

# UBC Annual Operational Sustainability Report

Vancouver Campus

2010/2011

**campus + community planning**  
campus sustainability



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

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The UBC Annual Operational Sustainability Report 2010/11 provides an overview of the sustainability activities at UBC's Vancouver Campus and highlights achievements from the three areas of social, ecological, and economic sustainability as outlined in *Inspirations and Aspirations: the Sustainability Strategy 2006-2010*.

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# 1. Executive Summary

The UBC Annual Operational Sustainability Report provides an overview of the sustainability activities at UBC's Vancouver Campus and highlights achievements from the 2010/11 fiscal year and outlines strategic priorities for the next fiscal year in the three areas of social, ecological, and economic sustainability as outlined in *Inspirations and Aspirations: the Sustainability Strategy 2006-2010*.

This annual report presents key sustainability achievements and reflects the efforts of the entire campus community. Highlights are presented in the following focus areas of Policy and Governance, Social Sustainability, Ecological Sustainability, UTown@UBC Community Development, and Economic Sustainability. Attachment A includes a presentation of progress against some key sustainability metrics for the latest reporting period of the 2010/2011 fiscal year.

## Policy and Governance

Sustainability is a core UBC community value that is embedded in university policy and guides the university's strategic directions. In 2010/11, two significant announcements further solidified sustainability into campus planning at UBC:

- In June 2010, UBC adopted a new **Vancouver Campus Plan**, setting long-term sustainability directions for land, infrastructure, buildings and landscape. Key strategies for achieving these objectives include using the campus as a living laboratory, providing more student housing, creating a public realm designed with nature, designing greener buildings and infrastructure, prioritizing a compact campus and enabling a vibrant campus life.
- Amendments to the **Land Use Plan**, adopted March 1, 2011, allow UBC to realize our vision of building a model university community that is vibrant, liveable and sustainable, which both supports and advances the academic mission. The amendments put an emphasis on increasing housing choice and affordability for faculty, staff and students and overall measures to enhance environmental sustainability.
- **Inspirations and Aspirations: The UBC Sustainability Strategy 2006-2010**, Canada's first comprehensive university sustainability strategy, wrapped up in 2010/11 and over 50 staff from 21 units across campus contributed to the final report. Of the 68 social, ecological, and economic targets set, 74 percent were achieved or exceeded, 7 percent are in progress or ongoing, 7 percent were not achieved within the timeline, and 12 percent are no longer relevant and currently under review. A full report on the accomplishments achieved as a result of the strategy is posted at [sustain.ubc.ca](http://sustain.ubc.ca). Starting in 2011, UBC will begin the development of a new sustainability strategy, which will build on lessons learned through I&A and set ambitious new targets to accelerate sustainability performance across campus.

## Social

The entire UBC community shares the challenge and responsibility of integrating sustainability into all aspects of campus life. The University encourages this through a variety of targeted campus engagement programs and initiatives.

- **Social Ecological Economic Development Studies (SEEDS):** Advancing UBC's commitment to explore and exemplify sustainability, the SEEDS program united operations and academics by fostering partnerships between 77 staff, 36 faculty members and 497 students. Since 2000, SEEDS has generated nearly 800 student reports, worked with 10 out of 14 UBC faculties and engaged over 4,000 participants.
- **Sustainability Coordinator Program:** The award-winning Sustainability Coordinator Program engaged 150 staff across one-third of departments at UBC's Vancouver campus, providing them with opportunities and resources to encourage behaviour change and foster sustainability in the workplace.
- **Sustainability in Rez Program:** The Sustainability in Rez program mobilized students to reduce water, waste, and energy consumption in residences and to build a culture of sustainability by training and supporting over 80 student leaders in 2010/11.
- **Student Involvement in Sustainability:** 1,100 students in Totem Park Residence participated in the 'Do It In the Dark' international energy competition, saving 9,431 kWh over the duration of the three-week competition and placing second overall in the competition. UBC was the only Canadian university to participate, achieving a 17.4 percent aggregate reduction in electricity use in Totem Park Residence.
- **UBC Food Services:** UBC was designated Canada's first 'Fair Trade Campus'. The accreditation from Fair Trade Canada recognizes UBC's leadership in Fair Trade purchasing and commits UBC to buy Fair Trade coffee, tea, chocolate and tropical fruit from producers who guarantee higher social, environmental and pay standards for farmers and workers.
- **Human Resources:** Focus on People: Workplace Practices at UBC completed its third year of initiatives, continuing to set out strategies and corresponding initiatives to develop a sustainable, healthy workplace, retain staff and faculty through positive opportunities and incentives, foster leadership and management practices, attract outstanding talent to UBC and identify and share institution-wide goals.

## Ecological

- **Climate and Energy:** To meet UBC's ambitious Climate Action Plan greenhouse gas (GHG) emissions reduction targets of 33 percent below 1997 levels by 2015, UBC has launched three major initiatives:
  - The **Continuous Optimization** program was launched in partnership with BC Hydro to reduce energy consumption and GHG emissions from academic buildings by 10 percent;
  - The **Bioenergy Research and Demonstration Project** broke ground in February 2011, which will reduce campus GHG emissions by 9 percent; and
  - Board 1 approval was reached on **converting the district energy system from steam to hot water**, estimated to reduce emissions by a further 22 percent.

- **Waste and Water:** In 2010, a campus-wide Waste Audit was completed. The results will be incorporated into the Waste Action Plan currently under development to set ambitious new waste reduction targets. A Water Audit was initiated to explore conservation opportunities in seven UBC buildings, which will inform the new Water Action Plan.
- **Transportation:** Opened a new, state-of-the-art bicycle parking facility at Buchanan Tower, increasing secure bike parking on campus by 34 percent. Bicycle end-of-trip facilities are now specified in the Design Guidelines of the newly released Vancouver Campus Plan and the campus transitioned to the Provincial U-Pass BC Program in September 2011.
- **Green Buildings:** Registered five new projects in the LEED system. All new construction and major renovations will achieve a minimum of LEED Gold and a total of eight projects will reach completion in 2011-2013, including the new Student Union Building and the Centre for Interactive Research on Sustainability (CIRS), which are targeting LEED Platinum and the Living Building Challenge.
- **Supply Management:** Launched Re-use it! UBC, designed to facilitate the reuse of low value goods between departments on campus and to minimize the number of reusable items from entering the waste stream. Since its launch in March 2011, Re-use it! UBC has 1,071 registered staff members, has exchanged over 18,500 lbs of goods, and has resulted in estimated cost savings of over \$24,700.
- **Green IT:** IT successfully ended the annual print of the UBC Telephone Directory and transitioned to an online directory, which will reduce paper consumption by 4.7 million sheets per year and eliminate 16 tonnes of CO<sub>2</sub>e annually, saving an estimated \$90,000 in staff and printing costs each year and eliminating the burden of recycling obsolete directories.
- The **Campus as a Living Lab Symposium** attracted over 325 students, faculty, staff and residents. Hosted by the UBC Sustainability Initiative (USI), the symposium offered presentations and conversations which explored the practical application of the living lab concept in UBC's campus life and campus systems.

## Economic

- **Financial Sustainability:** During the year the University generated a \$39m operating surplus as a result of higher than anticipated enrolment, favourable investment returns and selective clawback of historical surpluses previously allocated to units. In the 2011/12 budget, \$23m of this was allocated to specific strategic priorities and \$16m was set aside for contingency. The 2011/12 budget is balanced and structurally sustainable. The faculty framework ensures that faculties can generate additional revenues to meet their increasing costs, and administrative units are funded as required on a zero-based approach.
- **AMS Sustainability Projects Fund:** A student-run referendum was passed to establish the AMS Sustainability Projects Fund which will distribute over \$120,000 in the 2011/12 year to support student projects that reduce the ecological footprint of UBC and its students while increasing education and outreach opportunities.

## 2. Highlight Achievements

The UBC Annual Operational Sustainability Report 2010/2011 provides an overview of the sustainability activities at UBC's Vancouver campus and highlights achievements from the three areas of social, ecological, and economic sustainability as outlined in Inspirations and Aspirations: the Sustainability Strategy 2006-2010 from the past year. It reflects the efforts of the entire campus community and provides a snapshot of future priorities that are critical to maintaining and growing UBC's leadership position in operational sustainability and engagement. The appendix includes a presentation of progress against some key sustainability metrics selected from Inspirations and Aspirations: the Sustainability Strategy 2006-2010, for the final reporting period of 2010/2011.

### 2.1. POLICY AND GOVERNANCE



Sustainability is a core UBC community value that is embedded in university policy and guides the University's strategic directions. In 2010/11, two significant announcements solidified sustainability into campus planning at UBC:

- In June 2010, UBC adopted a new **Vancouver Campus Plan**, which embeds sustainability as the first of five interrelated strategies to achieve the Plan's vision. The Campus Plan focuses on setting long-term sustainability directions for land, infrastructure, buildings and landscape. Key strategies for achieving these objectives include using the campus as a living laboratory, providing more student housing, creating a public realm designed with nature, designing greener buildings and infrastructure, prioritizing a compact campus and enabling a vibrant campus life.
- Amendments to the **Land Use Plan**, adopted March 1, 2011, allow UBC to realize our vision of building a model university community that is vibrant, liveable and sustainable, which both supports and advances the academic mission. The amendments put an emphasis on increasing housing choice and affordability for faculty, staff and students and overall measures to enhance environmental sustainability.



## 2.2. SOCIAL PROGRAMS



### 2.2.1. SEEDS PROGRAM (Social Ecological Economic Development Studies)

The **UBC Social Ecological Economic Development Studies (SEEDS) Program** is designed for students to gain real-world sustainability experience, skills and knowledge while earning course-based credit. Students participating in the SEEDS program work collaboratively with faculty and staff to develop and implement projects that apply the “Campus as a Living Lab” concept to address real-life campus sustainability challenges. Solutions discovered in SEEDS projects have changed business practices across campus and have great potential to further accelerate organizational change for sustainability.

#### 2010/11 SEEDS PROGRAM ACHIEVEMENTS:

- In 2010/11, SEEDS united operations and academics by fostering partnerships between 77 staff, 36 faculty members and 497 students, resulting in 80 sustainability projects and 145 student reports. The outcomes of many of these reports will be implemented or influence the decision-making of staff.
- Innovative partnership between SEEDS and the **Alma Mater Student Society (AMS)** resulted in 24 student projects informing the development of the new ultra-green Student Union Building (SUB), including proposals for a rooftop garden and energy monitoring systems, transitioning to a paperless AMS, and developing a prototype for energy harvesting floor tiles.
- A SEEDS pilot project successfully initiated the first worm composting project in the SUB in an effort to determine the **feasibility of incorporating commercial scale vermicomposting** in the new SUB. If successful, food scraps from various restaurants will be turned into compost used to fertilize the rooftop garden, never leaving the building.

Since 2000, SEEDS has generated almost 800 student reports, worked with 10 out of 14 UBC faculties and engaged over 4,000 participants.



## 2.2.2. SUSTAINABILITY COORDINATOR PROGRAM

Currently in its 12th year of programming, the **Sustainability Coordinator (SC) Program** supports a network of 150 staff SCs, reaching one-third of departments in 2010/11. Each year, Campus Sustainability provides SCs with training, resources and materials, funding and educational opportunities to promote and implement sustainability initiatives and encourage behaviour change around sustainable practices in their department.

### 2010/11 SC PROGRAM ACHIEVEMENTS:

- A new Employee Sustainability Guide was developed in 2010 to educate new staff about basic waste reduction, energy conservation and green event planning and a set of sustainable purchasing practices will be shared in 2011.
- Campus Sustainability awarded six sustainability grants through the **Xerox Workplace Sustainability Fund**, which enables SCs to apply for funding annually to support departmental sustainability projects and innovations. Projects in 2010 included:
  - Two departmental **Styrofoam recycling pilot programs** at the UBC Hospital and Life Sciences Centre
  - An office LED lighting retrofit pilot in the Department of Psychology
  - Zero-waste events at the Faculty of Forestry
  - A waste-reduction promotion at UBC Athletics
  - A new **composting program at UBC Robson Square**



**150** Sustainability Coordinators foster sustainability in their departments

**73** departments reached through SC program

**6** sustainability grants awarded through Xerox Workplace Sustainability Fund

### 2.2.3. SUSTAINABILITY IN REZ PROGRAM

A joint initiative between Residence Life at **Student Housing and Hospitality Services (SHHS)** and **Campus Sustainability**, the **Sustainability in Rez** program seeks to foster the adoption of sustainable practices in residences at UBC, targeting water conservation, energy efficiency and waste reduction.

#### 2010/11 SUSTAINABILITY IN REZ ACHIEVEMENTS:

- Trained and supported over 80 **residence sustainability coordinators** who, in turn, engaged their peers to adopt sustainable lifestyle choices through outreach and educational events, campaigns, energy competitions and social media, reaching an estimated 7,441 students in 2010/11. Student sustainability committees continue to run in Totem Park and Place Vanier Residences, providing leadership opportunities and community building as well as promotion of sustainability practices, initiatives and events for residents.
- Launched **Green Star initiative** in September 2010 in Marine Drive, Walter Gage, Fairview, and Thunderbird residences. Green Star is a program designed to promote sustainable practices to residents in four main categories: Energy, Waste, Cleaning, and Food. Program support for the Green Star initiative includes 'green clean' booths in which residents are provided all materials needed to make their own biodegradable cleaning supplies as well as cooking workshops in partnership with **Sprouts** to promote local, organic, and fair trade food choices.
- Campus Sustainability developed **Sustainability in Rez Toolkits** on energy conservation, waste reduction, and sustainable food choices, tailored for dorm-style residences and suite-style residences, which will be launched in 2011.
- Student-led initiatives included 100-mile dinners, stuff swaps, lecture series, documentary screenings, green cleaning workshops, and energy saving competitions.



**80** student leaders trained in 2010/11

Over **7,000** students engaged in Residences

**1,000** students participated in Do It In the Dark energy conservation competition

## 2.2.4. STUDENT INVOLVEMENT IN SUSTAINABILITY

With over **20 active sustainability-related groups, clubs, and associations on campus**, student sustainability involvement at UBC continues to be significant.

### 2010/11 SELECT STUDENT-LED ACHIEVEMENTS:

- In 2011, a **student-run referendum** was passed to establish a Sustainability Projects Fund, which will distribute over \$120,000 in the 2011/12 year. The fund is designed to support student projects that reduce the ecological footprint of UBC and its students while increasing education and outreach opportunities
- **Sustainable Campuses NOW! regional conference** co-hosted by the Sierra Youth Coalition, goBEYOND, and UBC Common Energy brought over 40 presenters and 64 student delegates from 14 universities and colleges across Western Canada to UBC to develop skills and resources to enhance campus sustainability.
- Third annual **Chasing Sustainability Conference** hosted by the UBC Commerce Undergraduate Society Sustainability Committee featured outstanding speakers and industry professionals connected to the green business community.
- The **Alma Mater Student Society** installed two new Waterfillz water bottle refilling stations in the SUB as part of a year-long campaign to help students develop sustainable water consumption habits. Over 120,000 refills on the stations were recorded as of September 2011.
- Campus Sustainability continued to support **goBeyond** by offering two student internship positions for UBC campus outreach activities on climate action. In 2010/11, goBeyond held 10 events at UBC, had 35 active student volunteers, engaged 1,560 people directly through presentations, events and taking challenges, and reached over 1,000 students through climate justice teach-ins.



### NEW AMS SUSTAINABILITY PROJECTS FUND

In 2011, a student-run referendum was passed to establish a **Sustainability Projects Fund**, which will distribute over \$120,000 in the 2011-2012 year. The fund is designed to support student projects that reduce the ecological footprint of UBC and its students while increasing education and outreach opportunities.

## 2.2.5. HUMAN RESOURCES

*Focus on People: Workplace Practices at UBC* continues to set out strategies and corresponding initiatives to consider how we may improve our daily practices and develop a sustainable, healthy workplace, retain staff and faculty through positive opportunities and incentives, foster leadership and management practices, attract outstanding talent to UBC and identify and share institution-wide goals. Great strides have been made in our continued implementation of the Focus on People framework.

### 2010/11 HUMAN RESOURCES ACHIEVEMENTS:

- Focus on People completed its third year of initiatives in 2010/11. The annual report can be found at [www.focusonpeople.ubc.ca](http://www.focusonpeople.ubc.ca). Each year, UBC also provides a comprehensive benchmark report to the community that highlights the key human resource indicators used to track the success of the framework.
- Through a Healthy Workplace Initiative Program grant, a team from the **First Nations House of Learning (FNHL)** and the **Institute for Aboriginal Health (IAH)** has begun hosting a monthly community Feast Bowl meal that celebrates Aboriginal traditions, healthy eating, locally grown food, and the community of First Nations, Métis and Inuit people on the Vancouver campus.
- Led by the Integration Team Lead, a team has been established to help departments and units create strategic unit plans that will support the nine commitments in Place and Promise. Not everyone is experienced at creating a plan that will map to their broader **department's plan, which in turn is expected to map to the strategic goals laid out in Place and Promise.** The Integration Team helps people navigate this process.
- Human Resources also expanded a comprehensive medical surveillance program through **Workplace Health Services** to monitor work environments that may have potential occupational exposure to hazardous agents, in order to safeguard the health of faculty and staff.



## 2.3. ECOLOGICAL SUSTAINABILITY



### 2.3.1. CLIMATE AND ENERGY

On March 24 2010, President Toope announced UBC’s ambitious **Climate Action Plan** targets, committing UBC to reduce campus GHG emissions from 2007 levels by 33 percent by 2015, 67 per cent by 2020 and 100 per cent by 2050. As over 96 percent of UBC’s emissions come from campus buildings, with 76 percent of the total occurring at the steam generation plant, key actions focus on increasing energy efficiency in buildings and connecting alternative energy sources to the campus district energy system.

#### 2010/11 CLIMATE AND ENERGY ACHIEVEMENTS:

In 2010/11, UBC made significant progress on the key strategies outlined to achieve these aggressive targets:

- Launched the **Continuous Optimization** program in partnership with BC Hydro, which will be implemented in 72 core academic buildings to achieve an estimated 10 percent reduction in energy consumption and GHG emissions by 2015. In 2010, two pilot buildings underwent upgrades and began showing energy reductions of 15 to 30 percent. A Monitoring, Targeting and Reporting system was developed to ensure that buildings will continue to meet energy performance targets and energy savings will be maintained over time.
- In February 2011, UBC broke ground on the \$27 million **Bioenergy Research and Demonstration Project (BRDP)**, which will eliminate 9 percent of GHG emissions per year by reducing natural gas consumption used for generating steam. The first commercial-scale demonstration of biomass gasification co-generation in North America, this innovative research and teaching platform will yield valuable new knowledge in the clean energy sector and will inform new global standards for the performance of bioenergy systems.
- Board 1 approval was reached for one of the largest **steam to hot water conversions** in North America that will see 14 km of piping and \$85 million in capital investment on the Vancouver Campus. The replacement of the existing steam system infrastructure is anticipated to reduce emissions by 22 percent and save up to \$4 million a year in operational and energy costs annually.

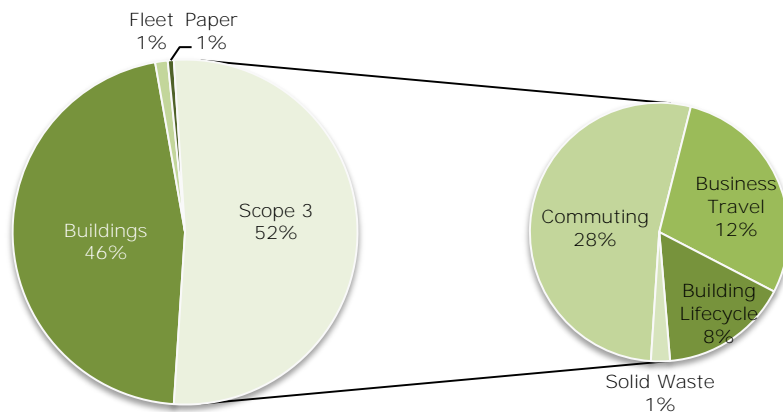


- In the first year of implementing the **Climate Action Plan**, 8 of the 111 actions and sub-actions were completed and a further 80 are in progress, ongoing or under development. The other 23 actions are not yet started, being re-evaluated, on hold, or are longer-term goals. For more information, please refer to the full **Climate Action Plan 2010 Report**.
- In 2010, GHG emissions for UBC’s Vancouver campus buildings, fleet and paper amounted to 58,353 tonnes CO<sub>2</sub>e, a 4.5 percent decrease from 2007 levels (Table 1). As required by provincial regulation, UBC became carbon neutral in 2010 by offsetting its remaining GHG emissions through the Pacific Carbon Trust.
- Going beyond provincial requirements, the annual **UBC Vancouver Campus GHG inventory** also quantifies several categories of optional or Scope 3 emissions (Figure 1). The combined Scope 3 emissions from commuting, business travel, building lifecycle and solid waste were greater than the offsettable emissions in 2010. While not directly responsible for Scope 3 GHG emission sources, UBC recognizes that they are within its sphere of influence and that the University can act to reduce these emissions.

**Table 1: UBC Vancouver Campus 2010 Key Performance Indicators Compared to 2007 Baseline**

Key Performance Indicator	2007	2010	Change from 2007 to 2010
Floor Space (square meters)	1,236,499	1,280,637	+3.4%
Staff and Faculty Employees (FTE)	12,461	12,524	+0.5%
Student Enrolment (FTE)	37,589	40,962	+9.0%
Offsettable GHG Emissions (tonnes CO <sub>2</sub> e)	61,082	58,353	-4.5%
GHG Emissions per Student (tonnes CO <sub>2</sub> e / FTE)	1.62	1.42	-12.3%

**Figure 1: UBC Vancouver Campus GHG emissions by source, 2010**



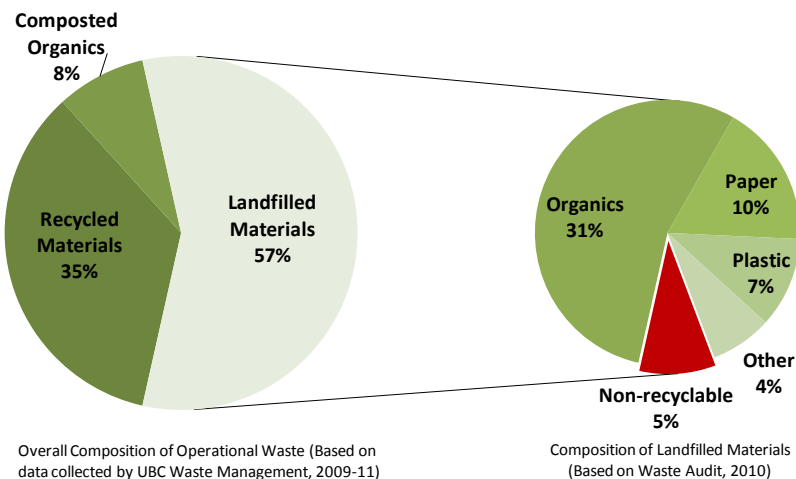
### 2.3.2. WASTE

In 2010/11, UBC diverted approximately 43 percent of its operational waste from the landfill. To enhance waste diversion on campus, UBC completed a Waste Audit and is embarking on a **Waste Action Plan**.

#### 2010/11 WASTE MANAGEMENT ACHIEVEMENTS:

- As part of the new **Vancouver Campus Plan**, UBC has made 75 percent construction waste diversion mandatory for all institutional buildings. In 2010/11, UBC exceeded this target and achieved an approximate construction and demolition diversion rate of 77 percent for institutional projects.
- In 2010, UBC conducted a Waste Audit to assess current waste disposal practices and waste composition at the Vancouver campus. According to the audit, the predominant materials that UBC still sends to landfill are organics, paper and plastic. The chart below (Figure 2) outlines the composition of UBC’s operational waste.
- UBC is currently developing a **Waste Action Plan** that will help establish a vision for waste reduction and management, and the actions required to achieve this vision. As the first step in the planning process, Campus Sustainability conducted a full-day workshop and open house in February 2011 to get input from the UBC community for the development of the Waste Action Plan. Approximately 40 staff, faculty, students, residents and others participated in the sessions, providing their visions and priorities for waste management, and actions the University could take to help realize these visions to strive towards a zero-waste campus.

**Figure 2: UBC Operational Waste Composition, UBC Waste Audit 2010**



**43%** diversion rate for operational waste

**77%** diversion rate for construction and demolition waste for institutional projects

**87%** diversion rate for construction and demolition waste for residential projects



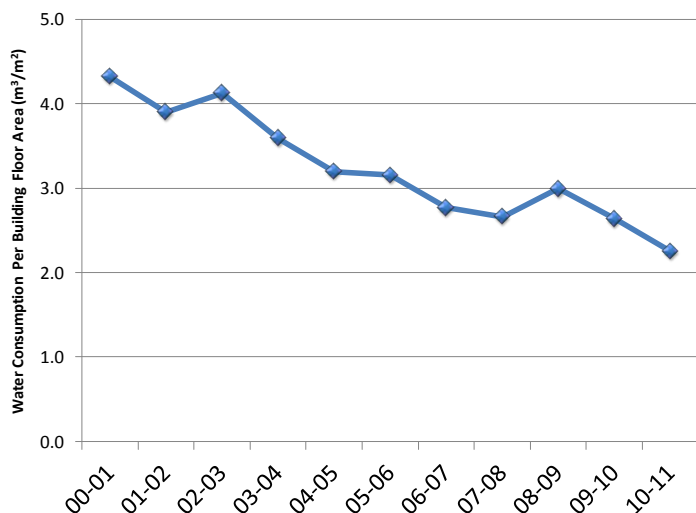
### 2.3.3. WATER

In 2010/11, UBC achieved a 48 percent reduction in water consumption in institutional buildings compared to 2000 levels, adjusted for growth. UBC is embarking on the development of a **Water Action Plan** that will set ambitious new water conservation targets for UBC’s Vancouver campus.

#### 2010/11 WATER ACHIEVEMENTS:

- As the first step in the planning process, Campus Sustainability conducted a full-day workshop and an open house in February 2011 to gain input from the UBC community for the development of a **Water Action Plan**. Approximately 80 staff, faculty, students, residents and others participated in the sessions, providing their visions and priorities for water conservation and management, and actions the University could take to help realize these visions. The input received at this session will be reviewed and considered by working groups in preparation of the draft plan.
- Five key priorities were identified for water management, including: rainwater harvesting; more efficient landscape irrigation; reduced water use and wastewater generation; managing water use in building operations; and education and engagement. Detailed and lengthy lists of potential actions that UBC could take in support of each priority were developed for further exploration.
- A Water Audit of seven UBC buildings is being conducted in 2011 to help develop an informed water management strategy and action plan. The Water Audit and Water Action Plan are anticipated to be complete in 2011.

**Figure 3: Water Consumption in Institutional Buildings, adjusted for growth, 2000-2011**



**48%** reduction in water consumption in institutional buildings (adjusted for growth) from 2000 levels

**80** staff, faculty, students, residents participated in Water Action Plan process

Water Audit conducted for **7** UBC buildings

## 2.3.4. GREEN BUILDINGS

With over 400 buildings on campus, buildings account for the largest component of UBC's environmental footprint. From building North America's greenest building to integrating ambitious energy efficiency targets into UBC's Climate Action Plan, UBC is continuing to transform the built landscape through innovative green building policies and programs.

### 2010/11 GREEN BUILDING ACHIEVEMENTS:

- Construction of the **Centre for Interactive Research on Sustainability (CIRS)** has progressed rapidly. When it opens in Fall 2011, CIRS is expected to be the most innovative and high performance building in North America and will serve as a living laboratory for leading-edge research, sustainable design practices, products, systems and policies.
- In 2010/11, UBC registered five new projects in the LEED system. All new construction and major renovations will achieve a minimum of LEED Gold and a total of eight projects will reach completion in 2011-2013, including the new **Student Union Building (SUB)** and the Centre for Interactive Research on Sustainability (CIRS), which are targeting LEED Platinum and the Living Building Challenge.
- Two residential buildings in UTown@UBC earned **Residential Environmental Assessment Program (REAP)** Gold certification in 2010/11, UBC's homegrown construction guidelines to encourage green development on campus. UBC is piloting use of REAP on two new student residence construction projects, one on the Vancouver campus and the other on the Kelowna campus, to deliver equivalence to LEED Gold.
- The **Vancouver Campus Plan** Design Guidelines published in 2010 include a table for "LEED Implementation at UBC", identifying LEED credits that are mandatory or prohibited at UBC and additional UBC requirements for implementing credits. The requirement that new buildings achieve energy reduction of 42 percent below MNECB (5 points from LEED-NC 2004 EA credit 1) was integrated into the UBC Technical Guidelines and communicated to every project team.



Campus Sustainability student interns host **tours of UBC's green buildings**. Over 6,000 guests have toured our green buildings since 2001. C.K. Choi and the Life Sciences Centre are the most popular building tours, and a tour is currently being developed for the new Centre for Interactive Research on Sustainability (CIRS).

### 2.3.5. TRANSPORTATION

**Transportation Planning** plays a crucial role on campus to encourage sustainable modes of transportation for UBC's campus of over 70,000 students, staff and faculty. Since 1997, transit ridership has increased by 232 percent and now accounts for 49 percent of trips to and from UBC. Average daily vehicle trips have decreased by 15 percent since 1997, despite a 42 percent growth in campus population. For more information, please visit the **2010 Transportation Status Report**.

#### 2010/11 TRANSPORTATION ACHIEVEMENTS:

- A new, **state-of-the-art secure bicycle parking facility** opened at Buchanan Tower in January 2011, increasing secure bike parking by 34 percent, providing 96 additional spaces. Another facility is under construction at North Parkade, bringing the total number of free, secure bike facilities across campus to seven. Planning is underway for two additional facilities to be located in the Fraser River Parkade and in the Chemistry/ Physics courtyard.
- In 2010, UBC published updated design standards and requirements for bike parking on campus as well as the first draft of UBC's 10-year **Campus Cycling Plan**, which identifies the type and location of future bike facilities on campus and sets a vision of making cycling at UBC safe, accessible to all, convenient, and enjoyable.
- Bicycle end-of-trip facilities for new development on-campus are now specified in the Design Guidelines of the newly released **Vancouver Campus Plan**.
- Students voted overwhelmingly to support the transition to the **U-Pass BC program** during the AMS Referendum held in March 2011, with 95 percent voting in favour. The new U-Pass BC Program has resulted in many program changes, including an increased monthly fee and changes to pass distribution.



Spencer Kovats

**65%** of UBC commuters used sustainable modes of transportation, including transit, carpooling, walking, and cycling.

**815** registered secure bike parking users in 2010

**15%** decrease in average daily automobile traffic levels compared to 1997 levels

### 2.3.6. SUPPLY MANAGEMENT

From working with Fisher Scientific to launch the Laboratory Plastics Recycling Program to developing a Sustainability Scorecard that will be submitted quarterly by UBC contracted vendors, **Supply Management** works directly with vendors to increase vendor and community engagement in respect to UBC's Supplier Code of Conduct.

#### 2010/11 SUPPLY MANAGEMENT ACHIEVEMENTS:

- Launched 2nd edition of the **Sustainable Purchasing Guide** in April 2010, including new sections on business travel and low-carbon travel choices, extended producer responsibility programs at UBC and sustainable furniture choices. Supply Management also partnered with Campus Sustainability to host a "Buying into the Future Fair", which showcased vendors and retailers and their sustainable products and services.
- Required the major campus supplier to automatically substitute 30 percent post-consumer recycled content paper for virgin paper, resulting in 97 percent of paper purchases having recycled content of 30 percent or greater.
- Worked with Acklands Grainger to begin the Reusable Totes program, which eliminated over 7,100 lbs of packaging in 2010 by using reusable totes for our deliveries.
- In collaboration with Campus Sustainability, launched **Re-use it! UBC** in March 2011, designed to facilitate the reuse of low value goods between departments on campus and to minimize the number of reusable items from entering the waste stream. As of September 2011, the website had over 1,070 registered members and has facilitated the exchange of over 18,535 lbs of goods, resulting in cost savings to the University estimated at over \$24,700 over a six month period. If deemed successful, the pilot is expected to expand to include UBC's student population and residential community members.



Javier Landaeta

**65%** reduction in paper consumption from 2000 baseline, despite a 34% increase in students

**97%** of paper purchased was 30% recycled content or higher

**7,100 lbs** of packaging eliminated through Reusable Totes program

**18,535 lbs** of goods exchanged through Re-use It! UBC

**\$24,700** cost savings over 6 month period via Re-use it! UBC

## 2.3.7. BUILDING OPERATIONS

### 2010/11 BUILDING OPERATIONS ACHIEVEMENTS:

- Adopted a '**Green Housekeeping Program**' that encompasses a number of comprehensive green cleaning/housekeeping initiatives which are being incorporated into the everyday operations of Custodial Services. As part of the Green Housekeeping Program, Custodial Services is committed to using high quality, non-toxic EcoLogo certified cleaning products (or Approved Alternates) in all spaces to ensure a healthy indoor environment for staff and visitors, and a safe working environment for staff, faculty and students. Currently 78 percent of buildings on campus serviced by Custodial Services use Green Seal certified products, with the goal to switch the remainder of academic buildings serviced by Custodial Services by 2012.
- A current **SEEDS project** is in progress in both laboratory and field testing settings with regard to the effectiveness of organic herbicides on the most common campus weeds. This collaborative project has revealed synergistic properties between organic herbicides, specific weed species susceptibilities and application methodologies.
- Purchased four electric trucks in 2010, bringing the total number of electric or hybrid vehicles in **UBC's fleet to 19, representing 5 percent** of the fleet.
- The new service delivery model for maintenance and repairs on campus has been a tremendous success with customer service ratings (NPS) exceeding 80 percent. Initiated in December 2009, trades were assigned into zones and aligned by academic department in an effort to simplify administrative processes, create a sense of ownership by the trades, and build strong relationships by instilling values of customer service excellence.



**78%** percent of buildings serviced by Custodial Services use Green Seal certified cleaning products

**4** electric trucks purchased

**5%** of UBC's fleet is electric or hybrid

**80%** customer satisfaction rate with new Zone Model



## 2.3.8. GREEN RESEARCH

UBC is taking progressive and innovative steps to reduce the impact of its research activities through a **Green Research initiative** that facilitates the sustainable reduction of the University's research footprint through training, guidance and consultation, and recycling and recovery initiatives.

### 2010/11 GREEN RESEARCH ACHIEVEMENTS:

#### Hazardous Waste Management:

- **Hazardous waste minimization** efforts in 2010 resulted in a 20 percent reduction in hazardous waste generation from the year before. Considerable source reduction was achieved in all of the main waste streams. The chemical waste, biohazard risk groups 1 and 2, solvents and pathological waste were reduced by 41 percent, 18 percent, 18 percent and 4 percent respectively. The pharmaceutical, biomedical, and sharps waste streams were reduced in 10 percent, 10 percent and 37 percent respectively.
- Active participation in all available **recycling programs** (including the chemical exchange, solvent recovery, silver recovery, oil and paint recycling, lab plastic recycling, battery recycling) resulted in an additional waste reduction of approximately 10.5 tonnes and estimated costs savings of \$28,312 in 2010.

#### Green Research:

- Ninety UBC faculty, staff and lab personnel attended the **2010 Green Research Workshop** to learn about hazardous materials substitution and source reduction, new opportunities in laboratory solid waste management and how to assess the energy consumption of laboratory equipment. Quarterly **Green Research Newsletters** provide UBC researchers with information to help reduce environmental impacts of research activities.
- A **Styrofoam Recycling Pilot** funded by the Xerox Workplace Sustainability Fund collected 81 bags of Styrofoam from the Brain Research Centre, Life Sciences Institute, and Michael Smith Laboratories in 11 months.
- The **Fischer Scientific Fund** awarded three staff members who are championing sustainability initiatives in their departments.
- A **laboratory plastics recycling program** was launched in June 2010 to engage a wider scope of research facilities at UBC.

**20 percent reduction**  
in hazardous waste  
generation from 2009

**10.5 tonnes waste  
reduced** and **\$28,000  
saved** via lab recycling  
programs

**90** staff and faculty  
attended Green Research  
Workshop

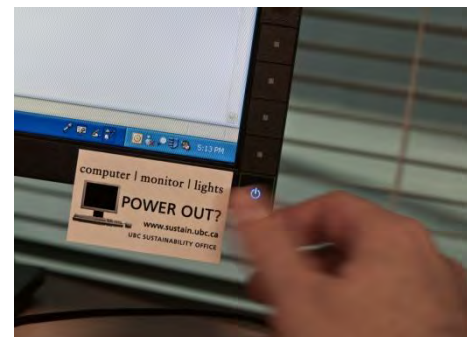
**81** bags of styrofoam  
diverted from landfill in  
Styrofoam Recycling  
Pilot

### 2.3.9. GREEN IT

From ending the annual print of the UBC directory to deploying virtualization technologies across campus, **UBC Information Technology**, together with its partners, is spearheading new initiatives to reduce paper and energy consumption and increase operational efficiencies. Integral to achieving **sustainability commitments outlined in UBC's IT's strategic plan** and roadmaps will be the continued integration of sustainable IT into its solutions and projects.

#### 2010/11 IT ACHIEVEMENTS:

- Successful completion of project to end the annual print of the UBC Telephone Directory and transition to an **online directory**. By eliminating the annual print of 10,000 directories, UBC has reduced paper consumption by 4.7 million sheets per year. The associated greenhouse gas emissions have been reduced by 16 tonnes of CO<sub>2</sub>e annually, equivalent to 3 percent of **UBC's entire annual copy paper emissions**. Ending the annual print saves an estimated \$90,000 in staff and printing costs each year and eliminates the burden of recycling obsolete directories.
- As part of the **Data Centre Consolidation initiative**, began project to build UBC's most sustainable data centre for research computing, which will address the current data center space shortage and consolidate existing IT assets, as well as leverage energy efficient design to reduce UBC's power utilization and carbon footprint.
- Virtualized 595 desktops and 1,310 servers, reducing the hardware lifecycle for desktops and reliance on physical systems, while reducing overall power consumption and improving reliability.
- In partnership with Supply Management and Xerox Global Services (XGS), further rolled out the Xerox Document Management Strategy (XDMS) across campus to achieve greater efficiencies while reducing overall costs. 520 devices have been deployed across UBC Vancouver and Okanagan campuses. All devices through XDMS are enabled with power saving settings, eliminate redundant print drives, and standardize 2-sided printing.



**4.7 million sheets** of paper saved by eliminating print of UBC Directory

**595** desktops virtualized

**1,310** servers virtualized

**520** devices deployed through Xerox Document Management strategy



### 2.3.10. STUDENT HOUSING AND HOSPITALITY SERVICES (SHHS)

**Student Housing and Hospitality Services (SHHS)** is responsible for the operations of Student Housing, Food Services, Child Care Services and Conferences and Accommodations at UBC. Through innovative waste management practices, sustainable procurement, campus and community involvement, expansion and redevelopment of living and social spaces and ongoing fiscal responsibility, SHHS demonstrates an ongoing commitment to creating and preserving a healthy and sustainable UBC.

#### 2010/11 SHHS ACHIEVEMENTS:

- Student Housing and Hospitality Services (SHHS) held the inaugural **'Do It In the Dark' international energy competition**. Over 1,100 students in Totem Park Residence participated, saving 9,431 kWh over the duration of the three-week competition, achieving a 17.4 percent aggregate reduction in electricity use in Totem Park. UBC was the only Canadian university to participate, placing second overall in the competition. Energy meters installed in each of the six houses in Totem Park enabled students to track electricity use in real time, using specially designed web-based software known as the Building Dashboard.
- UBC became the **first Fair Trade Campus in Canada**, the result of a collaboration between UBC Food Services, AMS Food Services and UBC Engineers Without Borders. The designation, which recognizes UBC for its national leadership in Fair Trade purchasing, commits UBC to buy coffee, tea, chocolate and tropical fruit from producers who guarantee higher social, environmental and pay standards for farmers and workers.
- Continuing to be a leader in local purchasing, in 2010/11, 50 percent of **UBC Food Services** expenditures were on food locally grown, raised, or processed within 150 miles of campus or certified organic.
- Launch of the **Eco-to-go container exchange program** in Residence doubled the number of students using containers and reduced disposable purchases by 25 percent. Residence students are issued a container that they can wash and reuse, or can drop off dirty in an exchange bin in residence and collect a clean container for their take out meal.
- UBC is the **largest campus-based child care provider in North America**, and continues to be the largest provider of infant/toddler child care in Vancouver. UBC currently has 527 spaces of licensed child care with plans to add an additional 37 spaces in 2011/12.

**1,100** students participated in energy conservation competition

**50%** of total expenditures on local/organic food

**First** Fair Trade Campus in Canada

**25%** reduction in disposable purchases via Eco-to-go Container Exchange program

## 2.4. UTown@UBC Community Development



**UTown@UBC** is UBC’s residential community on campus where over 18,000 students, faculty, staff and other residents live, work and learn together. As an emerging ecocity with innovative, sustainable community development and green building design, residents of UTown@UBC can live more sustainably with cultural amenities, shops & services, parks and public transportation all within walking distance. **UTown@UBC is making an important contribution to advancing UBC’s academic mission by contributing over \$300 million to the endowment.**

### 2.4.1. Housing

- UBC is creating options for faculty and staff to live on campus and has built one of the largest stocks of rental housing in the region, nearly half of which is non-market for faculty and staff. UBC also developed a co-development model, an ownership approach which offered UBC faculty and staff and others who work on campus the opportunity to jointly develop a townhouse or apartment project on campus allowing them to save up to 20 percent on **developers’ costs**. UBC is currently developing a **Housing Action Plan** to improve housing choice and affordability for faculty, staff and students.
- With over 9,000 beds, UBC Vancouver has more student housing on a single campus than any other university in Canada. As part of our efforts to reduce the number of students commuting to and from campus, UBC has also created the capacity to house 50 percent of current students on campus with a plan for 2,000 new beds in the next four years.

**27%** of all full-time students live on campus

Approximately **7,600** UTown@UBC residents live in the **UNA’s five** neighbourhoods

**52%** of UTown@UBC households are occupied by someone who studies or works on campus

Close to **1,000** UBC faculty and staff now live on campus

**20%** of all apartments and townhouses in campus neighbourhoods are rental, and nearly half of these units are non-market for faculty

### 2.4.2. Shops, Amenities and Community Resources

- Amenity obligations in the **Land Use Plan**, similar to the city of Vancouver, include requirements for daycare, green space, and community centres.
- **UTown@UBC** residents have access to hundreds of shops and amenities. These include a major grocery store, restaurants, retail stores, community and daycare centres, museums and galleries. Children and seniors alike have access to hundreds of recreational programs and community events offered through two community centres on campus.
- The **Community Services Card** offers discounted access to many of the on-campus attractions and services such as Beaty Biodiversity Museum and **UBC's athletic facilities** as well as free access to the Vancouver Public Library.
- Campus & Community Planning-sponsored programs such as **Community Grants**, offer residents funding resources to develop community-building initiatives.

### 2.4.3. Ecological Initiatives

- All new UTown@UBC residential buildings must meet UBC's stringent **Residential Environmental Assessment Program (REAP)** and two residential buildings in UTown@UBC earned REAP Gold certification in 2010/11.
- UBC and the **University Neighbourhoods Association (UNA)** are collaborating and engaging the community in sustainability planning through the **Water** and **Waste Action Plans** and the Community Energy and Emissions Plan, which will be completed in 2012.
- New cycling routes, interconnected greenways, pedestrian walkways and a campus shuttle service continue to encourage sustainable transportation on campus.

### 2.4.4. UTown@UBC and the Endowment

- To date, family housing has contributed over \$300 million **towards UBC's** Endowment Fund. The Endowment Fund allows UBC to give scholarships and bursaries to outstanding students, provide professorships to faculty and support researchers whose discoveries change lives.
- In addition, the University has committed future land development proceeds towards the **Student Housing Finance Endowment**, which will see revenue generated from the sale of family housing used to finance the construction of student housing.

## 2.5. ECONOMIC SUSTAINABILITY



### 2.5.1. Financial Sustainability

- During the year the University generated a \$39 million operating surplus as a result of higher than anticipated enrolment, favourable investment returns and selective clawback of historical surpluses previously allocated to units. In the 2011/12 budget \$23 million of this was allocated to specific strategic priorities and \$16 million was set aside for contingency.
- The 11/12 budget is balanced and structurally sustainable. The faculty framework ensures that faculties can generate additional revenues to meet their increasing costs, and administrative units are funded as required on a zero-based approach.

### 2.5.2. Responsible Investment Committee

- The University established a Responsible Investment Committee in January 2011 to provide recommendations to the UBC Board of Governors on how to integrate responsible investment into the current endowment investment process. The Committee is working with Shareholder Association for Research and Education (a Vancouver firm that advises investors on how to integrate environmental, social and governance issues into their investment management process) and will submit their recommendations to the UBC Board in Fall 2011.



### 3. Inspirations and Aspirations: Wrap Up Report

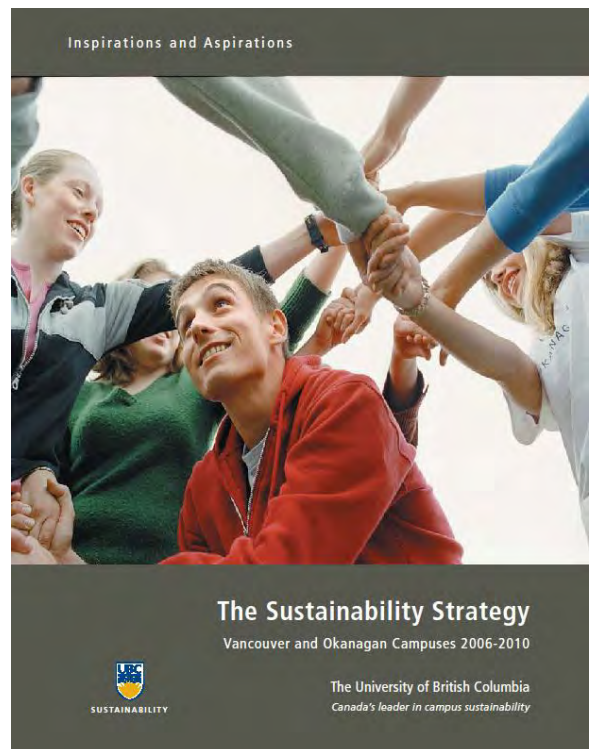
In 2005, UBC set out to produce the first comprehensive sustainability strategy at a Canadian university. **Inspirations and Aspirations: The Sustainability Strategy 2006-2010** was produced in response to UBC’s sustainable development policy (Policy #5), which calls for clearly targeted action plans in all departments to improve performance in key sustainability areas. In consultation with 20 departments, all 12 faculties, and all major student organizations at UBC Vancouver, UBC stakeholders developed a framework and identified major goals, objectives, and targets for sustainability at UBC, with at least one UBC unit assuming responsibility for achieving each of the defined targets.

Organized around nine core goals, 68 social, ecological, and economic targets were set, and allocation of roles and responsibilities allocated across UBC Vancouver units and faculties. In 2007, the Strategy was amended to include a **further 21 targets, representing UBC Okanagan’s** commitments to sustainability. This five-year strategy represents a university-wide commitment to sustainability, setting out social, ecological, and economic goals with specific targets, actions and timeframes.

The 2011 Inspirations and Aspirations Final Report reports on the accomplishments achieved as a result of the strategy and includes feedback on the success of the selected indicators to inform the development of the next sustainability strategy. Of the 68 social, ecological, and economic targets set, 74 percent were achieved or exceeded, 7 percent are in progress or ongoing, 7 percent were not achieved within the timeline, and 12 percent are no longer relevant and currently under review.

UBC will begin the development of a new sustainability strategy in 2011, which will build on lessons learned through Inspirations and Aspirations and set ambitious new targets to accelerate sustainability performance across campus.

The full Inspirations and Aspirations report is available at [www.sustain.ubc.ca](http://www.sustain.ubc.ca).



## 4. Future Priorities 2011/2012

### 4.1. Policy and Governance

- Starting in 2011, UBC will begin the development of a **new operational sustainability strategy**, which will build on lessons learned through Inspirations and Aspirations and set ambitious new targets to accelerate sustainability performance across campus.

### 4.2. Social

- In order to build a more sustainable university community, UBC is developing a **Housing Action Plan** to improve housing choice and affordability for faculty, staff and students on the Vancouver campus. The Housing Action Plan will be under development between Spring 2011 and Spring 2012.
- Campus Sustainability is embarking on developing a **behavior change strategy** that will support achievement of UBC's ambitious climate, waste and water goals. The behavior change component will aim to inspire and enable the campus community (students, faculty, staff and residents) to conserve resources and eliminate waste. The strategy will inform current behavior change programs such as the Sustainability Coordinators and Sustainability in Rez programs, sustainability planning and reporting activities, and may also spur new campaigns and initiatives.
- In 2011, UBC will expand the **Do It in the Dark energy conservation competition** to three additional houses at Totem Park and to Place Vanier, enabling the program to reach an additional 2,137 students.

### 4.3. Ecological

- The **Centre for Interactive Research on Sustainability (CIRS)** is expected to be the most innovative and high performance building in North America and will serve as a living laboratory for leading-edge research, sustainable design practices, products, systems and policies.
- The **Continuous Optimization** program will continue to be deployed from 2011-2015, optimizing building performance and achieving emissions reductions in combination with enhanced behaviour change strategies. In 2011, energy conservation measures will be implemented in the first 17 buildings and investigation will start in the next 25 buildings.
- **Converting the district heating system from steam to hot water** will break ground in July 2011. The project will occur in nine phases to minimize campus disruptions. Phase one will connect 15 buildings in the Lower Mall, including the Bioenergy Research and Demonstration Project, Totem Park student housing residences, the University Services Building and the Frank Forward building.
- The **UBC Bioenergy Research and Demonstration Project** is scheduled to open in March 2012, becoming the first commercial-scale demonstration of its kind in North America.
- **Water and Waste Action Plans** will outline key steps for achieving targets and new milestones in water conservation and waste reduction.

- A **Community Energy and Emissions Plan** that targets energy conservation and GHG reduction within the UTown@UBC community will be completed in 2012.
- The **Supply Management Sustainable Workshop**, scheduled for November 2011, will evolve procurement practices to standardize and scale best practices and drive sustainable operational purchasing programs. The workshop will include the City of Vancouver, contracted vendors, and internal stakeholders.
- As part of the **Green Research** program, an energy audit of laboratory spaces on campus will assess the current energy consumption and evaluate the potential for energy savings through innovative operational strategies. The inaugural Green Research Challenge will further promote environmentally sustainable research practices at UBC.



## 5. Measures of Sustainability (2010/11)

### 5.1. Selected Measurements for Model Campus and Campus Engagement Based on Data Collected for 2010/11

Model Campus	Result (trend data where available)
<p><b>Reduce Pollution</b> Reduce CO2 and equivalent emissions from institutional and ancillary buildings from 2000 levels (adjusted for growth)</p>	<p>2005-2006 – 22% reduction 2006-2007 – 24% reduction 2007-2008 – 26% reduction 2008-2009 – 22% reduction 2009-2010 – 25% reduction 2010-2011 – 22% reduction</p>
<p>Maintain daily automobile traffic at or below 1997 levels (absolute reductions)</p>	<p>2005-2006 – 24% reduction 2006-2007 – 22% reduction 2007-2008 – 20% reduction 2008-2009 – 18% reduction 2009-2010 – 19% reduction 2010-2011 – 15% reduction</p>
<p>Reduce daily single occupant vehicle trips (SOV) from 1997 levels (absolute reductions)</p>	<p>2005-2006 – 18% reduction 2006-2007 – 12% reduction 2007-2008 – 14% reduction 2008-2009 – 6% reduction 2009-2010 – 13% reduction 2010-2011 – 3% reduction</p>
<p><b>Conserve Resources</b> Reduce non-renewable energy consumption in institutional buildings by 30% (adjusted for growth) from 2000 levels</p>	<p>2005-2006 – 17% reduction 2006-2007 – 23% reduction 2007-2008 – 26% reduction 2008-2009 – 25% reduction 2009-2010 – 26% reduction 2010-2011 – 27% reduction</p>
<p>Reduce water consumption in institutional and ancillary buildings by 40% (adjusted for growth) from 2000 levels</p>	<p>2005-2006 – 34% reduction 2006-2007 – 42% reduction 2007-2008 – 40% reduction 2008-2009 – 29% reduction 2009-2010 – 37% reduction 2010-2011 – 48% reduction</p>
<p>Divert 55% of annual operational waste from the landfill (by 2010)</p>	<p>2005-2006 – 41% diversion 2006-2007 – 46% diversion 2007-2008 – 44% diversion 2008-2009 – 39% diversion 2009-2010 – 44% diversion 2010-2011 – 43% diversion</p>
<p><b>Livable Campus</b> Maintain the Land Use Plan goal that 20% of new residential dwellings will be rental housing, of which not less than half will be non-market housing that may include staff, faculty, cooperative, social, or other special housing needs.  <i>(Objective originally from the UBC Land</i></p>	<p>2010-2011 – 30% of units built and approved to date are rental and 64% of new rental housing is non-market (includes student housing in neighborhoods).</p>

Model Campus	Result (trend data where available)
<i>Use Plan (formerly Official Community Plan 4.1.16 (b))</i>	
<p>Work to maintain that not less than a 25% ratio of housing is provided specifically for full-time undergraduate students.</p> <p><i>(Objective originally from the UBC Land Use Plan (formerly Official Community Plan 4.1.14 (a))</i></p>	<p>2010-2011 – 27% of housing available for full-time undergraduates.</p> <p>An additional 567 new beds will be complete in 2011 as part of the Totem Park infill development, which will result in housing available to approximately 29% of undergraduate students.</p>
<p>Space Utilization</p> <p>Increase space utilization by at least 5% from 2000 levels (UBC-V)</p>	<p>2005-2006 – 2.5%</p> <p>2006-2007 – 4.0%</p> <p>2007-2008 – 5.5%</p> <p>2008-2009 – 6.5%</p> <p>2009-2010 – 7.5%</p> <p>2010-2011 – 9.0%</p>

Campus Engagement	Result (trend data where available)
<p>Support and engage staff, faculty and students in sustainability learning, practice and leadership development</p>	<p>2005-2006 – 344 SEEDS participants, 50 papers</p> <p>2006-2007 – 398 SEEDS participants, 64 papers</p> <p>2007-2008 – 500 SEEDS participants, 69 papers</p> <p>2008-2009 – 600 SEEDS participants, 91 papers</p> <p>2009-2010 – 627 SEEDS participants, 151 papers</p> <p>2010-2011 – 610 SEEDS participants, 149 papers</p> <p>2000-2011 – over 4,000 participants, 800 SEEDS projects</p>
<p>Demonstrate and recognize sustainable practices in the workplace and in student living</p>	<p>2005-06: 140 Sustainability Coordinators</p> <p>2006-07: 141 Sustainability Coordinators</p> <p>2007-08: 146 Sustainability Coordinators</p> <p>2008-09: 150 Sustainability Coordinators</p> <p>2009-10: 150 Sustainability Coordinators</p> <p>2010-11: 150 Sustainability Coordinators</p> <p>2010-11: 80 Residence Sustainability Coordinators conducted outreach to 7741 students</p>
<p>goBeyond</p>	<p>2010-11: 1,560 people directly engaged through presentations, events, and taking challenges</p> <p>1,000 students reached through teach-ins</p>

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