or event to explain what we're doing

encourage competitions between universities

consider competitions - between other universities, residences get people going!

green challenges

increased competition between departments

need to educate ourselves - check list of things we should be doing then we could lead by example

Better communication on greening

people don't know what to do - tell them

knowledge about what we are doing important i.e. Talliores Declaration, etc.  
lack of info on what we already do

how do we reduce - need information

where are things we use come from - what is their cost

show individuals impact - i.e. how much carbon or how much garbage saved

must have measurements on energy so can see change in use behavior results in  
start with modest goals, if things interfere with peoples lifestyles or if they haven't been  
involved before will be resistance - choose one or two issues to really push

measure where we are - let people know and measure progress

would like to know how much impact an individual has - what impact would my change  
make overall

Would like to know what we do - provide monthly breakdown?

better communication of what is being done

people are confused about what's going on - need better info on how to be green

need to get information out to everyone, i.e. what saves money what can be recycled  
measure ourselves each year to see how we are doing on this - where are we at and document

people need to know more about what could be done - saving energy or waste reduction

green website with green tips

shared course - one everyone has to take on sustainability or environment

encourage green in untypical students i.e. commerce

or workshop every semester to see latest green way but need credit for this  
did you know item in newsletter once a month or recognize a department for their efforts

green facts box in every edition of Over the Edge

webpage our green status as it changes

add info plaques on what we are doing, i.e. why T & L was designed the way it was

better info on website on what we are doing

use areas where people wait, i.e. elevator, coffee shop for educational info

set up feedback loop to measure impacts - index of efforts and get it back to community

place for each department to share efforts

publicize green audit

as students enter have them sign an environmental pledge

what do people do to be green - feature

Build this into Orientation - we're green and this is what it means

make green easy and make it visible

make green a part of our culture

more things in community showcasing greenness

have community come and learn about sustainability with costs and examples

sustainability efforts should be visible with information on them clearly visible we become a living demonstration

showcase things, i.e. how much waste is generated - highly visible displays

need to work to raise awareness in residences

advertise how much energy residences are consuming - people know how much consumption

mailouts get word out

school needs to communicate better what it is doing

we need to walk the walk

show people how much saved

put box in Agora and show how much paper thrown away

multiple exposures

display energy use how much does it cost

make it in your face, like geography display on weather

increase education signs at greenway, etc.

appearance is important get over pessimism out there

must see improvement to get people involved

meet standards association requirements

we need to meet or beat other universities use standards to demonstrate but if compare with universities choose our better comparables

encourage existing clubs that could support this

Money back in residences if reduce use - reduce fees or free beer

encourage regular input in to the process

hire faculty with environmental orientation

signs to remind community what we are doing - need to market these ideas and ways of doing things

have initiatives that include all the staff

need to be very positive and feeling that there are things we can do

do little things that make an impact

push in peoples face so that they learn

## **Surveys**

### “Caveats”

One aspect is difficult to do now...and that would have been involving students, faculty and staff from the beginning. But given that the decision has already been made and announced in the media without consultation, it will be critical to make everyone feel that their ideas matter and can be part of the plan. It's more difficult to want to get involved when it appears that someone, somewhere has already developed a plan without consultation and now simply wants people to implement it. I suppose there could be some system of rewards for good, implemented ideas in each program or area of the university. But I think the main thing is for people to feel that their participation actually matters and has the potential to have some impact on future plans and actions.

We have got to make this fun, interesting and meaningful... Our university community is fractured and disconnected; we have no real university wide culture – no student /

faculty / staff club where intellectual and social activities could contribute to building a UNBC pride and place.

There needs to be recognition that faculty (and I assume other staff) are already working to the max. Taking on more work in regards to sustainability has to be taken into account as a workload issue. The time devoted should be acknowledged and recognized. The plain truth is that there is just too much to do around here...so lack of response, for example, with the focus group idea should not be taken as lack of interest but rather that everyone is already going flat out. We need to find the ways to incorporate sustainability plans into our day-to-day work/lives such that it does not become an ordeal, but rather something that is do-able and, equally important, that seems do-able in terms of people's time issues.

important: Participation in greening the university should be optional and not cause faculty/staff undue stress. For example, mandating that faculty/staff must bus (rather than drive) a certain number of days per year would be stressful for some, cause resentment, etc. Limiting the temperatures in our offices would also be stressful for some - people have different tolerances for cold and it's important that it's a comfortable working environment for all (I have my own thermostat and am grateful for that). Perhaps any HUGE changes that would affect the day to day lives of faculty/staff need to be voted upon, and not imposed by the administration.

Difficult question with no good answer. This effort will need to be championed by the administration with some money where their mouth is.

Ensuring it is a bottom up as opposed to top down approach! But involvement will always be spotty in any initiative, and students and faculty at least are busy enough as it is!

I think faculty will be involved if they perceive that the Administration is truly committed to sustainability. Many feel that their interest was in the media hype. I think there are many faculty committed to sustainability and I commend them

Stop saying we're Green, because we're not until we have the full accounting of facts and figures to prove it. It's not an absolute – Green or Not, rather we are performing well in some areas and not so great in others. Recognizing our faults is a virtue and people will have greater respect for us in doing this.

The Green University can be something we are all proud to be a part of and can help build a sense of community again. However, there are other burning employee issues which deserve attention before we'll get too far forward with this initiative.

Further, UNBC employees are extremely busy with their regular jobs. Students and community are busy with their regular lives. People do not have time to attend multi-hour meetings where there seems to be no immediate payback. Provide some kind of incentive or heighten the profile and sense of purpose for getting involved in meetings or providing feedback.

It would be great if the collated results of this survey were sent out earlier than next year to provide more immediate recognition that people are being listened to and hopefully engage others.

#### “Seeing and Communicating”

Acknowledge as part of old “traditional knowledge Workshops on incorporating green

It's a good initiative. Keep the various sources of communications going – town hall meetings, email, web, radio, newsprint. The flywheel will turn slowly at first, but as consistent pressure is applied, people will come to see the light and pieces fitting together nicely and the majority will start to apply pressure in the same direction – the flywheel will gain momentum. Have faith and ensure that key people are driving a consistent message.

drive home the branding and inter-institutional communications. Everyone in the institution needs to know how to communicate what we are and what we stand for. Yes, not everyone will be 100% on board, but we should all be on the same page.

Signs in elevator = amount of calories expended climbing stairs versus amount of energy used by elevator

Challenge each Department to come up with three ways they can contribute

Ask people to undertake their footprint assessment so they understand where they fit

I see two communications streams depending on who we're talking to: 1) Green for the Environmental degree students. 2) and Green to promote the fuzzy good feelings around our Northern mandate, super-natural surroundings, buildings, personal atmosphere, and Prince George lifestyle.

Relate the sustainability to our audience. Various groups will relate differently. Survey students, alumni, community. If we are focused on diversity and economic sustainability of the University and the North, I'm sure we can spin a communications program to really hit home. I know if the programs, research, industry partnerships were having a real positive impact on Northern communities, the real estate market, our environment, air quality, etc (which they are), I'd be concerned and involved. I might even give money to a program that I feel particularly connected to. Good news stories are great, even if they are in the preliminary stages.

Multi-page strategic plans, long mission statements and wordy vision statements mean nothing to the average employee, student, or community member.

We need to simplify our message into a couple reproducible sentences including:

What are we? Why are we here? (sometimes we forget)

What do we stand for? (relate to people)

What do we do best? (drive it home)

Encourage people to educate themselves. Maybe offering courses or even making a mandatory ½ day course for the university community – similar to what we do with the respect in the workplace course. Educate the community on what we are doing to be green and continue to encourage people to be green, offer some kind of incentive for those that take the bus, have contests.

Provide Green leadership. Good leadership increases followers. When people gripe about going green, re-address the question to them of how they might tackle the problem. Involve the nay sayer's in the process, see what ideas they have to offer and by bringing them into the process they have a sense of responsibility to the project. Support all members on the Green committee for any initiative they may take. In survival training, which is what this essentially amounts to, it's more important to keep active and make mistakes than it is to stop and dwell on the mistakes that are made. If we make many mistakes but keep active we will do better in the end.

Emphasize the practical do-ability of the greening process, and be sure to report on concrete results. If an initiative saves, say, ten thousand sheets of paper, let people know. Provide concrete numbers for estimates involving the reduction of carbon emissions, etc. When people come to realize that the greening of the university is in fact more than a mere exercise in marketing, they will likely become more enthusiastic about the green initiative.

make obvious changes – people respond when they see things being done

One final idea is to make this quantifiable. To be able to update us on how we're doing, how much paper have we recycled this year and what can be done with that much recycled paper, how much compost has been created. What is the estimated saving a month or year on utilities. By keeping the broader community even loosely updated, I think the university community would be able to own the idea and so would feel more of a responsibility to be involved. Perhaps we could even set goals for different areas to have something to work towards both short term and long term.

A rollout campaign that trumpets all of the various ways that UNBC has changed to become greener. Not things we're doing now, but make a number of internal announcements on a fairly regular basis. This would send the message to faculty/staff/students that UNBC is serious about making changes to become greener. The repetition of the messages would help hammer home the message that UNBC is Canada's Green University.

Statistics, let people know how we're doing

Devise a method of green accounting and make the results visible. Provide an index of our green economy that reflects the true value of our sustainable vision. I believe that a green economy is based upon natural capitalism. This would require a measure of what was lost from the building of this campus needs to be factored into this accounting system. How much of the natural economy has been lost? There were wetlands and forests that provided natural services on this land. How have we as a University exported and offset this measured loss of green capital via education, sustainable development, and leadership.

Demonstration projects, open houses, contributed articles to local and province-wide newspapers, magazines.

Make it simple, let people know what they can do – lots of support already we need the campus community to 'BUY-IN' to the green initiative - this means communicating & helping people to want to be a part of it  
My diatribe in point #3 indicates my belief that people need more than encouragement and gentle prodding. If we just do it (keeping everyone informed), everyone (or close to everyone) will be proud of the result and happy to be a part of it.

need to give people 'info tidbits' that they might remember & share & be proud of i.e.  
"did you know that UNBC uses & this saves energy per year"

needs to be what we do, & the difference it makes is some tangible difference - something that people will remember & perhaps repeat

it seems that we learn about things UNBC is doing in the newspaper, but I have not seen some of it communicated to the campus community

Perhaps “tips for a greener planet” could be sent out on facstaff as often as possible to get people involved and give them the information they need. Not everyone is familiar with this information, and people can't do what they don't know how to do. We can always learn more!

perhaps a spot on the homepage about GREEN - it could have lists of these facts - an easy way to give the info without filling up people's inboxes or choose a day of the week that is 'GREEN DAY' where the photo & text on the homepage communicates one of these 'info tidbits' & then a link to the list of them - this would also help gain

exposure for the university in this initiative as new people inquiring about the university would see it on our website on those days.

a green newsletter in which people could contribute

Posters, emails, asking people to 'pitch in'. Maybe a table in hallway with information

Print a list of proposals and circulate a questionnaire asking the community to prioritize.

Making the tools accessible to everyone would be a wonderful start. I hear how we're a green university, but see nothing provided by the University to assist us with working more “greenly.” Perhaps an electronic UNBC message board where people can post their own ideas?

The best approach would be to provide concrete tutorials in information on how people can implement the same systems in their homes to save money. Most people in the community do not care about fluffy green initiatives that do not apply to them. However if you were to have a program in place that ordinary people could use to get information and other resources to implement the same systems it would be appealing to many people in the community and throughout the world.

Make it more available, I guess. I've looked for some information about sustainable landscaping, but haven't found much, aside from the lectures/workshops I'd have to pay to go to. I'd like to see more pictures of sustainable gardens and plants, rather than just

scientific names printed on a handout - so people can see how it's done, and what the plants look like.

Make advertisements at Citizen or PGTV? CBC radio?

Advertising these green activities and any related committees, etc., at welcoming functions would be a good start. My role at the university deals with a lot of grad students, who are largely environmentally-minded folks who would love to see some progressive action and might be keen to get involved, so be sure to include this population when looking for community involvement.

We could start with making this part of Dr Cozzetto's town hall messages he does from time to time. The message should be delivered as part of the budget. As with most things, you need to have the message delivered by the guys at top and pushed down to the rest of us. We could do a poster campaign – I know we have a bulletin board above our photocopier, I see them in faculty areas, etc. I really think we need to reveal what we do and how it makes a difference.

Energy/carbon budgets work well for faculty members. Show them how activity X reduces their carbon footprint by Y amount.

“Doing”

UNBC needs to sponsor and strive towards green actions. Instead of just discussing possible actions, innovative activities need to be implemented. Harness the creativity of our students! Perhaps certain class projects would include/require some green enhancement of the university.

encourage sustainable offices

bag lunches,

Being a "greener operation" also means paying special attention to environmental issues in teaching and research, so it would possibly have implications for the A VI and more broadly for what we teach. Perhaps most controversially, I would like to see every first-year student at UNBC take a course on "Human Beings and Their Environments" or something like that.

Offer more courses about how to achieve a greener environment locally, regionally, nationally, internationally and globally

Educate the larger community by exporting our greening initiatives

Where possible, include students in “greening” – e.g., perhaps there are courses that could include landscaping, etc. even more so than now; contribute to better forest practices in terms of teaching and research; highlight First Nations healing practices and learn more about herbs and other medicinal plants, etc.

Undertake more research that addresses the specific needs of the local and regional communities – e.g., air quality; forestry; health-related issues; etc.

Have grad students or even undergrad classes do much of the calculations and planning: e.g., the energy and carbon cost of paper towels vs electric dryers in the washrooms; disposable cups vs china (which needs washing in hot water, uses detergents, etc.) in the cafeteria; implications of \$1.50/day parking vs. \$4.00/day transit fares, what carbon offsets are needed each time a prof attends a conference in Vancouver, Victoria, Edmonton, Portland, Toronto, etc.

Let’s get the students involved in a meaningful sense (e.g., membership on campus wide planning committees, internship opportunities to work with different administrative and academic units on campus to plan and initiate ‘green’ projects). Students are usually chomping at the bit to take on ‘real world’ exercises and so many of these environmental issues are near & dear to their hearts and minds.

get undergrad student clubs involved (e.g. NUGSS) to get the largest body of students excited about the idea, peer pressure works!

It is time to reconstruct a suite or so in residence to create a “teacher in residence position or positions”. The University has made many futile attempts to raise the awareness of residence and to alert the academic community that the other 19 hours a day not spent in the classroom is spent in residence. To date there is no apparent interest on behalf of the academic community to exploit this time.

Other ways would be to fund grad students to do the assessment monitoring part of it.

Involve the student groups at the outset, e.g. PGPIRG. Grass-roots is always better

Advertising these green activities and any related committees, etc., at welcoming functions would be a good start. My role at the university deals with a lot of grad students, who are largely environmentally-minded folks who would love to see some

progressive action and might be keen to get involved, so be sure to include this population when looking for community involvement

Make it easy for people to incorporate green habits into their daily work day and create incentives – don't make this bureaucratic or more work for them otherwise it will not work.

Make it palatable and easy

Offer workshops on green practices

a short (one-day) conference to include students, staff, faculty, and community members would also be good IF it happened at a time when people could attend.

Host a yearly UNBC Green University sustainability conference. At the end of each conference, hold a referendum where registered attendee's vote on binding green resolutions. All UNBC staff, faculty, and students have free admission. Give green awards at the conference.

Involve the UNBC community by holding quarterly democratic votes on binding green resolutions.

Hire a sustainability coordinator and provide the coordinator with a centrally located office space on campus. Name the location UNBC Green University office of reception. We have an office of communication, but no office of reception.

Community educational events would be a first step: We have so many wonderful colloquia, brown bag lunches, speakers here on a weekly basis. A lecture series maybe in the evenings based on a Green theme, or even a Green film series could get people fired up. What are other cities/countries/universities doing? We could invite speakers, and finish each lecture with a discussion of how it applies to us; and what we can do to enact change on that point.

A "Town-meeting" would be a good forum for these types of change.

A green conference and green day will help. A centrally located Green office should promote and educate students about social green responsibilities as they walk by. Make it big, visible, and green.

public presentations

A green info week each year. Invite industry, faculty and students to participate with booths to promote green living.

If the President's office is passionate about this issue that will show, that makes a big difference in helping the rest of the university to buy in. We have so many professors and students doing environmental research, perhaps we could have lunch hour forums to hear about the latest environmental research (this doesn't only need to be an academic forum but more of a community forum so that even people in the community, and those at UNBC that aren't working in those fields could attend).

Money. In many cases, non-sustainable practices are more costly than sustainable practices. We keep hearing, however, that sustainability will cost money. It will save money. I would argue that over the long haul (20 years) most, if not all, sustainable practices are more cost efficient than non-sustainable ones. The exceptions will occur where we unreasonably subsidize waste.

My preference when learning something new is to have a lot of visuals. And hands-on discovery.

Develop short-term projects that are do-able and visible. It's important to feel and see success in the short-run in order to have the stamina to undertake and work toward more complex, longer term goals. What about a contest for students to come up with ideas? I bet there would be some uptake on something like that. In terms of community visibility, I think that shopping bag idea has the potential for having a visible impact – shopping bags across the city that say: “UNBC: Canada's Green University – Do Your Part – It's in the Bag!” I'm sure someone else can spend a bit more time and come up with a better slogan...but something like this could be visible and a way to involve the entire community both promoting UNBC and a greener North.

Bring school kids to UNBNC for sustainability tours

Probably displays/events during the day in the wintergarden. I used to like the audits your class did in which garbage was dumped on the ground and sorted into compostable and recyclable materials.

Actions speak louder than words! A group of one-hundred cyclists riding up the hill together. Then the following week, two-hundred. The president of UNBC should be leading the way. Where I moved from, the mayor of the city led “bike to work week”. Stations were set up around the city for free breakfast to cycle-commuters.

Green bags and mugs given to each and every student upon initial registration.

Start a solar array.

Noticeable things such as solar panels on top of buildings or a wind-based generator might also be noticeable, although I'm not sure if either would be efficient at the UNBC site.

A natural history bio-green museum or educational institute to promote our campus initiative is a grand idea

Implement a parking payment strategy that enables those driving a vehicle with a certain miles-per-gallon to get free parking.

use the agora space over the lunch hours to have 'activities' set up, demonstrate 'a typical office' and how actions can be taken to conserve/reduce waste, or 'a typical dorm' – go with themes!

Town Criers, Sandwich Board messages, contests, make it fun to remember, buttons for people to wear, more recycling cans, a method of removing all the cigarette butts from campus, signs in the classrooms, offices, library, coffee areas, hallways, live by example

Possibly have live ads: students putting on skits or something to catch the eye like walking minstrels

I think that building a corporate culture is needed and that leadership at all levels is critical. Set up the necessary infrastructure, people and systems require to make it happen. Lead by example from the president to the Directors to each faculty member supervising students

Bike to school days – each week! Bus to school days – each week! No plastic bags on campus, none.

For example a detailed and well documented process on the implementation of Micro-hydro, solar and wind energy capture systems would be extremely helpful.

Allowing people to borrow the UNBC FLIR camera for their homes would allow everyone to make improvements at home as well.

Community partnerships, i.e. clothing drives for recycling

Organize events like:

“Walking for Green UNBC” where people can join maybe like a 10km walk or run around the university hiking trail and reward those people that perform or participate well?

“Vehicle Free Day” where students voluntarily walk up to school on a particular day

Learn by example - we need more facilities here for recycling - we need signs that ask to "PLEASE turn off the lights and computer" - we need to politely ask people to live green - we need a green day once per month - or even once per week - until people remember and do things naturally without being reminded.

recycling rallies - do a big group thing to create a sense of community - prizes or other incentives

Surcharge on bottled water coupled with retrofitting of all buildings with adequate fountain water. Surcharge could provide funds for conservation projects and

sustainability coordinator on campus.

Involving the university community could start with something as simple as a conscientious recycling program and having members of the university community advise administration of materials not in "green" compliance

At [www.cbsm.com](http://www.cbsm.com), there are some examples of what others have done to help change behaviours. While I found the website to be limited, I thought the document, “Community-Based Social Marketing,” by Dr. Doug McKenzie-Mohr to be excellent. It outlines several key steps to take to help change behaviour. That said, I don’t have anything to compare it to.

I have heard so many cynical comments about the process, and people are so fatigued by the multiple processes underway at the university, that I am not certain how to encourage broad participation. I would have a contest for "green" suggestions and offer prizes. I would enlist the groups and individuals on campus who have historically promoted this issue-PIRG comes to mind immediately.

A little internal competition never hurt. How about our own version of carbon credits and the like? Some sort of budgetary reward for savings in paper, waste, energy use offered at the academic or administrative unit level? Some sort of ‘prize’ for innovative approaches to teaching and learning.

contests. Make it fun. Contests among academic units; contests among students; contests between green universities?

could have contests re the academic dept that uses the fewest "carbon footprints" per person. This would take into account such things as paper used, faculty who bus or bike rather than drive, number of air trips, etc.

Competitions between groups.

Get competitions going for best ideas

Here is a possible idea Contest for Green offices at UNBC.

Most progress: Measure current environment, allow offices to make changes over a number of months, measure the changed environment, judge based on greatest change.

Best overall green office: Measure the number of ways the office is being green.

Incorporate the contest with a number of information bulletins about the different ways to be green. Encourage an email loop where employees can post their successes in this regard. Provide all participating offices with prizes, but leave the biggest prizes for the winners.

maybe have contests for greenest areas, or greenest ideas ' ; c. most people will not get involved unless it has something "in it for me!"

Generate excitement with contests or provide 5 minutes of "fame" to people who come up with great ideas.

#### "Incentives"

Grades or credit for being green with proof of course, receipt from bottle depot, or bus ticket or pass proof. It has the potential to be controversial however, so does global warming.

Incentives, department contests

Reward incentives for good behaviour, i.e. use refillable pens, earn points towards free purchase

Make it look like an economical win-win: savings on electricity and power sources etc to be used for increasing the faculty members of the university, or half that and half scholarship for a student interested in this field of ecological environmental greening

you have to have some kind of hook that will be of benefit to the end user, possibly less expensive for the recycled materials, rather than more expensive items

Reward and honor those who are engaged.

Perhaps a financial award for innovation. Money usually talks and gathers a crowd.

Maybe we could give incentive prizes to students; staff, administration and faculty - or maybe we could give "raspberry prizes" for people who mess up.