University of Calgary research being conducted on the Kwadacha Glacier to further our understanding of our climate.
Message from the President

It is with great pride that I present the University of Calgary 2010 – 2011 Sustainability Report – a reflection of our institutional commitment to excellence and leadership in sustainability, and the significant progress we have made toward achieving our goals.

Our vision for on-campus sustainability spans the full breadth of our institutional endeavours, from the operational and facilities management perspective where we have had our greatest focus and thus most significant progress to date, to our academic programs and research.

We have taken on this wide-ranging sustainability challenge because we believe we are uniquely positioned here to lead, to develop both interdisciplinary and systems-based solutions for the communities we serve, and to model sustainable development practices in our daily campus activities.

This report outlines the contributions of our passionate community of students, faculty and staff, whose innovative ideas and collaborative approach have fueled our progress towards a more sustainable campus.

Since the end of this reporting period (fiscal year 2010 – 11), we have strengthened our resolve and set our sights higher: our Eyes High strategic direction affirms sustainability as one of the University of Calgary’s core values and the accompanying 2012 Academic Plan identifies sustainability as one of seven institutional priorities. In the coming years we will coordinate our sustainability efforts in the academy to provide cutting edge research opportunities, leading curriculum and exciting co-curricular learning opportunities for students. In addition, our Institutional Sustainability Plan defines our path forward over the next four years. I invite you to read each of these plans, monitor and provide feedback on our progress, and join us as partners in this challenge.

The summary and full versions of the 2010 – 2011 Sustainability Report are available at: ucalgary.ca/about/sustainabilityreport.

Please share comments and questions on this report at: sustain@ucalgary.ca.

Sincerely,

Elizabeth Cannon
President
Introduction

WHAT IS THE SUSTAINABILITY REPORT?

The University of Calgary Sustainability Report (SR) is a report to the community on institutional progress in fulfilling our commitment to excellence and leadership in sustainability. The report encompasses:

- Planning, Administration & Engagement
- Learning & Research
- Campus Operations

The 2011 SR – the university’s first comprehensive report to the community – includes this summary report which provides highlights, and a full report with more details online at www.ucalgary.ca/about/sustainabilityreport.

WHY REPORT ON SUSTAINABILITY PERFORMANCE?

Demonstrating Progress on Commitments

The University of Calgary Sustainability Policy confirms our commitment to the pursuit of excellence and leadership in advancing sustainability in all that we do and to publish a biennial report on our progress. The Institutional Sustainability Plan (ISP) is our framework for developing and acting on our commitments. It establishes goals, key performance indicators, targets and actions for administrative, academic and operational activities.

The university’s new strategic direction—Eyes High: 2011 Vision and Strategy—is an ambitious vision to become one of Canada’s top five research universities by the university’s 50th anniversary in 2016. Eyes High identifies sustainability as a core value that will help the University of Calgary achieve our vision.
The university has made commitments as a signatory to other sustainability related frameworks, including: imagineCALGARY, the Talloires Declaration, and the University and College Presidents’ Climate Change Statement of Action for Canada.

Sustainability Reporting Trends

From a 2011 review of the world’s 250 largest companies, 95% reported information to publicly communicate progress on integrating sustainability principles within core activities. Parallel to the increase in Corporate Social Responsibility reporting, sustainability is growing as a key issue in higher education. Stakeholders expect academic programs to conduct research to address fundamental societal concerns. Students increasingly seek careers with socially responsible organizations and subsequently look to universities to prepare them for those opportunities. Employers seek graduates literate in sustainability principles, and benefactors are turning their focus towards institutions that have aligned their mandate with society’s most pressing challenges.

HOW WAS THE REPORT DEVELOPED?

We consulted a number of independent frameworks and programs to determine relevant sustainability indicators to include in the SR.

To ascertain sustainability indicators that are of material importance to our stakeholders we consulted the Sustainability Tracking, Assessment and Rating System (STARS), Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, and a number of other independent frameworks.

STARS was developed to facilitate measurement of sustainability performance in post-secondary education institutions. We referred to STARS extensively to gain a robust definition of material issues for campus sustainability. We also looked to the Talloires Declaration and imagineCALGARY plans for guidance on material issues. The content in the full report is based on the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. We self-declare the Full 2010 – 2011 Sustainability Report as meeting GRI Application Level C.

Internally, the ISP sets goals and targets for campus sustainability. The ISP was developed through a two-year consultation process with a cross-section of campus stakeholders, including key institutional governance councils, student groups, staff and faculty members, and members of senior administration. The ISP identifies issues of material significance to the University of Calgary.

HOW ARE WE DOING?

We earned a STARS Silver rating in 2011 as part of the first cohort of institutions to complete a STARS report. Benchmarking against this group of leading post-secondary institutions, the University of Calgary rated lower than average in Planning, Administration and Engagement, and Education and Research, but performed slightly better than average in Campus Operations.

The University of Calgary was awarded an A-ranking on the Sustainable Endowment Institute’s 2011 Green Campus Report Card, tying for top marks in Canada and placing 14th out of 53 participating institutions in North America. These external ratings confirm the University of Calgary as an emerging sustainability leader within Canadian higher education while identifying room for continued growth.

Our Stakeholders

- Students
- Faculty
- Staff
- Alumni
- Local Community
- Business Community
- Government
- Government

The University of Calgary earned a silver rating in the Sustainability, Tracking, Assessment and Rating System – a North American framework for assessing campus sustainability.
Planning, Administration & Engagement

**INTRODUCTION**

Planning, administration and engagement encompasses several organizational processes that determine our direction and capacity for addressing sustainability in:

- governance and administrative practices
- accessibility and diversity initiatives
- human resources and investment management practices
- our approach to community engagement

**OUR GOALS**

The university strives to attain the following goals as articulated in the 2010 ISP:

- Demonstrate leadership in sustainability in our institutional planning processes.
- Support diversity within the student population and strives to provide programs and services to support a diverse range of students.
- To be an employer of choice.
- To be a community leader in advancing sustainability.
- Additionally, the 2010 ISP commits to discussions within the Finance and Services portfolio to confirm appropriate investment goals, indicators, baselines, and a supporting action plan

**EVALUATION**

**Strengths**

Progress has been made in integrating sustainability throughout core governance and planning processes by adopting the ISP, and including sustainability principles in key planning documents. The Office of Sustainability supports administration, staff, faculty and students in meeting university goals established in the ISP, monitors and reports on progress on key performance indicators, and provides engagement and communications programs

**Opportunities**

Future strategic discussions about sustainability within Human Resources, Investment, Community Engagement, and Accessibility & Diversity programs are expected to focus on identifying and prioritizing opportunities for progress and developing measurable goals where appropriate.

Improving accessibility to education by offering awards and bursaries worth $3.8 million with consideration to financial need in 2010/2011.
2010 Climate Action Plan – The Plan confirms greenhouse gas emission reduction targets and identifies key strategies required to achieve those targets.

**PERFORMANCE**

Performance in Planning, Administration & Engagement is evaluated primarily through qualitative metrics based on STARS and GRI criterion and other evaluative frameworks. The development of quantitative metrics is under consideration for some areas and may be included in future reports.

**CURRENT INITIATIVES**

Governance, Planning and Coordination

**Sustainability Policy** – The Policy commits the University to “excellence and leadership in advancing the pursuit of sustainability in teaching, research, campus operations and community service.”

**2010 Institutional Sustainability Plan** – The Plan provides a multi-year framework for developing and acting on the University’s commitments to sustainability.

**Board of Governors** – The Environment, Health, Safety & Sustainability Standing Committee meets quarterly to review progress and advise the Board.

**The Office of Sustainability** – The Office oversees coordination and implementation of the Institutional Sustainability Plan and reporting on progress.

Diversity & Accessibility

**Workplace Diversity and Employment Advisory Committee** – The committee advises senior administration on plans and initiatives to improve diversity and employment equity.

**President’s Advisory Committee on the Status of Women** – Develops initiatives and makes recommendations for action. Monitors outcomes of the recommendations and receives any complaints of discrimination whenever normal channels are insufficient.

**Affordability & Diversity Support Services** – Key services are offered through the Women’s Resource Center, the Native Centre and the Disability Resource Centre to advance equality and facilitate supportive and accessible learning environments. Over 80 awards and bursaries (worth $3.8 million in 2010/2011) were offered with consideration given to financial need.
Human Resources

**Employee Engagement Survey** - An employee engagement survey was conducted in March 2011 to collect feedback on employees’ perceptions about working at the university, and opportunities for improvement.

**Childcare** - Two accredited child care facilities on the Main Campus provide full-day care and education for children ages 3 months to 6 years.

Health & Wellness

**Wellness Centres** – Facilities on campus offer counselling services to faculty, staff, and immediate family members. Employees have access to a Health & Wellness Spending Account. The Students’ Union Wellness Centre supports student wellness by providing a range of health, dental, optometry, counselling and spiritual services.

Investment

The university is in the process of assessing how to formalize sustainable investment practices for our endowments and investments.

Campus Engagement

**SustainabilityON** – Engages the campus community in everyday behavioural changes to help meet our sustainability commitments. Central to this program in 2010-2011 were 43 department coordinators, and 36 student volunteers.

**Sustainability Stewardship Working Group** – Brings staff, faculty, and students together to develop and implement campus projects. Comprised of 14 portfolios, this structure enables cross departmental collaboration and engagement.

Community Engagement

**imagineCALGARY** – As one of over 50 participating partners, the university has been contributing to the goals and targets in the imagineCALGARY community plan and is assisting with developing new monitoring and governance frameworks.

**Public Lectures and Workshops** – A number of faculties institutes, and student groups host lectures and events that engage the greater community on sustainability related issues.

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**Campus Master Plan** – “Embrace the three pillars of sustainability—environmental, social and economic—in every aspect of the planning and implementation of the master plan.”
Learning & Research

INTRODUCTION
Institutional sustainability leadership extends beyond campus operations and administration to developing leading thinking on sustainability through curriculum, research, and co-curricular initiatives.

OUR GOALS
The university’s 2009 academic plan, Academic Foundations, establishes principles to guide planning and execution of learning and research, including:
- Student success
- Excellence in research, scholarship and creative activity
- Interdisciplinary education & research
- Return to community

This document has been superseded by the newly released 2012 Academic Plan which includes sustainability as one of seven academic priorities. The 2010 Strategic Research Plan provides further direction for all research at the university, identifying a number of research priorities, including Energy and Environment, that serve as platforms for collaboration and interdisciplinary development. These priorities have since been updated in the 2012 Strategic Research Plan.

Supporting these foundations, the ISP commits the institution to advance discussions in the academic community on how and where sustainability education is appropriate, and how institutional planning documents should articulate sustainability education and research priorities. As well, the ISP commits to engaging students to confirm sustainability learning priorities in the co-curricular context.

EVALUATION

Strengths
The university has considerable depth in course offerings and research programs related to sustainability. The university draws upon diverse and expert faculty as we develop sustainability goals and priorities for teaching, learning and research. Additionally, a vibrant student community participates in co-curricular sustainability activities.

Opportunities
The campus can be used as a living laboratory for sustainability through partnerships that provide experiential learning and applied research opportunities, and that concurrently support sustainability leadership in operations.

Three key strategies that can further integrate sustainability into teaching and learning activities to enhance student learning outcomes include:
- Infusing sustainability content in existing courses.
- Developing a sustainability minor accessible to students in all faculties.

Providing programs for sustainability-focused faculty development.

Proportion of graduates from programs with required sustainability content

45%
CURRENT INITIATIVES

Curriculum

- 275 of 4,241 courses are sustainability-related or sustainability-focused.
- 33 of 50 departments or programs offer at least one sustainability-related or sustainability-focused course.
- 2,760 of 6,128 students graduated last year from programs with required sustainability content.
- Corporate Knights magazine ranked the university #1 in Canada for integrating sustainability in the engineering program, #2 for the Master of Business Administration program, and #3 for the undergraduate business program.

In addition to individual courses, the university offers sustainability-related content in 28 degree programs. Five are specifically focused on sustainability:

- Environmental Science (BSc)
- Development Studies (BA)
- Master of Environmental Design (MEDes)
- Global Energy Management and Sustainable Development (MBA)
- Sustainable Energy Development (MSc)

Research

- Over 100 sustainability-related research projects were in progress in 2010 – 2011.
- 24 of 50 departments had at least one faculty member engaged in sustainability-related research.
- Over 100 of approximately 1,740 faculty members conducting research are addressing sustainability.

Adopted in 2010, the Strategic Research Plan is aimed at achieving excellence in research at the university. The plan identifies four priorities for sustainability-related research:

- Advancing health and wellness
- Ethics, social responsibility, and governance
- Sustainability of energy and environment
- Understanding life on Earth

At the 5th Annual Undergraduate Research Symposium in 2010, more than 35 of 130 presentations were related to sustainability. A $1000 award was given for excellence in sustainability research.

Dr. Curtis Berlinguette investigates new materials for use in next-generation photovoltaic devices

Dr. Patrick Feng examines the accuracy and effectiveness of eco-labels
Co-curricular Initiatives

- **667 students contributed over 8,520 hours in community service learning programs.**
- **6,000 students registered for Co-Curricular Record, each contributing at least 20 hours annually to approved volunteering programs.**
- **12 sustainability related undergraduate and graduate clubs and associations.**

The Centre for Community-Engaged Learning integrates student learning with the overall needs of our community through curricular and co-curricular programming. Last year, 400 students participated, contributing approximately 3,520 hours in certified activities.

The Students’ Union Volunteer Services fosters volunteerism, social innovation, collaboration, community/social enterprise and service learning. Last year, 267 students participated, contributing approximately 5,000 hours.

More than a 1000 students are directly involved in over a dozen student clubs and faculty-student associations active in different aspects of sustainability such as the Eco Club and Engineers Without Borders. University of Calgary teams participate in international solar car and solar housing competitions annually.

667 students participated in community service learning programs
Campus Operations

INTRODUCTION

The institution’s buildings and infrastructure, food and residence services, information technology and purchasing practices all function to support institutional activities and the academic mission. Sustainability practices are critical aspects of campus operations as the university stewards natural resources, manages emissions, solid-waste and supplies, and protects the health, safety and well-being of employees and students. Modeling sustainability in campus operations provides essential linkages to sustainability learning and research and the student experience.

OUR GOALS

The 2010 ISP confirms 12 goals and 34 targets for sustainability leadership across 12 operational areas. Some key targets are included in the performance table below. A complete list of metrics and related programs can be found in the full report.

EVALUATION

Strengths
Recent efforts to develop new management systems for solid waste on campus are expected to reduce the amount of waste generated and disposed in landfills. Initiatives to increase water efficiency and use grey water have substantially reduced potable water consumption on campus. Improving the sustainability performance of new and existing buildings have resulted in a net decrease in GHG emissions from a 2008–2009 baseline despite institutional growth. Additional details are available in the full report.

Reduced total scope 1 (direct) and scope 2 (indirect) GHG emissions to 238,420 tonnes of CO₂ equivalent.

Opportunities
Priorities for campus operations identified in the ISP include improving the university’s sustainability performance monitoring systems and continued development of strategic plans regarding water, transportation, health and wellness, purchasing, and dining services. Continued improvement of staff awareness and engagement is essential to support successful implementation of initiatives.

Potable water consumption reduced by 33%
CURRENT INITIATIVES

Greenhouse Gas Emissions

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<tr>
<td>Emissions – Scope 1 and Scope 2</td>
<td>240,000 CO$_2$e</td>
<td>1% decrease</td>
<td>-45%</td>
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The university’s Climate Action Plan was adopted in 2010 and identifies actions for reducing operational greenhouse gas emissions, proposes emission reduction goals, and underscores related research, teaching, and co-curricular activities. Current energy efficiency initiatives are anticipated to significantly reduce emissions in subsequent years. The full SR highlights progress towards fulfilling our commitment to the University and College Presidents’ Climate Change Statement of Action for Canada.

Energy

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<tr>
<td>Total building energy consumption from direct and indirect sources</td>
<td>TBD</td>
<td>444,520 MWh</td>
<td>TBD</td>
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The Energy Performance Initiative is aimed at reducing operating costs and greenhouse gas emissions. The program manages energy throughout the building cycle by addressing issues of energy supply, new and existing buildings performance, systems operations and maintenance, user demand management, and engagement, with an anticipated annual operating savings of over $4 million from initiatives completed by the end of the 2010 – 2011 academic year.

Built Environment

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<tr>
<td>Percentage of new buildings certified minimum LEED Silver</td>
<td>1 LEED Platinum project</td>
<td>5 of 5 projects certified or registered for LEED Silver or higher (1% project LEED Gold)</td>
<td>100%</td>
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All buildings and projects under construction are pursuing LEED (Leadership in Energy and Environmental Design) certification including the Taylor Family Digital Library, Energy Environment Experiential Learning Building, Yamnuska Hall and the High Density Library. The recently completed Veterinary Medicine Clinical Skills Building was awarded LEED Gold certification. In older buildings, infrastructure maintenance continues to address energy and water efficiency, asbestos abatement and utilizing low emitting materials and finishes.

Transportation

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<td>Percentage of students/staff using alternatives to single occupant vehicles for the majority of computer trips</td>
<td>TBD</td>
<td>Students 74% Staff 49%</td>
<td>TBD</td>
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The Clinical Skills Building, home to our Faculty of Veterinary Medicine, is LEED® Gold Certified.
Initiatives include a discount transit pass available to all students, an enforceable idle-free program, use of biodiesel fuels in university vehicles, incentivized car-share and carpool programs, and engagement programs.

### Waste

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<tr>
<td>Solid waste diverted from landfill</td>
<td>TBD</td>
<td>35%</td>
<td>65%</td>
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A Recycling & Waste Management Plan was completed through a multi-stakeholder consultation process. Additionally, new recycling infrastructure design standards, and engagement campaigns encourage waste reduction and diversion on campus. Following pilot projects, efforts are underway to begin comprehensive composting of organic food waste. More than 20 waste streams are now diverted from the landfill.

### Water

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<tr>
<td>Potable water consumption</td>
<td>1,540,600 m³</td>
<td>33% decrease</td>
<td>TBD</td>
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Engagement campaigns and the installation of low-flow fixtures have reduced potable water consumption. Grey water is being used for toilet-flushing in two new buildings and 100% of site irrigation is supplied by reused process water.

### Purchasing

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<tr>
<td>Percentage of office paper expenditure with recycled content</td>
<td>&lt;1%</td>
<td>29%</td>
<td>TBD</td>
</tr>
<tr>
<td>Percentage of cleaning products that are Green Seal and EcoLogo certified</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
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Responsible purchasing Initiatives include facilitating increased purchasing of recycled paper, the availability of sweat-shop free apparel at the campus bookstore, using furnishings certified to have low chemical emissions, and a commitment that 100% of IT desktop purchases and cleaning supplies used in facilities maintenance are certified environment friendly.

### Dining

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<td>Percentage dining services food sourced responsibly</td>
<td>TBD</td>
<td>24%</td>
<td>TBD</td>
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</table>

In the University of Calgary composting pilot program food organics are composted and used on campus grounds. The Students’ Union has worked with its food vendors to remove all polystyrene foam containers. The university’s contracted food service provider has introduced certified fair trade and organic coffee and tea, sustainably sourced seafood, and more local products.
University of Calgary students designed and built a solar home for the 2009 Solar Decathlon, placing 6th in the international competition hosted in Washington, D.C.

For the full version of this report, or to share your feedback and ask questions, please contact:

University of Calgary
sustain@ucalgary.ca
ucalgary.ca/about/sustainabilityreport
Contact Us

For more information on sustainability at the University of Calgary please visit:

ucalgary.ca/sustainability