AMS Lighter Footprint Strategy

Zhixia (Stella) Cao, Sarah Common, Heather Goodison, Jade Sun In Hwang, Yi Ting (Tina) Lam, Jacky Lo, Melanie Petersen

University of British Columbia

AGSC 450

April 11, 2008

Disclaimer: “UBC SEEDS provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student project/report and is not an official document of UBC. Furthermore readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Coordinator about the current status of the subject matter of a project/report.”
Scenario 2: AMS Lighter Footprint Strategy

UBC FSP 2008

Group 19
Zhixia (Stella) Cao
Sarah Common
Heather Goodison
Jade Sun In Hwang
Yi Ting (Tina) Lam
Jacky Lo
Melanie Petersen
Table of Contents

Abstract page 2  
Introduction page 2  
Problem Definition page 3  
Vision Statement Reflections page 5  
Methodology page 6  
Findings page 7  
Other Universities page 8  
Sustainable Packaging page 13  
Discussion page 15  
Recommendations page 18  
Conclusion page 19  
References page 20  
Appendix page 22
Abstract

The current concern of our high ecological footprint has caused an increased need for awareness and change in our food system. The University of British Columbia Food System Project (UBCFSP) is a research project addressing the sustainability of food system at UBC Vancouver. By researching the current polices of other universities as well as collaborating with several stakeholders in the project, namely AMS Sustainability, AMS Food and Beverage Department, and Neptune Food Service, our group determined the need to work with the grocery supplier to create a sustainable food procurement policy. The food procurement policies of University Communities can affect ecological footprint in numerous ways including food miles, sustainable production practices and packaging. University towns as large as UBC have the potential to create demand for more sustainable practices from their suppliers in all three pillars of sustainability: social, ecological, and economical. We suggest several methods to create transparency in the food chain between Neptune Food Service and AMS Food and Beverage Department that we hope will help strengthen the community and business bonds for both companies respectively.

Introduction

The UBC Food System Project (UBCFSP) is a community-based action research project, started six years ago, whose aim includes reducing the Ecological Footprint (EF) of the UBC food system (Richer & Rojas, 2008). EF is a concept used to describe environmental impact and was developed by Dr. William Rees and Mathis Wackernagel of UBC (Doherty & Stein, 2007). It is a measure of how much land and marine area a group of people requires to produce its resources and dispose of its waste and it is determined largely by the actions of large organizations, such as UBC (Doherty & Stein, 2007). The overarching goals of the UBCFSP are
to assess UBC food system sustainability, identify barriers to sustainability, create a shared vision and model of transition among stakeholders, make recommendations to enhance sustainability and implement measures of the effectiveness of actions taken (Richer & Rojas, 2008). The UBCFSP has many partners including UBC Food Services, AMS Food and Beverage Department, UBC Waste Management and the UBC Farm, but bases itself in a stream of core UBC Land and Food Systems courses which culminate with AGSC 450 (Richer & Rojas, 2008). In this course teams of students approach scenarios dealing with food security issues on campus.

This team’s scenario involves creating targets for sustainable food procurement for the AMS Lighter Footprint Strategy. The AMS is the student society of UBC and operates student services, student owned businesses and clubs (AMS Lighter Footprint Strategy, 2008). The AMS has created its Lighter Footprint Strategy, as part of the Environmental Sustainability Policy passed in 2007, in order to try to improve the social and ecological environments in which students work (AMS Lighter Footprint Strategy, 2008). Our goal in this project was to help the AMS create targets for food procurement that lower the EF of the AMS Food and Beverage Department.

**Problem Definition**

There exists a severe lack of education about, connection to and transparency of our food system, from production to consumption to waste disposal. We are separated from our food by oil, which manifests itself as fuel, fertilizer and plastic. And, we are separated from our food by the convoluted systems of production which value profit over health and growth over sustainability. The lack of awareness of the multifarious impacts of our food, economic, social and environmental, has allowed negative food consumption habits to develop and engrain
themselves in our culture. We are a fast food people, basing our food choices on convenience and taste, forgoing the benefits of local and seasonal food choices. We are not only causing detriment to our own health by commoditising food and allowing irresponsible and disrespectful food systems to dominate our landscapes; we are also destroying ours and others’ communities and ecosystems.

While many universities campus have established concrete sustainability programs with specific targets and solid policies, UBC has a fragmented initiative with no complete guiding principles or documentations. The AMS, a student society of UBC, has recently developed a draft form of sustainability strategy: the AMS Environmental Sustainability Policy (AMSESP). This strategy contains suggestions on guiding UBC towards its goal of sustainability. The purpose of our project is to work alongside with AMS food and Beverage Department to create action plans and develop targets within the AMS lighter Footprint strategy. This aligns with the objective of the AMSESP which is to reduce the university campus ecological footprint to sustainable levels and to “foster environmental justice in our own operations and through our relationships within the University and the broader community” (Doherty & Stein 2007).

As community researchers of the Food systems component of the AMS Lighter Footprint Strategy our vision is to be part of the movement to create sustainable policies for UBC: policies that ensure that the university is living respectfully of the other peoples and systems with which we share this planet, present and future. We aim to create AMS and AMSFBD targets to enhance the sustainability of food purchasing by analyzing what that policy is now, where potential for progress lies, and how steps to achieve that progress can be made. The entire campus body should benefit from changes made, in terms of the health of our campus community. UBC has pledged sustainability and so these targets will also be in keeping with
that moral obligation. Our vision in the long term is of a vibrant, local, healthy food system; in order to realise that vision we need to make positive change wherever possible.

Our focus is on food procurement but we have moved back from the choices that the AMS is making to those that one of its suppliers is making. AMS orders grocery items from Neptune, produce from Central foods, dairy from Saputo, cheese from Larosa, and baked goods from Island City Baking Company (N. Toogood, personal communication, March 5, 2008).

Nancy Toogood, AMS Food and Beverage Manager, mentioned in her address to AGSC450 students that she wants to effect change in the suppliers she is already established with instead of changing suppliers. If UBC can pressure and then assist companies it orders from in changing their systems to more sustainable ones, then we can truly be the "leaders in sustainability" that we have promoted ourselves as. Miriam Stein, AMS Sustainability coordinator, was also excited about us focusing on a supplier as part of the strategy to lighten UBC’s footprint and also, hopefully, as a potential mode of lightening that of BC.

We want to review Neptune’s available foods: where they are procuring their food from, what their ethics are, what changes they have been making in their company of late, if any, whether or not they are aware of the FSP and UBC's sustainability initiatives, where they think we could be of service to them in the future and which issues they are interested in as far as sustainability goes.

Reflections on Vision Statement

Our main criticism of the Scenario 2 Vision Statement is that its focus lies heavily on environmental sustainability, when a more balanced analysis including economic and social sustainability would be beneficial. We heard many times in our discussions with partners that they are, above all, businesses. The demand for various products and the profit that can be made
are important factors, as well as ecological and social sustainability concerns. This is a very important point because a business cannot make changes that put the economic bottom line in jeopardy or they will go out of business and cease to exist.

We were working under an anthropocentric paradigm, with the value assumptions that a balance between environmental, social and economic sustainability is essential; these are equal pillars of sustainability. We also feel that working towards sustainability has to be step-by-step process. The ideals of the vision statement are excellent, but it is not possible to achieve these ideals immediately. Any movement toward those goals is important, and opportunities for change should not be ignored because they aren’t ideal. We tried to be aware of the fact that as students in the Faculty of LFS our outlook may differ considerably from the general population of UBC. The power of convenience often weighs in heavier than concerns of environmental sustainability of the food system.

**Methodology**

In continuing with the FSP, we employed the use of community-based action research (CBAR), which is the overarching methodology of the UBCFSP. The main principle of CBAR is the collaboration and inclusion of community partners and stakeholders in the research direction and implementation (Stringer, 1999). We engaged in a variety of information-collecting methods including literature reviews, personal interviews, and emails. Our literature review consisted of researching sustainable food purchasing and procurement policies as well as other sustainability initiatives of other universities. In particular, we looked at University of Victoria, Simon Fraser University, University of California Santa Cruz, and University of Toronto. We also reviewed FSP papers from previous AGSC 450 groups. Additionally, our team had personal interviews, guest speakers, and communicated via email with individuals from
AMSFBD, Neptune Food Service, and other universities such as University of Victoria, and University of Toronto. With every email sent, we included a copy of the ethics consent form to ensure that we met the ethical guidelines of the UBCFSP. Email correspondence is included in Appendix 1. Lastly, we reviewed other relevant information from the AMSFBD such as current purchasing, inventory, and supplier lists.

**Findings**

In order to provide feasible, useful and effective recommendations for our stakeholders, we must first understand their expectations, aims, goals and targets regarding sustainable movements. In January 2007, AMS student society passed an Environmental Sustainability policy with the aim of creating formal environmental strategies that help the UBC community to reduce ecological footprint. The student organization then compiled a cohesive document called AMS lighter Footprint Strategy that summarizes and records all the future opportunities, targets, goals and environmental impacts that AMS has achieved in different disciplines. The document is not only a report that defines targets and achievements; it also includes action plans and recommendations for future leaders of AMS, so that previous hard work can be traced, and implementation of each sustainability strategy can proceed more efficiently.

Although AMS clearly recognises that ecological, social and economical concerns are three equally important pillars of sustainability, the AMS Lighter Footprint Strategy only focuses on the aspect of ecological sustainability. The strategy aims to make AMS a more environmental organization and to moderate the EF of the UBC community. In order to gather descriptive data and benchmarks for the AMS to develop targets, assessments and consultation sessions with different departments, AMS permanent staff, senior management and Executive Committee were conducted. AMS hence uses Ecological Footprint Analysis to examination current situations and
then develops strategies. By using this approach, AMS can categorize targets as either quantitative targets where objectives are supported by numerical data or qualitative targets where AMS doesn’t have sufficient data on particular aspects, and can only provide vague directions. Other than categorizing targets as quantitative and qualitative, AMS also classifies targets as internal or interactive targets. Internal targets are objectives that AMS has complete authority; whereas interactive targets are objectives that need other organizations or partnerships to participate so that actions can be processed.

The report places the topic of Food and Beverages under both internal and interactive targets, where the estimated Ecological Footprint is evaluated as high under internal target and very high under interactive target. There is a list of actions recorded under the topic of both internal and interactive targets that AMS would like to participate in the coming years. For example, the ultimate internal target under Food and Beverage is to significantly reduce the average per-serving ecological footprint of food and beverages sold at the AMS food outlets. One of the actions includes setting informed targets for increasing the purchase of local food ingredients as a percentage of total food purchases. There is also a time frame given for each action; this action is listed as a short-term. Our recommendations aim to align with most of the short-term actions listed under the topic of Food and Beverage and Communication under both internal and interactive targets of the AMS Lighter Footprint Strategy.

Findings from Other Universities

In this project, we have conducted some research on the approaches which SFU, UVic, U of T, and Queen’s have taken to achieve a more sustainable and procure more local food for campus.
a. **Simon Fraser University**

Sustainable SFU is an organization run by students, staff, and alumni helping the campus to be a more sustainable community (Sustainable SFU, 2007). Sustainable SFU, in conjunction with the Centre for Sustainable Community Development and Local Solutions, has established the Local Food Project in order to attain a more sustainable food system on campus. This project was funded by Environment Canada's Eco Action Grant and is supported by SFU Sustainability Advisory Committee (Sustainable SFU, 2007). The goal of this project is to increase the amount of local food on campus through several programs such as “Green Food Box” (Sustainable SFU, 2007). Other campus partners who participate in this project include SFSS Food and Beverage Services, Chartwells Dining Services, SFU Health Promotion, The SFU Community Trust and Natures Garden Organic Deli. Food service outlets, residence café, and some restaurants offer weekly or daily local food specials and fair trade coffee. In addition, this project raises public awareness with research revealing the problems of the food system today, the benefits of local foods, the strategies to consume more locally on campus, and the case studies of the food systems in other universities (Sustainable SFU, Toolkit, n.d). The Local Food Project also supplies the information regarding the locations on and out of campus where one can purchase local sustainable food products (Sustainable SFU, Food Guide, n.d).

Under the Local Food Project, SFU introduced a program known as the “Good Food box Program” in which boxes of mixed produce, including organic and sustainably produced foods, are sold as a box on campus (Sustainable SFU, 2007). Not only does this program encourage people to consume more vegetables and fruits, but it also raises awareness of sustainability, supports local farmers, and reduces food miles. The Local Food Project also proposed some possible strategies that increases amount of local food on campus (Sustainable SFU, 2007).
the University Local Food Toolkit, Sustainable SFU suggested the possibilities of food production on Campus by edible landscaping, Farmers Markets on Campus, and Farms to Campus Program (Sustainable SFU, Toolkit, n.d).

b. **University of Victoria**

The University of Victoria (UVic) offers various routes for people on campus to enjoy local food. UVic’s Student Society has begun to launch local food menus in the restaurants at the SUB (University of Victoria, 2004). In front of SUB, there is also a weekly “Pocket market” where people can buy produce directly from farmers (UVic, 2004). This market was initiated by the UVic Sustainability Projects and Food Roots, a Co-op distributor of locally and naturally grown produce and locally processed food (Food Roots, n/a). In addition, a “Campus Community Garden” allows people to operate their allotted plot to grow their own food (UVic, 2004).

In the email communication with Sarah Swebb, the Sustainability Coordinator at UVic, it was explained that UVic is still in the progress of developing policies and plans in food procurement (S. Swebb, personal communication, March 26, 2008). It was also explained that UVic has recently joined the Nanaimo Food Share to improve the food security problem in Nanaimo area. Swebb described UVic’s Purchasing Services Department, which administers purchasing services policy and manages all sorts of procurement on campus (S. Swebb, personal communication, March 26, 2008).

c. **University of Toronto**

Beginning in 2006, University of Toronto (U of T) partnered with “Local Food Plus” (LFP) to improve its sustainable food procurement on campus (Local Food Plus, n.d). LFP is a non-profit organization that certifies farmers and processors as local & sustainable and links
them to local purchasers, benefitting both farmers and consumers (LFP, n.d). In response to many students’ preference for more healthy sustainable food, LFP is able to provide more local sustainable food to the restaurants and cafeterias at U of T campuses. This collaboration has received a tremendous amount of positive feedback and raised the public awareness regarding the advantages of sustainable food (LFP, n.d).

d. **Queen’s University**

The food system at Queen’s University also sets a good example in terms of sustainability. Queen’s University is dedicated in bringing the best and freshest quality local foods onto campus as it supports the local economy and reduces carbon footprint. Queen’s purchasing department spends a lot of time on trying to get local suppliers inspected and approved to be used at its service locations (C. Hanna, personal communication, March 26, 2008). Carl Hanna, the director of Residence Food Operations, stated that the current percentage of local food purchase by Queen’s is 35%, however, this number can fluctuate due to seasonal produce and availability (Personal communication, March 26, 2008). Also, Queen’s University has been contacted with Sodexo Canada for a long time, because the mission of Sodexo coincides with that of Queen’s (C. Hanna, personal communication, March 26, 2008). It is mentioned by Hanna that Sodexo Canada has a committee dedicated to sustainability, while one of Queen’s main area of focus is to buy local products. Sodexo, a company committed to purchasing as locally as possible, is running one of the main cafés at Queen’s, Ban Righ (C. Hanna, personal communication, March 26, 2008). Sodexo lists all the nutrition information for the food so students can acknowledge the nutrition value of the food they consume.
e. **University of California Santa Cruz**

University of California Santa Cruz (UCSC) has a Food System Working Group (FSWG) which aims to provide campus with more local organic food produced by socially responsible operations and to raise student awareness and engagement in the campus food system (UC Santa Cruz, n.d). FSWG has done much to promote sustainability on campus, such as, by holding the “Local and Organic College night” feeding up to 2000 students, creating dinners that strengthen relationships between growers and campus stakeholders, and implementing the study of sustainability into the existing undergraduate courses (UC Santa Cruz, n.d). As of May 2004, UCSC Food System Working Group drafted guidelines for UCSC Dining services to adopt some food policies, which is to 1) buy local, 2) buy seasonal, 3) buy certified organic, 4) buy humanely produced animal products, 5) buy direct, 6) buy certified fair trade, and 7) buy from worker supportive producers (UC Santa Cruz, n.d).

There is also a course at UCSC called “The Education for Sustainable Living Program” (ESLP). It is an interdisciplinary effort to attain a sustainable campus community. Students form action research teams to implement tangible changes on campus, while they are provided with knowledge from guest lecturers, faculty, administrations, and community members (UC Santa Cruz, n.d). Within the Santa Cruz County, the food policy council, Santa Cruz County Food Systems Network (SCCFSN), responds to problems such as food security and hunger and diet related diseases (UC Santa Cruz, n.d). They recruit the expertise of public and private stakeholders in developing local food policy and also welcome students, faculty, and staff who would like to assist (UC Santa Cruz, n.d).
Findings: Sustainable Packaging

The Canadian Council of Minister of the Environment (CCME) was established to protect Canada’s environment, and it is comprised of the environment ministers from the federal, provincial, and territorial governments. Reduction of packaging is one of the CCME’s concerns. In 1989, CCME called for the development if a “National Packaging Protocol” with the aim to minimizing packaging waste (CCMC, 2008). Representatives from federal, provincial, and municipal government, industry, environment, and consumer interest groups formed the National Task Force on Packaging which contributed greatly to the development of the protocol. Since the development of the “National Packaging Protocol”, the task force continues to look for alternative ways to reduce packaging, and expanse re-useable packaging system. In March of 2007, CCME and the Ontario Ministry of Environment hosted the “National Packaging Workshop” in Toronto. One of the key topics addressed during the workshop is sustainable packaging. During the workshop section, one of the guest speakers, Jim Thompson of Wal-Mart, gave a presentation on how sustainable packaging influences purchasing decisions (MRC, 2007). He pointed out that Wal-Mart has established goals with respect to reducing packaging solid waste, using renewable energy, and sell products without toxic materials (MRC, 2007). He also suggested that sustainable packaging is not only reducing waste, but also increasing the use of renewable resources for packaging (MRC, 2007).

Since the emphasis on sustainable packaging is become more and more robust, it is necessary to take a closer look into the concept. The Sustainable Packing Alliance (SPA) defines sustainable packaging as effective, efficient, cycling, and safe (2005). Since the definition provided by SPA is vague, it is difficult to get a firm understanding on sustainable packaging. Fortunately, the Sustainable Packaging Coalition (SPC) provides a much concrete definition.
According to the SPC, Sustainable Packaging defined as being: beneficial, safe & healthy for individuals and communities throughout its life cycle; compatible with market criteria for performance and cost; sourced, manufactured, transported, and recycled using renewable energy; a maximized use of renewable or recycled source materials; manufactured using clean production technologies and best practices; made from materials healthy in all probable end of life scenarios; physically designed to optimize materials and energy; effectively recovered and utilized in biological and/or industrial cradle to cradle cycles (2007).

Although the SPA and the SPC have provided a general outline of sustainable packaging, it is still difficult for consumers or distributors to identify products which are participating in sustainable packaging. With the aid of “Packaging Scorecard”, however, consumers and distributor are given more transparency about information on products’ packaging. According to the Flexible Packaging Association (FPA), the packaging scorecard measures suppliers’ ability for developing sustainable packaging. Specially, the scorecard measures greenhouse gas emissions related to packaging raw materials production, sustainable materials values, product to packaging ratio, cube utilization, recycled content usage, innovation, the amount of renewable energy used to manufacture the packaging, the recovery value of the raw materials and emission related to the distance required to transport the packaging materials (FPA, 2008). The overall score of each supplier can be used for evaluating the sustainability level of packaging in each product. Wal-Mart, mass distributor, has been using this tool to identify green suppliers. With the aid of the scorecard, Wal-Mart is able to more accurately measuring the progress toward its goal of reducing packaging in their supply chain by 5% By 2013 (FPA, 2008). In order make packaging more sustainable, making packages small, or use less materials is only part of the
solution. It is more important to look at the total package and it development process, the product, and customer relationship for an overall better package (FPA, 2008).

**Discussion**

After analyzing the food system of many universities, there is an apparent trend of universities attempting to increase the amount of local sustainable food and the awareness of sustainability on campus. Approaches to a more sustainable food system can differ substantially among different universities due to their populations, size and structure of their campuses, and their geographical locations. Thus, we would have to consider these limitations before suggesting such programs or methods to UBC or AMS. As an example, SFU’s Local Food Project is able to bring more local food to campus with the financial support from Environment Canada's Eco Action Grant (Sustainable SFU, 2007). While local sustainable food can sometimes be more expensive than the existing non-local food, funding is often helpful for the transition to purchase more locally and the search for ideal local food suppliers. If AMS applies for this grant, it will gain financial assistant in bringing more local items to the AMS food outlets. In the meantime, AMS would benefit from this program since applicant of this grant is required to submit an EcoAction project proposal (e.g. Local Food Project by SFU). This proposal would enforce AMS to work towards a defined direction in reducing the ecological footprint of AMS. Although SFU (~25000) has only about half of the population of UBC (~45000 students), AMS food outlets do not actually serve all students in UBC, so SFU and AMS are of comparable sizes.

Additionally, a feasible way to promote a more sustainable food system on campus is to sell fresh local produces directly on campus. SFU has the “Good Food Box” Program that sells boxes of mix produces, while UVic and Food Roots have their Pocket Markets to sell fresh local produce directly to students and staff (Sustainable SFU, 2007; UVic, 2004; Food Roots, n.d).
These are great routes for students to purchase fresh local foods and to promote their awareness in importance to consume locally. The location where the food is sold also has its significance determining its impact on public awareness. For example, Pocket markets at UVic are held in front of their student union building (SUB) (UVic, 2004). The food from UBC farm could also be sold at busy sections of the campus like the UBC SUB.

Some other approaches to sustainable food system on campus are to contract with organizations and companies that can provide the university more local food. For example, Queen’s is contracted with Sodexo for running one of its main cafes, while Sodexo is dedicated to provide as much local food as possible. Queen’s also carefully chooses its local food suppliers with approximately 35% of food is locally purchased. According to Statistic Canada, Ontario and Quebec has the most food manufacturers meaning more choices for locally processed food for Queen’s University (2006). When taking the geographical difference into account, AMS can adopt the similar structure as Queen’s but will have to set different targets and timeline in local food procurement. As well, U of T partners with LFP to bring more locally produced food on campus from LFP certified suppliers and farmers (LFP, n.d). However, U of T is scattered at various places as small campuses so connecting these small campuses to different local farmers might be easier than connecting many local farmers to UBC as an entire entity. Yet, the certification which LFP honoured the farmers as local and sustainable can serve as a marketing tool (LFP, n.d). If there is such organization in Vancouver that would partner with Neptune it could be a great advance in connecting Neptune to more local farmers.

Nancy Toogood is working towards effecting change with her suppliers, in recognition of the importance of social sustainability (N. Toogood, personal communication, March 7, 2008). It is a point of important potential to be creating change in other businesses through the demand
of the university for ethical and sustainable products. UBC can begin to demand more transparency in the products it orders by asking for origins of products, and asking questions about why products are being sourced from long distances or about the ethics of those sources. We recommend that next year’s FSP include more emphasis on aspects of social sustainability. For example how is the wider student body being brought information about changes happening in its food system? Are messages clear and effective? The AMS LFS is focused on environmental sustainability but the impact of raising awareness on campus and involving more people in thinking about their food system is a point at which change can be initiated. Programs like the UPass, which benefit the student body and reduce the university’s footprint without requiring much extra effort, are most effective. As the campus continues to change and grow it is important that issues of food security be part of the building process. Nancy Toogood raised this issue in many different ways with us, discussing the need to get as many people involved as possible to ensure that initiatives have longevity and do not fade out of focus when their pioneers retire or move on (N. Toogood, personal communication, March 7, 2008). We need to work to change consciousness and habits; in order to be effective policy change needs to include considerations of education, communication and public involvement.

We chose to look at Neptune and groceries instead of at Central and produce or other distributors that UBC orders from because other Scenario 2 groups were already covering this. Although our findings have not been as clear as we hoped, we thought it was important to try and reveal the food system behind this partner in our food system. Neptune expressed willingness to collaborate with us in research about the products they offer but timing was not good for them as the UBC contact, Kim Babiuk, was away on for the past five months and, understandably, did not manage to answer our questions about Neptune and the products it distributes. Included in
Appendix 1 is both our email correspondence and the contact information for Kim Babiuk so that next year’s groups can make contact immediately, knowing that this is a willing partner in community based action research.

Recommendations

For Neptune
- Continue to expand on the community connections via active participations in organizations whose mission is to foster sustainability (e.g. Green Table). This can help them to build connections to other sustainable farmers and food suppliers. Also, these organizations can provide Neptune advices to implementing sustainable operations and supports while making any sustainable changes with their expertise.

- Request product information (e.g. origin of the ingredients) from suppliers and provide this to customer (i.e. AMS Food and Beverage). The purpose of this is to enhance the transparency of food UBC purchased from Neptune. Transparency can be used as a marketing strategy in selling products to green food service outlets.

- Collaborate with UBCFSP student officially next year. There should have a date where a representative from Neptune to come in during class time to provide background information on the company, answer any questions, and set up appointments for interview.

For AMS
- Support Neptune during their change to more sustainable practices.

- Demand their suppliers to have to provide information on their packaging by using the “Packaging Scorecard”. Results can be used to identify suppliers who are working toward more sustainable packaging practices.

- Create a food purchasing committee with representatives from AMS Food & Beverage, UBC Food Service, UBC Farm, etc. UBC food providers can be invited to the committee meetings, allowing them to comprehend UBC’s current need or changes and relationship bonding.

- Conduct research to see which food suppliers practice sustainability that can be used for AMS and UBC Food Service.

- Suggest similar course (i.e. AGSC 450) in other faculties, such as Faculty of Commerce, to help the food providers to become sustainable-practiced business. This can also raise campus’s awareness in sustainability and importance of local food.

For Next Year’s AGSC 450 Student
Initiate contact with Neptune as soon as possible. Discuss what research would benefit the company, what they are interested in changing, what ideas they have about sustainability.

Create a proposal to setting up network, non-profit organization like Local Flavour Plus for UBC. This network provides services such as communication with local farmers and linking them to UBC Food Providers, and holding events that promote awareness of healthy eating and sustainability on campus.

For AGSC 450 Teaching Team
- Facilitated discussions in scenario groups would have been very useful for achieving an understanding of the project, our goals as a scenario, our findings etc. They also would have been helpful for communication between TAs and students.
- Any background information related to Neptune and AMS obtained from interviews should be readily available to the students of next year, as well as contact information. This eliminates the time in doing background research and interviewing AMS representatives for the same information every year.

Conclusion
The UBC Food Security Project is a process that will continue to be developed in future years of AGSC450, further expanding a network of UBC students, professors and administrators, UBC food service providers, and external UBC food system partners and stakeholders. The AMS Lighter Footprint Strategy is a valuable tool in the effort to improve the food security of the UBC campus and by incorporating it into all aspects of the university it will bring the effort to create a sustainable system on UBC campus forward. Other campuses across British Columbia and Canada are making similar efforts and provide both inspiration and models for sustainable initiatives. It is important that we consider the economic, social and environmental aspects of policy or purchasing changes when we are working towards a sustainable system in order for changes to be productive and to have longevity. Neptune Food Service is a UBC food system partner that is a willing collaborator on this mission of sustainability, a potential aspect of the UBC food system that could be developed to reduce the ecological footprint of the AMS and thereby of UBC.
References


