What is Sustainability?

The University of Calgary Sustainability Policy defines sustainability as articulated by the Brundtland Commission, formally the United Nation’s World Commission on Environment and Development:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

I am pleased to present the University of Calgary’s 2012-2013 Sustainability Report, which outlines our progress towards our institutional commitment to excellence and leadership in sustainability. The report details the progress made towards the goals outlined in our 2010-2011 Institutional Sustainability Plan to the end of March 2013.

This report highlights the progress we have made over the past two years in research and education for sustainability, how our students are leading the way in daily campus activities, and how we are advancing the social, environmental, and economic dimensions of sustainability in the governance and operational practices of our institution.

The University of Calgary received a 2013 Sustainability, Tracking, Assessment and Rating System (STARS) Gold rating in recognition of our achievements – currently the highest score achieved by any Canadian institution. The STARS program measures and encourages sustainability in all aspects of higher education and we are very proud to have received our highest overall score to date.

The University of Calgary continues to coordinate our sustainability efforts in the academy to provide cutting edge research opportunities, leading curriculum and exciting co-curricular learning opportunities for students. Sustainability is one of the core values outlined in our strategic vision, Eyes High, and the accompanying 2012 Academic Plan identifies sustainability as one of our seven institutional priorities. Our vision spans the full breadth of our institutional endeavors, from our academic programs and research to our operational and facilities management practices. Sustainability at our institution encompasses the collective work of our students, faculty, staff and our surrounding community through day-to-day practices. Our progress to date is a reflection of the leadership role our community has embraced as sustainable global citizens. We are very proud of the efforts of the University of Calgary campus community.

I encourage you to take time to learn more about our progress since the 2010-2011 fiscal year, to provide feedback on our progress, and join us as partners in this challenge.

The 2012-2013 Sustainability Report and accompanying data index, which fulfill our commitment to the Global Reporting Initiative, are available at: ucalgary.ca/about/sustainabilityreport.

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

Sincerely,

Elizabeth Cannon
President
Our Challenge

"On October 31, 2011 our global population reached 7 billion and is on track to reach 9 billion by 2050... Consumption of natural resources outpaces the earth’s capacity to replace them and to absorb or adapt to wastes. It is clear that our earth’s support systems are under increasing pressure, and many question whether current approaches are sustainable. Local and global social systems are similarly under increasing pressure with dire conditions in both developed and developing economies. Disenfranchisement and conflict will contribute to further breakdown. Identifying new approaches are some of society’s biggest challenges.”

University of Calgary 2012 Academic Plan

As centres for advanced education and research, and hubs for multi-disciplinary collaboration, universities are at the forefront of developing solutions to these complex challenges and preparing future generations of leaders. Universities have the responsibility to meet student aspirations to participate in building a sustainable future and to fulfill student expectations that their university experience will equip them for leadership in sustainability – in concert with developing expertise in their selected discipline.

Our Commitments

The University of Calgary’s Sustainability Policy communicates our commitment to the pursuit of excellence and leadership in advancing sustainability in all that we do. In 2011 we launched Eyes High, our strategic vision to become one of Canada’s top five research universities by 2016. This vision confirms sustainability as one of our core values. Externally, we have demonstrated this commitment 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 Planning

As part of a two-year process, our Institutional Sustainability Plan (ISP), was developed in collaboration with several stakeholder groups representing a broad cross-section of students, faculty, and staff. The 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.
Our Progress

This year, we completed our second submission for the Sustainability Tracking, Assessment, and Rating System (STARS), a framework for measuring sustainability performance in higher education. stars.aashe.org.

Our 2013 STARS submission received a Gold rating which is currently the top rating among Canadian institutions. Over 260 institutions in North America, including 22 in Canada, have completed STARS submissions to-date.

Notes

*Our peer group includes the U15, which is Canada’s 15 research-intensive universities. To date, 8 of the U15 publicly report their sustainability performance through STARS.

Working Together

As we continue working to weave sustainability into our institution’s DNA, advancing sustainability is an organizational value across the academy.

Our Board of Governors’ Standing Committee on Environment, Health, Safety and Sustainability provides oversight on operational sustainability matters.

The Executive Leadership Team provides strategic oversight for sustainability including governance, academic endeavours, and operating practices.

In 2012, we appointed our first Chief Sustainability Officer, who works as an organizational strategist with our senior leadership team to integrate sustainability values and aims into the institution’s teaching, co-curricular student activities, research, service learning, and operations across campus.

Our Academic Committee for Sustainability was launched in 2013, bringing together 25 thought leaders from the academic community representing all faculties. This committee is advising on development of the academic arm of our ISP.

We also collaborate through our Sustainability Stewardship Working Group, which brings more than 100 students, faculty, and staff together to advance operational strategies and community engagement.

Our Office of Sustainability works to position the university as a leader in sustainability by building pan-university awareness, participation and interdisciplinary collaboration in sustainability stewardship, and to build institutional capacity to achieve innovation and measurable results.

Sustainability involves complex and interconnected issues, and we are committed to having all members of the campus community working together to accomplish our goals.

<table>
<thead>
<tr>
<th>University of Calgary in Numbers</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students</td>
<td>27,915</td>
<td>30,476</td>
<td>32,021</td>
</tr>
<tr>
<td>Undergraduate Students</td>
<td>22,539</td>
<td>24,586</td>
<td>25,928</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>5,376</td>
<td>5,890</td>
<td>6,093</td>
</tr>
<tr>
<td>Degrees and Diplomas Awarded</td>
<td>6,001</td>
<td>6,214</td>
<td>6,389</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>4,921</td>
<td>4,697</td>
<td>4,934</td>
</tr>
<tr>
<td>Sponsored Research Income ($M)</td>
<td>264</td>
<td>286</td>
<td>266</td>
</tr>
<tr>
<td>National Research Ranking</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Budget ($M)</td>
<td>979</td>
<td>1,051</td>
<td>1,175</td>
</tr>
<tr>
<td>Unrestricted Net Assets ($M)</td>
<td>-58</td>
<td>47</td>
<td>63.8</td>
</tr>
<tr>
<td>Fundraising ($Million)</td>
<td>79.1</td>
<td>123.7</td>
<td></td>
</tr>
<tr>
<td>Endowment Balance ($M)</td>
<td>340</td>
<td>497</td>
<td>568.3</td>
</tr>
</tbody>
</table>

The Role of Universities in Research for Sustainability

The challenges of creating a sustainable future present numerous wicked problems – problems with complex interdependencies including technical and social dimensions. With a critical mass and diversity of disciplinary expertise, universities are uniquely positioned to address society’s most pressing challenges. New approaches and innovations are needed from a broad cross section of disciplines and areas of expertise. Additionally, collaboration across institutions and in partnerships with private sector and other public sector entities is essential in both research and commercialization of discoveries and solutions. Universities have the expertise to be profound facilitators of the kind of interdisciplinary and cross-sector collaboration required to tackle societies grand challenges.

Faculty Members Involved in Sustainability Research

<table>
<thead>
<tr>
<th>Year</th>
<th>2010/11</th>
<th>2012/13</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>109</td>
<td>251</td>
<td>360</td>
</tr>
<tr>
<td></td>
<td>1,740</td>
<td>1,773</td>
<td>3,513</td>
</tr>
</tbody>
</table>

Enbridge Centre for Corporate Sustainability launched
The university’s 2012 Strategic Research Plan identifies six research themes that will leverage our distinct capabilities while addressing the needs and challenges of our society as a whole:

**Brain and mental health**
- 1 in 3 Canadians will be affected by a brain or nervous system disorder or injury in their lifetimes and 1 in 4 Canadians will have a stroke in their lifetime. These trends have major implications for our health care system.

**Human dynamics in a changing world: smart and secure cities, societies, and cultures**
- Urban growth, multiculturalism, transportation challenges, sustainable resource use and the desire for a rich social environment are among the key issues our cities face.

**New earth-space technologies**
- This theme cuts across faculties and disciplines, integrating research strengths to create new technologies for improving global communication networks and environmental monitoring.

**Engineering solutions for health: biomedical engineering**
- Solving problems in the health field by developing technologies and better treatment methods for those affected by stroke, Alzheimer’s, arthritis, bone and joint conditions, heart disease, and neurological injury.

**Infections, inflammation and chronic diseases in the changing environment**
- Chronic diseases, infections, inflammatory states, and pain combine to create the greatest burden on health on a global basis. They are influenced by genetic predispositions and stress, but we now also know that the health of humans is closely intertwined with that of domestic animals, wildlife and the environment, including their respective microbiomes.

**Energy innovations for today and tomorrow**
- Key issues facing the energy sector and societal demands include discovering energy supplies and new sources; extracting efficiently with minimal environmental impacts; exporting to new markets; and planning for the future.
Building Research Capacity

Over the last year we have been working to facilitate the formation of self-organized “confederations of scholars” to generate interdisciplinary collaborations, each bringing together faculty from across the university and engaging our scholars in active discussions, roundtables, and national and international workshops. To support the advancement of each of our key themes, over 60 new postdoctoral fellowship positions have been confirmed and are currently being filled.

Progress on Key Themes

Particular headway has been made in the Energy theme. In 2012-13, through broad consultation among our researchers and community partners, we developed a comprehensive Energy Research Strategy to advance the area Energy Innovations for Today and Tomorrow and to identify grand challenges that draw on our disciplinary and interdisciplinary strengths.

In support of the Energy theme and to build capacity, the process has been initiated to recruit over 30 assistant professors, postdoctoral scholars and research chairs to work on priority research topics.

Partnerships and Collaboration

The University of Calgary partners on research pertaining to sustainability in the communities in which we are a part of as well as communities abroad. The Urban Alliance, a research partnership between the City of Calgary and the University of Calgary, brings together researchers and city staff to ask questions and find answers for local urban challenges. Research themes encompass both technical and social dimensions of creating a more sustainable community.

Our new Enbridge Centre for Corporate Sustainability facilitates leading-edge research on triple bottom line decision-making in Canada, and across North America.

Additionally, the University of Calgary is home to a number of institutes and centres, and engages in various regional, national, and international networks, a sample of which is below:

- World Forum of Universities of Resources on Sustainability (WUFRS)
- Economics and Environmental Policy Research Network (EEPRN)
- Canadian Institute of Resources Law at the University of Calgary (CIRL)
- Carbon Management Canada Inc.
School of Public Policy at the University of Calgary
- Alberta Global Forum
- Biogeoscience Institute
- Calgary Centre for Innovative Technology (CCIT)
- Calgary Institute for the Humanities (CIH)
- Centre for Public Interest Accounting (CPIA)
- Institute for Advanced Policy Research (IAPR)
- Institute for Sustainable Energy, Environment and Economy (ISEEE)
- Arctic Institute of North America (AINA)
- Bamfield Marine Sciences Centre (BMSC)
- Canadian Energy Research Institute (CERI)
- Institute of Health Economics (IHE)
- Macleod Institute for Environmental Analysis
- Sustainable Forest Management Network (SFMN)
- And many others: http://www.ucalgary.ca/vpr/research/institutes

### Departments Involved in Sustainability Research

<table>
<thead>
<tr>
<th></th>
<th>2010/11</th>
<th>2012/13</th>
<th>PEERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27</td>
<td>27</td>
<td>50</td>
</tr>
</tbody>
</table>

2010/11 54%  2012/13 54%  PEERS 44.23%

### 2012-13 Highlights

- World Forum of Universities of Resources on Sustainability (WUFRS) launched in Summer 2012. The University of Calgary is one of more than 50 international universities partnering on this initiative to explore and develop solutions to resource use issues.
- The Enbridge Centre for Corporate Sustainability (ECCS) launched in 2012 to advance the science and practice of achieving the triple bottom line in business and in policy.
- The Economics and Environmental Policy Research Network launched in 2012, bringing together over 70 leading researchers to study and develop innovative policies for protecting Canada’s environment while simultaneously building a stronger economic future.
- The Urban Alliance, a research partnership between the City of Calgary and the University of Calgary, relaunched last year. It is a platform bringing together leading researchers with key municipal personnel to develop solutions to critical issues.
Education for Sustainability

The Role of Universities in Education for Sustainability

Each year nearly half a million students graduate from post-secondary institutions in Canada, bringing their newly acquired knowledge and skills into the world as community members and as leaders across all facets of society. The graduates most able to contribute to addressing global needs will be the ones that can collaborate with teams across disciplines, that are able to connect knowledge to action, and that have the capacity to lead. Critical to supporting comprehensive learning in sustainability are embracing the interdisciplinarity of sustainability concepts, expanding opportunities for students to become transformational leaders, evolving the pedagogy of education for sustainability, leveraging the campus and community as learning environments to support sustainability for education, and fostering partnerships and collaborations that reflect the complexities of the challenges at hand. Universities have a unique capacity to affect deep change by equipping their graduates with the knowledge, skills, and the connection of heart and hand to address society’s needs.

“If we seek to create conditions that will ensure a more sustainable future, higher education will have to provide college and university graduates with the skills, background, knowledge, and habits of mind that will prepare them to meet the challenges presented.”

Education for Sustainability at the University of Calgary

At the University of Calgary we are focusing our expertise in teaching and learning to address society’s most pressing challenges. Our goal is that our graduates will:

“have experienced high quality, engaging academic programs and will be thoughtful, communicative citizens and leaders of their respective communities, with abilities to think critically and creatively to solve issues of the day. They will understand the value of collaboration and partnerships, and will be used to working with others who are considered traditionally outside of their fields of expertise. They will also appreciate different cultures and see value in diversity—of opinion, thought, gender, race, and culture. They will appreciate the limited resources by climate change, loss of biodiversity, a world population of 9 billion in 2050, limited water resources, global health issues, and extreme poverty.

The scale of this challenge, of integrating sustainability into college and university curricula, is significant... Deciding how to change the curriculum is complicated by the fact that there are multi-curricula within any institution. Sustainability, because of its complexity and richness, can inform any and all of the following:

- Workforce development;
- General education;
- Education within the major or discipline;
- Graduate education;
- Stand alone programs - certificates, minors, majors, graduate degrees - in sustainability; and
- Co-curricular education.”

2 Association for the Advancement of Sustainability in Higher Education, A Call to Action (2010), 1.

### Sustainability Related Courses

<table>
<thead>
<tr>
<th></th>
<th>2010/11</th>
<th>2012/13</th>
<th>PEERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>212</td>
<td>279</td>
<td>5.46%</td>
</tr>
<tr>
<td></td>
<td>4,241</td>
<td>4,223</td>
<td></td>
</tr>
</tbody>
</table>

**Sustainability Related Courses**

Student research on water health

Faculty of Education: Developing environmental educators

Schulich School of Engineering students studying renewable energy in China

Sasha Tsenkova with students in her “Sustainability in the City” class in The Netherlands
available on Earth, and work and live to create a sustainable future. Importantly, they will recognize the content and skills they learn during their time at the University of Calgary will change with new discoveries, and as a result they will be life-long learners.\textsuperscript{3}

Our 2012 Academic Plan establishes academic priorities that inform our goal development and guide our strategies and actions, including a number of key elements that are critical to providing comprehensive educational experiences for sustainability.

### Sustainability

The University of Calgary is committed to being a model for developing and applying sustainable practices on our campus and in our regional and global communities. The university strives to develop and integrate environmental and social responsibility into our curricula, research, built environments, open spaces, and our daily operational and business practices such that we have significant impacts on our students and our communities.

### Interdisciplinarity

We are committed to fostering multiple dimensions of collaboration, encouraging partnerships across disciplinary expertise between students, faculty and staff. Furthermore, we will seek to provide opportunities for collaborative discovery, knowledge creation, and innovation within our communities both on and off campus.

### Connection with Community

The University of Calgary strives to support its students, faculty and staff in forming respectful, responsive and mutually beneficial collaborations with all of our communities to discover and apply new ideas and innovations that are relevant to all partners involved. We are providing a venue for our communities to develop leadership, engagement and build community capacity to help solve problems for the betterment of society.

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\textsuperscript{3} Academic Plan, 6-7.
2012 - 2013 Highlights

- 2012 Academic Plan released, confirming sustainability as one of seven academic priorities
- Established our Academic Committee for Sustainability
- Confirmed appointment of an academic sustainability coordinator, a brand new role, to commence in Fall 2013
- First cohort of the Global Energy Executive MBA, a 20-month program taking students to energy centres in 5 countries on 4 continents.
- Faculty of Education launches Education for the Environment program, a graduate level program to prepare students for educating others about the environment.
- The University of Calgary’s Haskayne School of Business ranked fourth out of 30 schools in the 2013 Corporate Knights Global Green MBA survey.

Current Sustainability Degree and Program Offerings

- Environmental Science - BSc
- Energy and the Environment specialization - BSc (Eng)
- Corporate Social Responsibility and Sustainable Development student-run program for BComm
- Master of Science in Sustainable Energy Development
- Master in Environmental Design
- Energy and Environment Systems Specialization for graduate students
- Master of Laws in Environmental Law

Departments Offering Sustainability Courses

- 2010/11: 38.1%
- 2012/13: 66.67%
- PEERS: 48.82%
Student Engagement

Why
The 2006 Millennial Cause Study confirmed “61% of Millennials, born between 1979 – 2001, feel personally responsible for making a difference in the world.” Students are increasingly interested in the value of their holistic post-secondary experience in preparing them for their future, bringing sharp focus on the university’s ability to integrate sustainability into students’ extra-curricular literacy, co-curricular opportunities for applied learning and practice, and leadership development. Fostering student engagement in sustainability contributes to the university’s capacity to help its students develop into strong leaders in their communities. Skills and experiences obtained outside of classrooms, libraries and labs — such as personal development, interpersonal and organizational intuition, sensitivity to a diversity of perspectives, and applied understanding of concepts such as systems thinking and change theory — are increasingly valuable in helping students accelerate the societal transition to a sustainable future.

Student Engagement at the University of Calgary
The Centre for Community-Engaged Learning, the Leadership and Student Engagement office, and the Office of Sustainability work in partnership to develop leadership and engagement programs. We seek to provide students with a unique environment for combining excellence in formal

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curriculum with leadership skills development for sustainability and hands-on project experience to enhance the learning experience of our graduates.

Our campus environment is an engaging space to support learning and research for sustainability by the university’s students and the community.

Recognizing the diversity of sustainability awareness and engagement, the university offers a range of programs that provide a variety of entry points for students to engage in campus sustainability efforts.

Leadership and Student Engagement helps students develop their leadership identities and complement their academic learning experience with programs that are grounded in innovative learning, teaching, and collaboration with multiple partners on and off-campus.

The Centre for Community-Engaged Learning (CCEL) offers co-curricular service-learning programs (non-credit programs) through partnerships with non-profit and voluntary sector and faculty members.

Working in conjunction with Residence Life, the Office of Sustainability offers the Residence SustainabilityON Coordinators program. Students are provided mentorship and resources to engage and educate their peers to help turn the university’s residences into living laboratories in sustainability.

The Office of Sustainability also offers the Sustainability Street Team program. Volunteers engage fellow students with events and activities to help support and promote campus sustainability awareness campaigns and initiatives.

47
VOLUNTEERS
active Sustainability Street Team volunteers

871
STUDENTS
subscribed to receive a monthly sustainability e-bulletin

ucalgarycares: students working to support local urban agriculture
Students Leading the Way

Why
A significant proportion of University of Calgary students are highly engaged in activities supporting sustainability on campus and in the community. In the 2012 Princeton Review “College Hopes and Worries Survey”, over 68% of respondents indicated that a university or college’s commitment to environmental issues would influence their decision to apply or attend that institution. On campus, students are demonstrating leadership by shaping their own post-secondary experience through championing sustainability in their learning and by pushing for sustainability at the university and in the community.

Students’ Union
The Students’ Union (SU) is a student-run non-profit organization representing over 25,000 undergraduate students and providing a range of services and business to support students.

Student Wellbeing
An extended health and dental benefits plan and SU Wellness Centre is offered to all eligible full-time undergraduate students. Diversity is supported through initiatives such as the Q Centre, a resource for the gay, lesbian, bisexual, transgendered, and queer (GLBTQA) communities here on campus.

Sustainability Engagement
The Students’ Union Sustainability Board carries out awareness and education programs to promote better understanding of environmental issues, and administers funds from the SU Sustainability Fund. To date, the Students’ Union has awarded over $45,000 to a variety of student-led projects through its Sustainability Fund.

Operations
The SU operates the MacEwan Student Centre (MSC), located in the heart of campus. Operational sustainability initiatives underway include the use of green cleaning products, the introduction of energy efficiency in lighting and computing, and procurement of Fair Trade coffee and teas. Waste reduction and diversion programs in MSC include recycling and composting infrastructure, compostable serving-ware in food outlets, and student outreach programs on sustainability practices.
22 STUDENT CLUBS involved in sustainability

OVER 1000 STUDENTS in sustainability-related clubs

**Student Clubs**

More than 22 student groups on campus are focused on initiatives related to sustainability, with a cumulative membership of over 1000 students. Examples of club initiatives includes:

- **Engineers Without Borders (EWB)** worked over the last year to introduce Fair Trade products on campus, working together with the Students’ Union and Chartwells Food Services to shift to Fair Trade coffees and teas.

- **The Institute for Sustainable Energy, Environment, and Economy Students’ Association (ISEEESA)** hosted educational seminars, tours and workshops throughout the year to build energy and sustainability literacy.

- **The Solar Car Team unveiled the Schulich Delta**, a two-seater car intended to bridge the gap between concept solar vehicles to practical, everyday cars. The team will be racing in the 2013 World Solar Challenge in Australia.

- **University of Calgary students** won the Emerald Award in 2012 for their net-zero solar home. The home was the only Canadian entry to compete in the U.S. Department of Energy 2011 Solar Decathlon, placing 10th out of 19 international teams.

- **Design was completed on the Borealis**, the University of Calgary students’ entry in the 2013 Solar Decathlon in partnership with students from Mount Royal University.

- **The Eco Club hosted several “Swap Till You Drop” events on campus for students to exchange clothing, electronic devices and other gently used items.**

- **The Engineering Students’ Society hosted the Schulich Year of Green**, a year-long series of events that challenged students to live sustainably.

- **Hope 2 Opportunity (H2O)** is dedicated to addressing water resource disparities in developing countries.

**Graduate Students’ Association**

The Graduate Students’ Association (GSA) of the University of Calgary is committed to sustainability in its operations and in its programs and services for students. The GSA administers the Quality Money fund to support student initiatives. Emphasis is placed upon proposals which impact the majority of students, promote multidisciplinary interactions, and integrate sustainable initiatives. Details on the GSA’s services can be found online.
ISO 26000 provides guidance to organizations on social responsibility. It defines the following principles of social responsibility which are intended to inform governance and serve as fundamental considerations when addressing particular issues:

- accountability
- transparency
- ethical behaviour
- respect for stakeholder interests
- respect for international norms of behaviour
- respect for human rights

Organizational Governance

Our Code of Conduct guides our Board of Governors with respect to conflict of interest, confidentiality, and transparency. The university’s processes for approving and disclosing senior leadership expenses exceeds provincial standards as an example of our commitment to ethical and transparent governance.

We have conducted a broad-reaching and inclusive staff engagement process to identify priorities in the institution’s strategic planning. We implemented tools for the campus community to provide ongoing feedback to the university’s administration and staff.

Enterprise Risk Management

We work to identify potential risks and hazards; develop best practices in loss prevention, loss control and loss financing; build awareness and educate; purchase insurance and manage claims; and provide emergency response support, both locally and internationally.

Community Well-being

We are focused on the well-being of our communities locally and abroad, and this mission is

Fundraising for the United Way

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>2009</td>
<td>$217,725</td>
</tr>
<tr>
<td>2010</td>
<td>$199,459</td>
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<tr>
<td>2011</td>
<td>$321,000</td>
</tr>
<tr>
<td>2012</td>
<td>$354,144</td>
</tr>
</tbody>
</table>
what drives our research and learning enterprises. This is our most important contribution, but we are also proud to support the wellbeing of our community in other ways. For the last two decades we have partnered with the United Way of Calgary to support agencies undertaking important community initiatives. In our 2012 fundraising campaign, we surpassed our goal to raise $354,155. (over $321,000 in 2011, $199,459 in 2010, and $217,725 in 2009).

Institutional Engagement

It is important that everyone on campus feels safe, respected, and is able to engage meaningfully in their activities. In 2013, we conducted our second biennial staff engagement survey. Overall, the 2013 results show improvement over 2011, especially in the areas of: leadership; respect and recognition; direction; ratings of faculty, institute or administrative unit; and learning and research focus. These results inform the initiatives we undertake in striving to foster our institutional culture.

Employee and Student Wellbeing

A number of programs and benefits are in place to enable students and employees to care for their personal health and well-being.

Employee benefits include extended health coverage, annual Health and Wellness spending accounts, tuition support programs, child and elder care services, and more.

On campus, we have the Health and Wellness Centre with a full range of health professionals which all staff can visit.

The Students’ Union Wellness Centre supports student wellness by providing a range of health, dental, optometry, counselling and spiritual services.

Diversity

We are proud of the diversity of our students and employees and we work to support that diversity through many programs on campus. We offer a range of services through the Women’s Resource Center, the Native Centre, the Faith and Spirituality Centre, the Students’ Union-run Q Centre, and Student Accessibility Services, among others. We seek to better understand and account for diversity on campus so that we may be more inclusive and provide better support. In 2012 we participated once again in the National Survey of Student Engagement (NSSE), which assesses our student population on a number of diversity-related issues.

Sustainability is more than environmental stewardship. It involves the well-being of individuals and the ability of our communities and institutions to support those individuals in living healthy, safe, and meaningful lives. This is both a means to achieving sustainability overall and a goal in its own right.

Environmental Sustainability

We continue to advance sustainability throughout our campus operations, working towards the stretch goals and milestone targets of our Institutional Sustainability Plan (ISP). As a research and learning institution, we are committed to modelling sustainability in our operational practices and using our campuses as living laboratories for learning about sustainability.

Climate and Emissions

Goal: The University of Calgary strives to attain net carbon neutrality.

As a signatory to the University and College Presidents’ Climate Change Statement of Action for Canada, we continue to work towards the goals of our 2010 Climate Action Plan:

- 2012-13 marked our first full year of operation for our co-generation facility which generates lower carbon electricity on-site and captures waste heat to heat campus buildings
- Our Greenhouse Gas Inventory was updated for 2012-13
- We continued operation of our 65,000 kW photo-voltaic array on the Child Development Centre

Emissions - Scope 1 & 2 (MT CO₂e) (All Campuses)

<table>
<thead>
<tr>
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<th>Emissions (MT CO₂e)</th>
</tr>
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<tbody>
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<td>240,000</td>
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<tr>
<td>2010-11</td>
<td>238,417</td>
</tr>
<tr>
<td>2012-13</td>
<td>187,398</td>
</tr>
</tbody>
</table>

Emissions reductions from 2008-09 baseline (All Campuses)

- 2010/11: 1%
- 2012/13: 22%

Emissions reductions (MT CO₂e) from 2008-09 baseline (Main Campus)

145,933 (2008-09)

Co-generation Scope 2: 87,454

Growth: 31,830

Net Impact: 45,384

Cogeneration facility cuts emissions and costs
Total building energy consumption from direct and indirect sources (MWh)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
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</tbody>
</table>

Our Energy Performance Initiative (EPI) is aimed at reducing operating costs and greenhouse gas emissions. The EPI operating model manages energy throughout the building cycle by addressing energy supply, new and existing building performance, energy management systems, user demand management, and occupant engagement. The EPI has generated annual operating savings of over $7.5 million annually from initiatives completed by the end of the 2012 – 2013 fiscal year.

- Continued application of rigorous energy performance requirements for new building projects and major retrofits
- Outdoor lighting retrofits to LED lighting with majority of campus complete by end of 2013
- Recommissioning pilot project to inform a campus-wide recommissioning program
- Computer lab power-down pilot project complete. Potential demonstrated for $100,000 in annual savings

Built Environment

Goal: The University of Calgary is a North American leader in high performance green buildings.

In 2013, our Energy Environment Experiential Learning (EEEL) building received LEED for New Construction Platinum certification, confirming its status as one of the most energy-efficient laboratory buildings in North America. The recently completed Taylor Family Digital Library, High Density Library, and Yamnuska Hall student residence are currently awaiting LEED certification. All new major capital projects under development are targeting LEED certification. In existing buildings, operations and maintenance practices are undergoing review and modification to improve overall environmental performances.

2012-13 highlights include:

- Piloting the LEED for Existing Buildings: Operation & Maintenance program in the ICT building
- Provided staff professional development programs to increase staff capacity in sustainable building operations and maintenance
- Enhanced the green housekeeping program for higher performance and alignment with institutional sustainability goals

<table>
<thead>
<tr>
<th>metric</th>
<th>baseline</th>
<th>2010-11</th>
<th>2012-13</th>
<th>Target 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of completed major projects achieving or pursuing LEED Certification</td>
<td>0</td>
<td>3/3</td>
<td>4/4</td>
<td>All</td>
</tr>
<tr>
<td>Number of projects achieving or pursuing LEED EBOM Certification</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
Waste

Goal: The University of Calgary is a net zero waste campus.

More than 20 material streams are currently managed and diverted from the landfill. 2012-13 highlights include:

- Over 5000 new recycling & waste collection units deployed across campus
- New partnership with hauler that incentivizes all parties to avoid costs through reduced waste generation and increased diversion
- Compostable serving-ware introduced across campus
- Campus waste audit completed
- Participated in 2013 North American Recyclemania Challenge
- Continued expansion of organic food waste collection with all food areas now included

<table>
<thead>
<tr>
<th>Year</th>
<th>Total waste generated (metric tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009/10</td>
<td>4903</td>
</tr>
<tr>
<td>2010/11</td>
<td>5248</td>
</tr>
<tr>
<td>2012/13</td>
<td>4642</td>
</tr>
<tr>
<td>Target 2015</td>
<td>4062</td>
</tr>
</tbody>
</table>

Water

Goal: The University of Calgary demonstrates exemplary stewardship of water quality and use.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual volume of potable water use (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,540,627</td>
</tr>
<tr>
<td>2010-11</td>
<td>1,026,595</td>
</tr>
<tr>
<td>2012-13</td>
<td>998,169</td>
</tr>
</tbody>
</table>

2012-12 highlights include:

- Engagement campaigns and the installation of low-flow fixtures continue to reduce 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
- The new Taylor Family Quadrangle includes raingardens and a storm water retention pond

- Continued existing building multi-year water fixture retrofit program to achieve at least a 50% reduction in potable water flow
- Participated in 2013 Campus Conservation Nationals, a North American competition challenging post-secondary institutions to reduce their water consumption
Transportation
Goal: The University of Calgary is committed to low emission commuting and campus operations transportation practices.

Using alternatives to single occupant vehicles for the majority of commuting trips

- In 2012-13 the University of Calgary developed a Transportation Demand Management Plan currently being reviewed in draft form
- A new carshare program, Car2Go, was introduced on campus
- Our 2011 commuter survey indicates an increase in sustainable commuting in both staff and students from the previous survey in 2008
- Student UPass program expanded to cover summer transit usage for full-time students
- Participated in 2012 National Commuter Challenge

Purchasing
Goal: The University is a leader in sustainable supply chain management.

The University of Calgary continues to implement sustainable practices in institutional purchasing.

2012-13 highlights include
- Purchasing of post-consumer content recycling paper increased 39%
- 100% of cleaning products Green Seal™ or EcoLogo™ certified
- Continued to work with Chartwells, our institutional food services provider, to increase food purchasing from sustainable sources
- 100% of new furnishing in major projects are Greenguard certified, protecting indoor air quality
- All desktop computer equipment purchased is minimum Electronic Product Environmental Assessment Tool (EPEAT) Silver certified

Percentage of office paper purchasing with at least 30% post-consumer recycled content

<table>
<thead>
<tr>
<th></th>
<th>2008/09 BASELINE</th>
<th>2010/11</th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENTS</td>
<td>&lt;1%</td>
<td>29%</td>
<td>68%</td>
</tr>
<tr>
<td>STAFF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Food sourced from sustainable sources

<table>
<thead>
<tr>
<th></th>
<th>2010/11</th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/11</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>2012/13</td>
<td>27%</td>
<td></td>
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</table>
Economic Sustainability

Universities play a pivotal role in the economic sustainability of their communities, and society at large.

Supporting a Vibrant Regional Economy

The University of Calgary helps drive economic growth in Alberta and beyond, last year generating an estimated total of $7.92 Billion¹ in direct and indirect benefits. We contribute directly to the regional economy through our hiring and spending, and our campus attracts students and visitors to Calgary who contribute significantly to the local economy during their stay. The most important contribution we make, however, is through knowledge generation and transmission. Each year, alumni and new graduates alike apply the skills and knowledge they’ve attained, providing greater value to society and in return commanding better wages. This benefit is estimated at $3.14 billion.² Just as significant is our research enterprise, which through the generation of new ideas, technology, and other solutions, contributes to economic productivity.

Institutional Economic Wellbeing

Throughout the fiscal year ending March 31, 2013, the university continued its focus on financial sustainability, improving our unrestricted net asset balance from a negative position of $57.6 million in 2009 to a positive position by the 2011 fiscal year. To support progress towards our Eyes High vision, a new results-based budget model was implemented that incents the achievement of our goals. On March 7, 2013, a 7.3% cut was announced by the province, which will result in $47.0 million

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¹, ², ³, ⁴ University of Calgary, 2013 Economic Impact Report (2013).
less than expected for our programs and infrastructure. This cut will decrease our economic impact on the regional economy, and result in significant impacts to people, programs, enrolment, number of classes offered, operations, and research productivity. On the other hand, a budget cut of this magnitude produces opportunity – and we are currently exploring options of re-imagining the university, and over the next six months will conduct in-depth analysis of over 200 ideas that have been submitted by our academic community.5

**Supporting Student Access to Education**

We offer a number of financial programs to increase access to education. These are in addition to provincial and federal student aid programs targeting low and middle income students. Last year, our bursary program awarded $4.3 million to 2145 students, our emergency loan and bursary programs provided support to students with identified financial need, and the Students’ Union (SU) continued to operate their hardship fund. The SU-run campus food bank is available to all students, and the Bookstore offered no-cost book-loans to about 40 students. Students with documented disabilities are eligible for full-time status while taking a reduced course load, enabling them to access the full range of supports available to full-time students.

**Supporting Our Employees**

At its most basic level, social sustainability concerns the well-being of people. Business and organizations play a role in enabling individuals to lead safe, healthy, and meaningful lives. Providing adequate compensation to employees can enable them to take care of their basic needs, save for future needs and goals, and devote quality time to family and their community. To this end, we offer a fair compensation and benefits package that also includes a tuition allowance for employees and their family members. Additionally, we have begun to benchmark our compensation program using “Living Wage” standards developed by Vibrant Communities Calgary.6 Living wage standards exceed provincial minimum wage standards and reflect the local cost of living. Using these standards, over 99% of the 5893 regular salaried employees at the university earn at or above a living wage. Of the remaining casual employee groups (Sessional Instructors and casual/hourly support staff), over 82% are paid over the living wage threshold.

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Message from the Chief Sustainability Officer (CSO)

The 2012-13 Institutional Sustainability Report reflects steady progress towards our institutional commitment to excellence and leadership in the pursuit of sustainability. Since our 2010-11 report we have advanced both quantitative and qualitative indicators in our governance, research and learning, student engagement, and campus operations.

Our progress is a reflection of the collective effort and leadership of many individuals including our students, faculty, staff, and our partners in the community. The breadth and depth of our campus community’s commitment to collaborative action in support of sustainability, and enthusiasm towards making change happen is inspiring. Buoyed by an engaged campus community and supportive community partners, we are positioned to reach for new heights as we chart our course for the next four years in development of our 2014 Institutional Sustainability Plan.

Joanne Perdue
Chief Sustainability Officer

This report was developed in accordance with the Global Reporting Initiative’s (GRI) guidelines, bringing us in line with the global standard in sustainability reporting. The online version of this report includes live links to referenced data as well as an accompanying GRI index which contains full disclosures in accordance with an Application Level B. It also includes live links to referenced data.

In addition, we have participated twice in the Sustainability, Tracking, Assessment, and Rating System (STARS), a framework for measuring sustainability performance in higher education. Our 2013 submission garnered a STARS Gold rating and achieved the highest points among Canadian institutions at the release of this publication.

<table>
<thead>
<tr>
<th></th>
<th>2010-11</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>STARS</td>
<td>Silver (50.49 points)</td>
<td>Gold (67.52 points)</td>
</tr>
<tr>
<td>GRI</td>
<td>Application Level ‘C’</td>
<td>Application Level ‘B’</td>
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</tbody>
</table>
Contact Us
For more information on sustainability at the University of Calgary please visit:
ucalgary.ca/sustainability

For the electronic version of this report and for the GRI compliant report index please visit:
ucalgary.ca/about/sustainabilityreport

To share your feedback and ask questions, please contact:
sustain@ucalgary.ca