



UNIVERSITY OF  
CALGARY

# Institutional Sustainability Strategy

Framework for Sustainability in Administration and Operations

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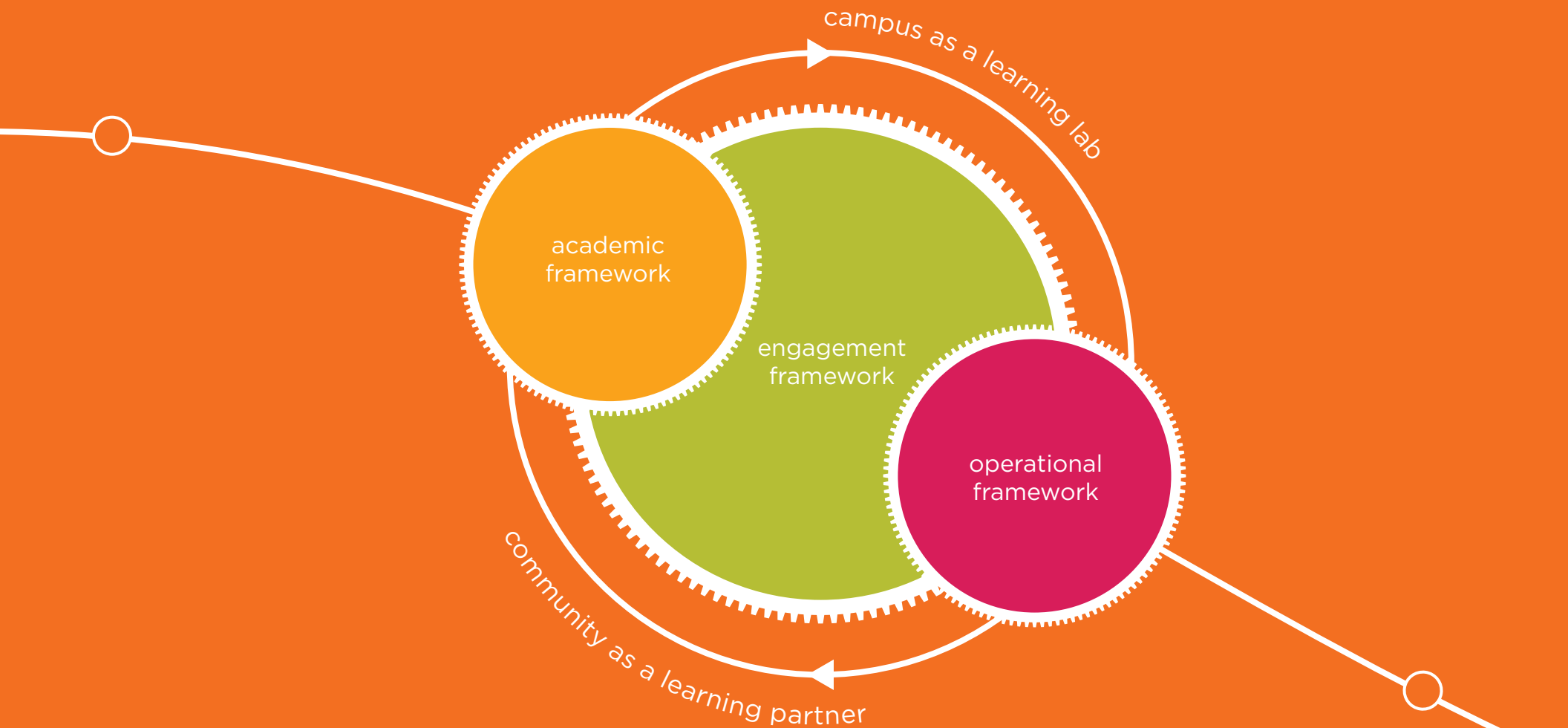
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# Introduction

**The University of Calgary Framework For Sustainability in Administration and Operations confirms an institutional roadmap to inform the development of sustainability practices across our administrative and operational endeavors. It encompasses our impetus for action, the values and guiding principles that differentiate our practice of sustainability, and an overview of our current foundations in sustainability practice upon which we will build looking forward. Last, this framework confirms the goals and strategies that will guide us in fulfilling our commitments to sustainability as laid out in our institutional *Eyes High* vision, our Academic Plan and our institutional sustainability policy.**

This Framework for Sustainability in Administration and Operations is one of three interdependent frameworks that collectively inform our overarching Institutional Sustainability Strategy (ISS). Additionally, we have an Integrated Framework for Education and Research on Sustainability, and a Framework on Engagement for Sustainability. Our frameworks were developed through an extensive and iterative campus community consultation process. While each is written to stand alone in terms of presentation, there is an intentional overlap and interdependence across the goals and strategies of each framework. The ISS is designed to stimulate an integrated sustainability practice. Our frameworks are informed by our institutional core values together with the guiding principles that emerged through our campus consultation process, in this way they define a placed-based vision. Among these frameworks, our Framework on Engagement for Sustainability serves as the bridge that connects our campus community, integrating the diversity of our sustainability practices, including academic and operational approaches, and it aims to join our campus with local and global communities.

# University of Calgary Integrated Practice Model for Sustainability





Sustainability at the University of Calgary is embedded in our culture and we have a strong foundation to build upon. We look forward with renewed energy and new initiatives that will integrate, deepen and diversify our academic, engagement and operational practices. Embedded sustainability programs and practices will serve as important institutional differentiators; ones that will place the university in a leadership position among national if not international peers. As global and local societal challenges continue to magnify and change, we will be proactive as well as responsive. We are committed to action alongside peer institutions across North America and around the world to find solutions to complex and interdependent challenges in order to ensure a sustainable future.

## The Impetus for Action<sup>1</sup>

At the University of Calgary, sustainability is integral to our highest aims. Our *Eyes High* (2011a) vision and strategy confirms our strategic goal to be one of Canada's top five research universities, fully engaged with the communities we both serve and lead. Sustainability is one of the eight core values of this vision and strategy. Sustainability is also one of the seven key priorities in the Academic Plan (University of Calgary 2012a), and underpins priority research themes outlined in the Strategic Research Plan (University of Calgary 2012b), with particular relevance to "Energy Innovations" and "Human Dynamics in a Changing World: Smart and Secure Cities, Societies, and Cultures". Further, the *Eyes High* strategy also confirms our commitment to providing opportunities for students to thrive in programs rich with research, formal education and applied, "hands-on" experience. This commitment is integral to and informs our approach to assisting our students with attaining core competencies for sustainability leadership across all disciplines.

“(In) 2011 our global population size reached 7 billion and is on track to reach 9 billion by 2050... Per capita consumption rates of energy continue to increase, showing no signs of leveling off with increasing population size. Consumption of natural resources outpaces our 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 2011 Academic Plan

As centres for advanced education and research, and hubs for interdisciplinary collaboration, universities are uniquely positioned for developing solutions to the complex challenges of sustainability and for 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 to be leaders in sustainability — in concert with their selected discipline<sup>2</sup>.

The University of Calgary is committed to sustainable practice on campus, and to sustainable community development that links environmental stewardship and ecosystem health to economic, social and cultural stewardship, social justice, and community health and well-being. Within the context of our administrative and operational practices, we embrace our responsibility to lead the way through principled practices. Modeling the way provides the opportunity to infuse sustainability into the campus experience. Through utilizing the campus as a learning laboratory for sustainability, our students, faculty, staff, and the community at large can be immersed in new ways of thinking and doing. Further, the collective impact of operational practices of higher education is both local and global in reach. Through our procurement practices, and through partnerships with industry, we have significant capacity to leverage large scale change in global supply chain practices, pilot new technologies and accelerate their uptake to market, and model new partnership concepts that leverage innovation. As stewards of public post-secondary higher education we enthusiastically embrace this opportunity.

“The University of Calgary is committed to excellence and leadership in advancing the pursuit of sustainability in teaching, research, campus operation and community service.”

— University of Calgary 2009 Sustainability Policy

<sup>1</sup> See the *Institutional Sustainability Strategy* for further narrative on the impetus for sustainability and our institutional sustainability commitments.

<sup>2</sup> Calhoun et al. 2005; Sterling 2011; Bone and Agomar 2011

## Values and Guiding Principles

The University of Calgary's *Eyes High* vision confirms the core values that will help us to achieve our strategic goal to be one of Canada's top five research universities, fully engaged with the communities we both serve and lead. **Sustainability** is one of the eight core values that we embrace as we reach towards this goal. Further, the University of Calgary's approach to sustainability is itself distinguished by our core values, which explicitly inform how our students, faculty, and staff work together and with our community to advance sustainability.

Our relationships are defined by a culture of **collaboration** and a shared commitment to achieving common goals. We embrace **globalization** by thinking and acting with a **global** mindset, acknowledging worldwide connectivity, while also valuing and preserving local and regional connections. We aim to build bridges both internally and with our community through proactive **communication**, and with an important focus on integrity and transparency. We **support** our community through interactions that are inclusive and respectful, and we strive to support one another to ensure that diverse needs are met. We seek to stimulate **curiosity**, rely on this to provoke exploration and innovation, and we aim to promote **balance** in learning, research and work

environments through social, cultural and recreational activities to promote a healthy community. Last, we will achieve **excellence** by helping each other to strive toward and ultimately meet our highest ambitions (University of Calgary 2011a). This approach to how we work together is the first differentiator of our institutional sustainability practice.

The second differentiator of our sustainability practice is our commitment to providing opportunities for students to thrive in programs rich with research, formal education and applied, “hands-on” experience. This too emerges from our *Eyes High* Vision and our Academic Plan. At the University of Calgary students will have unique opportunities for experiential learning and practice through research activities situated in a context of sustainability. The campus will serve as a vibrant learning laboratory for sustainability research and will offer co-curricular programs that build essential core competencies for sustainability leadership. Our students will have unique opportunities to be immersed in research environments and projects that directly confront complex societal challenges on our campus, in our local community and across the globe. In this way our students, faculty and staff benefit from a unique and highly energized environment for the practice of sustainability.

In addition to our institutional core values that shape how we work together, we confirm the following guiding principles, which characterize the foundational assumptions and attributes that anchor our approach to sustainability practice. These were derived from an extensive campus community consultation process that informed the development of the Institutional Sustainability Strategy and the three supporting and interdependent frameworks.

## Social Responsibility

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Pressing societal challenges and the well-being of local and global communities depend on research and services in higher learning.

## Engagement

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Diverse and meaningful connections across disciplines, the student body, operational units, and communities are foundational to creating an engaged community and to effective solution generation.

## Experiential Learning

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Applied-practice and project-based learning are foundational to developing core competencies for sustainability leadership, for integrating knowledge domains and for understanding the importance of place-based solutions.

## Capacity Building

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Building the capacity of our students — across all disciplines — will transform local and global capacity for leadership in sustainability. Strengthening the capacity of our faculty and staff for leadership in sustainability will transform our student experience.

## Diversity

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Sustainability is dependent upon understanding and embracing cultural and biological diversity, an appreciation of the magic and wonder of life on Earth, and respect for intergenerational equity.

## Entrepreneurialism

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Sustainability presents grand challenges that require bold action, innovative problem solving and tenaciousness in the face of increasingly complex and interwoven societal and planetary issues.

## Administration and Operations: A 2015 View

Sustainability initiatives at higher education institutions in Canada and around the world are gaining momentum at an accelerated rate. While the University of Calgary currently benchmarks well to our peer Canadian research institutions (U15), the challenge to keep pace with the growing depth and breadth of engagement in sustainability demands vigilance, foresight and effort.

The Sustainability Tracking, Assessment and Rating System (STARS™) is one standard for measuring sustainability practices at the University of Calgary. Administered by the Association for the Advancement of Sustainability in Higher Education (AASHE), STARS™ is a self-reporting tool that North American colleges and universities (and increasingly international institutions) use to measure sustainability performance. This reporting allows for comparative evaluation and scoring of sustainability performance across peer institutions, effectively allowing for benchmarking of an institution's overall

performance within broad categories of academics, engagement, administration and operations. As such STARS™ informs the key performance indicators of this framework.

In 2011 the University of Calgary achieved a STARS™ Silver Rating, and this was superseded by a Gold rating in 2013, reflecting the success of the first formal Institutional Sustainability Plan (2011b) published in early 2011. At the time of the 2013 submission the university had the highest score in Canada. The continuously rising scores within the STARS™ framework reflect the maturing of sustainability practices across Canadian and American post-secondary institutions; further, the number of institutions participating in sustainability assessment is growing steadily. This reflects increasing societal expectations for post-secondary institutions to not only lead in sustainability but to demonstrate tangible progress towards sustainability commitments. Within the Canadian U15 universities, the University of Calgary remains within the top five scoring institutions, and is proud to be among the highest-scoring institutions in the categories of Planning and Engagement and Operations.

In the context of administrative practices, the University of Calgary has embedded sustainability into its core strategy and planning documents. In addition to *Eyes High* and our Academic Plan, sustainability is interwoven within supporting strategy documents such as our Teaching and Learning Strategy and our International Strategy. It is also embedded in our Campus Master Plan and its supporting element plans. We undertake sustainability reporting following international best practices such as the Global Reporting Initiative. Our Office of Diversity, Equity and Protected Disclosure supports the development of future leaders to work effectively in a pluralistic society by acquiring intercultural competence. It provides a centralized resource for diversity and inclusion information/resources, and it provides a safe and confidential space for individuals to discuss protected disclosure matters such as breaches of ethical conduct or harassment. Our governance practices embrace transparency, inclusivity as well as consultation with our campus community and with external communities.





Within our operational practices we have also demonstrated significant progress. Underpinning this success is a community of practice leaders. This includes a diversity of cross-functional sustainability working groups that comprise a diversity of business units as well as some students and faculty. We have also established a Sustainable Investment Advisory Committee. Below is a summary of select achievements to date<sup>3</sup>:

- Buildings: Eight LEED™<sup>4</sup> Certified Projects<sup>5</sup>, including two Platinum, four Gold, one Silver and one Certified; as well as six LEED™ registered projects in progress.
- Community: Our students, faculty and staff participate in a diversity of community service initiatives, and we have also been recognized with a Spirits of Gold award for our annual United Way Fund raising campaign.
- Dining: Approximately 30% of food served on campus is sustainably sourced<sup>6</sup> and we are a Fair Trade Certified Campus.
- Energy: Our cumulative energy efficiency practices have contributed to annual cost avoidance of over \$7 million, and a significant portion of our electrical demand is supplied through lower carbon intensity electricity produced through co-generation on campus.
- Environment, Health and Safety: We were awarded a Certificate of Recognition (COR) by the Government of Alberta for our health and safety management system based on an evaluation by a certified auditor. The University of Calgary was the first campus in Alberta to attain campus level COR (COR is an Alberta program, SAIT is the only other Alberta higher education institution with COR).
- Greenhouse Gas Emissions: Annual emissions reductions are down over 20% across all sites or over 30% on Main Campus where the emissions reductions initiatives have been implemented — despite more than 30% growth in built area<sup>7</sup>. Annually this is a reduction of over 100,000 metric tonnes.
- People: We offer a diverse suite of resources and programs to support the health and wellbeing of our students and employees.
- Potable water: consumption is down 30% over a 2005 baseline despite over 30% growth in built area.
- Solid Waste: Daily waste diversion is over 50% and construction and demolition waste diversion from all construction is over 80%.
- Supply Chain Management: A diversity of our supply streams employ responsible purchasing practices based on recognized third-party rating systems. Select examples include: desktop computing, cleaning products and consumable paper products, furnishings, and copy paper.

Last, and perhaps most critically, we have undertaken a diversity of academic-operational and co-curricular-operational partnerships in which we have explored opportunities to use our campus as a learning laboratory for applied practice in sustainability. The aim of this work has been to assist students in gaining core competencies for sustainability leadership through immersion in applied practice and project-based learning. Additionally, this work has assisted operational units in advancing our current Institutional Sustainability Strategy. Looking forward, this experience has substantively informed our vision for the next five years.

<sup>3</sup> Please see our 2012-13 Institutional Sustainability Report for further information.

<sup>4</sup> LEED™ (Leadership in Energy and Environmental Design)

<sup>5</sup> Includes owned and lease spaces certified under LEED™ for New Construction and Major Retrofits, or Core and Shell, or Commercial Interiors

<sup>6</sup> As defined under STARS™ (Sustainability Tracking and Rating System) V1.0

<sup>7</sup> Scope 1 and 2 Greenhouse Gas Emissions (CO<sub>2</sub>e), reductions from a 2008 baseline

## Administration and Operations: A Future View

The goals and strategies that follow build upon our past Institutional Sustainability Plan, our experience to date, best practice reviews, and an extensive campus community consultation process. Our goals and strategies are practical in presentation and we aim for continuous and steady progress towards our long-term goals measured through clear key performance indicators and tangible progress towards interim targets. We seek to demonstrate principled practice for our students and for the communities that look to us to lead and model the way in social responsibility. Our approach will be informed by our core values of collaboration, communication, curiosity, support, globalization, balance, and excellence. Our actions will be anchored by our guiding principles.

In summary, our strategic goals include:

1. Continually improve our sustainability performance and infuse sustainability into the campus experience through modeling principled practice in social responsibility across our administrative endeavors.
2. Continually improve our sustainability performance and infuse sustainability into the campus experience through modeling principled practice in social responsibility across our operational endeavors.
3. Build core-competencies for leadership in sustainability, and infuse and embed sustainability into the campus experience by utilizing our campus as a learning laboratory for applied practice in sustainability.
4. Promote meaningful engagement among students, faculty and staff across the university in all aspects of sustainability, and link this to the development of active Communities of Practice.

The section below delineates our aspirational long-term objectives and our near-term performance targets in support of these aspirations. Our long-term objectives are lofty and provide an important signal to our campus community to think deeply about the scale of change necessary to enable a sustainable future. Our near-term performance targets confirm specific and measurable milestones towards our objectives. Some near-term performance targets are noted as to be determined (TBD). In these areas we have thought carefully about measurement and identified that further assessment is needed to ascertain our 2019-20 performance target. We commit to confirm these performance targets and update this framework over the first year following release of this document.



# Goals and Strategies for Administration and Operations



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**Goal 1:** Continually improve our sustainability performance and infuse sustainability into the campus experience through modeling principled practice in social responsibility across our administrative endeavors.

### Strategy 1.1

Continue progress towards the long-term sustainability objectives and the interim performance targets for administrative practices as articulated below.

### Communications

**Objective:** The University of Calgary strives to be a community that understands sustainability as a core institutional value and how to be a participant in sustainability; further we aim for local and national communities to be aware of University of Calgary sustainability leadership practices in academics, engagement and operations.

Primary Indicators and Performance Targets	2012-13 <sup>8</sup>	2019-20
	Actual	Target
TBD in year 1	n/a	TBD

On campus, sustainability communications practices support sustainability engagement in academic, co-curricular and operational endeavours. Recognizing the diversity of our community of over 40,000, a variety of communications channels are needed for two-way sharing to help build a vibrant community of practice in sustainability, and to promote necessary behavioral change in support of sustainability. In the community, communicating about sustainability leadership practices provides multiple benefits, such as demonstrating institutional leadership in environmental, social and governance practices, increasing public and private sector partnerships, and student, faculty and staff recruitment. Collaboration between campus communicators helps to strengthen alignment and integration of sustainability messaging and helps reinforce sustainability as an institutional core value.

## Diversity and Access to Education

**Objective:** The University of Calgary values diversity across our community and aims to create opportunities to develop deep understanding of a range of cultures in relation to history, values, politics, economy and beliefs and practices.

Primary Indicators and Performance Targets	2012-13	2019-20
	Actual	Target
TBD in Year 1	n/a	TBD

“In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. Members of racial and ethnic minority groups and immigrant, indigenous and low-income communities tend to suffer disproportionate exposure to environmental problems. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open through affordable programs accessible to all regardless of race, gender, religion, socio-economic status and other differences. In addition, a diverse student body, faculty and staff provide rich resources for learning and collaboration.”

— (AASHE 2013, 261)



“Sustainability planning affords an institution the opportunity to clarify its vision of a sustainable future...”

— (AASHE 2013, 249)

## Governance, Planning and Coordination

**Objective:** The University of Calgary strives to provide the campus community with a clear understanding of how we are advancing our commitment to excellence and leadership in sustainability. We support a diversity of leadership committees and working groups that collectively advance our Institutional Sustainability Strategy.

Primary Indicators and Performance Targets	2012-13 Actual	2019-20 Target
Publication of an Institutional Sustainability Strategy and supporting frameworks for sustainability in academics, engagement and operations	*	yes
Board of Governors Standing Committee on Environment, Health, Safety and Sustainability	yes	yes
Chief Sustainability Officer reporting to the Provost & VP (Academic) and a Vice President (Facilities) or Vice President (Finance & Services)	yes	yes
Office of Sustainability responsible for advancing the Institutional Sustainability Strategy	yes	yes
Academic Committee on Sustainability responsible for advancing academic sustainability and engagement	no	yes
Sustainability Stewardship Working Groups responsible for advancing operational sustainability and engagement	yes	yes

*8 At time of publication the most recent STARS assessment was completed in 2012-13, performance from this year is included as it represents the most comprehensive set of institutional key performance indicators. Items not measured are noted as n/a (not applicable or not available).*

\* Institutional Sustainability Plan published in 2011, Institutional Sustainability Strategy published in 2015

“An institution can bolster the strength of its community by making fair and responsible investments in its human capital. Such investments include offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers and acting to protect and positively affect the health, safety and wellbeing of the campus community.”

— (AASHE 2013, 276)

## Health, Well-being and Work

**Objective:** The University of Calgary strives for a holistic approach to integrating, supporting and empowering individuals to ensure positive healthy lifestyles, and work, study and living environments.

Primary Indicators and Performance Targets	2012-13 Actual	2019-20 Target
Institutional Engagement Survey (HR to confirm an appropriate measure for well-being and integrate in the 2017 engagement survey)	n/a	TBD
Employee Assistance Program (EFAP) utilization rate	10.82%	15.00%
Per cent Student participation in ucalgarystrong programs	n/a*	TBD
Top 100 Employer Identification	n/a*	Achievement of Top 100

\* Initiated in 2015

## Investment

**Objective:** The University of Calgary aims to remain current on trends and movements related to sustainability in investment practices. The university through the Sustainable Investment Advisory Committee will strive to follow higher education best practices in this area.

Primary Indicator and Performance Target	2012-13 Actual	2019-20 Target
The Vice-President (Finance and Services) will convene the Sustainable Investment Advisory Committee a minimum of two times per year	n/a	yes
The Vice-President (Finance and Services) will confirm an appropriate performance indicator in year 1	n/a	TBD



“Institutions with transparent and democratic investment processes promote accountability and engagement by the campus and community. By using the tools of sustainable investing, institutions can improve the long-term health of their endowments, encourage better corporate behavior, support innovation in sustainable products and services, support sustainability in their community, and help build a more just and sustainable financial system.”

— (AASHE 2013, 293)

## Reporting

**Objective:** The University of Calgary aims to demonstrate tangible progress on our commitment to excellence and leadership in sustainability through regular external reporting and benchmarking of our progress, and utilize reporting data to continuously improve our sustainability practice.

Primary Indicator and Performance Target	2012-13 Actual	2019-20 Target
STARS Rating	Gold	Platinum
Participation in other reporting frameworks	various	various
Frequency of internal reporting on core strategic key performance indicators	Semi-annual	Semi-annual

This strategy recognizes the importance of demonstrating tangible progress towards our commitments and of benchmarking our progress with peer institutions. We aspire to demonstrate our leadership through transparent reporting and through participating in external assessment systems. Further, regular monitoring of key performance indicators provides essential information to assess the effectiveness of our actions and identify course corrections where necessary in order to meet our goals and performance targets.

**Goal 2:** Continually improve our sustainability performance and infuse sustainability into the campus experience through modeling principled practice in social responsibility across our operational endeavours.

### Strategy 2.1

Continue progress towards the long-term sustainability objectives and the interim performance targets for operational practices as articulated below.

“Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are particularly pronounced for low-income communities and countries. Institutions that inventory and take steps to reduce their air pollutant emissions can positively impact the health of the campus community, as well as the health of their local communities and regions”

— (AASHE 2013, 110)

## Air and Climate

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

Primary Indicator and Performance Target	2012-13	2019-20
	Actual	Target
Scope 1 + 2 Greenhouse Gas Emissions (metric tonnes)	187,398	TBD
Scope 1 + 2 Greenhouse Gas Emissions (% reduction from 2008/09)	22%	TBD

## Built Environment and Open Space

**Objective:** The University of Calgary aims to be a Canadian leader in high performance green buildings and sustainable sites practices.

Primary Indicator and Performance Targets	2012-13	2019-20
	Actual	Target
Per centage of new buildings and major retrofits completed and certified in accordance with the University of Calgary High Performance Green Buildings Standard.	N/A *	100%
Per centage of minor retrofits completed in accordance with the University of Calgary High Performance Green Building Standard.	N/A *	100%
Per cent of buildings operated and certified in accordance with the University of Calgary High Performance Green Building Standard.	N/A *	100%
Per cent of open spaces designed in accordance with the University of Calgary High Performance Green Building Standard.	N/A *	100%

\* An updated High Performance Green Building Standard will be published in 2016 which will supersede existing practices and standards in high performance green buildings.

Campus buildings are typically the largest source of campus energy consumption and greenhouse gas emissions. By adopting and following sustainable design and construction, and operations and maintenance frameworks, institutions can conserve energy and water, promote healthy and resilient open spaces and eco-systems, reduce waste and water consumption, promote indoor environmental quality, and support markets for environmentally preferable materials while providing healthy work, learning, and living spaces that optimize learning and productivity.



“Institutions can use their food purchases to support their local economies; encourage safe, environmentally-friendly and humane farming methods; and help eliminate unsafe working conditions and alleviate poverty for farmers. These actions help reduce environmental impacts, preserve regional farmland.”

— (AASHE 2013, 142)

## Energy

**Objective:** The University of Calgary aims to be one of the most energy efficient campuses in Canada.

Primary Indicator and Performance Target	2012-13 Actual	2019-20 Target
Energy Utilization Intensity (GJ/M2) averaged across all sites	2.6	TBD

Energy consumption is the largest source of University of Calgary greenhouse gas emissions and thus presents the largest opportunity for slowing climate change. Through using our campus as a learning laboratory, connecting teaching and research with operational innovation and through leveraging partnerships with industry the University of Calgary can demonstrate pathways to energy efficiency and eventual carbon neutrality.

## Food Services

**Objective:** The University of Calgary aims to be a leader in sustainable and healthy dining service practices.

Primary Indicator and Performance Target	2012-13 Actual	2019-20 Target
Per centage of dining expenditures that are Food Alliance, Marine Stewardship Council Blue Ecolabel, Certified Organic, Fair Trade, or grown on a farm that has a social responsibility policy, or local (150 mile/240 kilometre radius)	27%	40%
Fair Trade Campus designation	No	yes



“Collectively, institutions spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.”

— (AASHE 2013, 179)

## Information Technology

The University of Calgary is currently developing a new comprehensive strategy for Information Technology (IT). As part of this initiative, an IT sustainability strategy will be developed in partnership with the Office of Sustainability. The IT sustainability strategy will address considerations for IT facilities, energy consumption, e-waste, and IT services to improve operational sustainability practices. On completion, the IT sustainability strategy will be integrated in to the Framework for Sustainability in Administration and Operations. In the interim, Information Technology will explore opportunities for continuing implementation of the PowerDown pilot program for computer labs and other appropriate areas of campus.

## Purchasing

**Objective:** The University of Calgary aims to be a best-practice leader in environmentally and socially responsible supply chain management.

Primary Indicator and Performance Target	2012-13 Actual	2019-20 Target
Per cent of institutional purchasing by total annual spend* on goods that meet formally identified sustainability criteria, standards or certifications (not including services).	TBD	TBD
Per cent of institution service purchasing by total annual spend* that includes sustainability criteria and evaluation in vendor selection and ongoing vendor performance evaluation.	TBD	TBD

\* Not including items/services for which sustainability is not a determining factor

“Institutions that reduce workplace injuries and occupational disease cases help ensure that all employees have a safe working environment.”

— (AASHE 2013, 288)

## Residences

**Objective:** The University of Calgary aims to be a leader in sustainability student housing operations and in providing residence life programming with focused sustainability initiatives.

Primary Indicator and Performance Target	2012-13 Actual	2019-20 Target
Number of students involved in peer-to-peer sustainability outreach and education programs	unconfirmed	TBD
Number of annual sustainability-related outreach initiatives that yield measurable, positive results	unconfirmed	5
Alignment with institutional targets for waste, water, energy and GHG emission – see associated sections	no	yes

Residence Services has a significant role to play in supporting campus sustainability. Measures can be taken that reduce the cost and environmental impacts of residence facilities and enhance and model healthy living environments while maintaining a high standard of financial stewardship with respect to residence students' fees. Incorporating initiatives that focus on sustainability into residence life can be a powerful way to engage students and create co-curricular learning opportunities.

## Risk

**Objective:** The University of Calgary aims to be a recognized leader in Canadian post-secondary education for best practices in health, safety and emergency management.

Primary Indicators and Performance Targets	2012-13 Actual	2019/20 Target
EHS+S Management System Audit Results (e.g. Certificate of Recognition – COR)	82%	80+%
Lost time claim rate (lagging Indicator)	0.55	Below Industry Rate
Institutional Enterprise Risk Framework Reporting	no	Yes
Departmental Emergency Response plans (high functioning)	no	100%
Departmental Business Continuity Plans (high functioning)	no	100%



## Solid Waste

**Objective:** The University of Calgary strives to be a zero waste community; by 2020 eighty per cent of our waste will be diverted from landfill.

<b>Primary Indicators and Performance Targets</b>	<b>2012-13 Actual</b>	<b>2019-20 Target</b>
Annual volume of waste generated (nic construction waste + hazardous waste) in metric tonnes (MT)	3303 MT	3000 MT
Annual Per cent of waste diverted from landfill (nic construction + hazardous waste) (includes recycling, composting, reusing, donating, resale)	44%	80%
Annual Per cent of construction and demolition waste diverted from the landfill in current fiscal year	75%	85%

“Institutions that are moving toward zero waste by reducing, reusing, recycling, and composting... These actions mitigate the need to extract virgin materials from the earth, such as trees and metals. Reducing the generation of waste also reduces the flow of waste to incinerators and landfills which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Source reduction and waste diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.”

— (AASHE 2013, 216)

“Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer... Campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage storm water.”

— (AASHE 2013, 202)

## Transportation

**Objective:** The University of Calgary strives to reduce impacts on the environment and our surrounding communities through promoting and practicing sustainable transportation options.

Primary Indicators and Performance Targets	2012-13 Actual	2019-20 Target
Per cent of students using alternatives to single occupant vehicles for the majority of their commute trip	79%	TBD
Per cent of employees using alternatives to single occupant vehicles for the majority of their commute trip	61%	TBD
Per cent of institutionally owned vehicles that employ alternative fuel and power technologies	1.5%	TBD

## Water

**Objective:** The University of Calgary aims to demonstrate exemplary stewardship of water quality and use.

Primary Indicators and Performance Targets	2012-13 Actual	2019-20 Target
Annual litres of potable water use per weighted campus user (m <sup>3</sup> /wcu/yr) <sup>9</sup>	42	TBD
Indicator for management of precipitation events to be confirmed in year 1	N/A	TBD



“Pumping, delivering, and treating water is a major driver of energy consumption, so institutions can help reduce energy use and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation, water recycling and reuse, and effective rainwater management practices are important in maintaining and protecting finite groundwater supplies. Water conservation and effective rainwater and wastewater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.”

— (AASHE 2013, 233)

The following Goals and Strategies from our Framework on Engagement for Sustainability support the advancement of the Framework on Sustainability in Administration and Operations.

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**Goal 3:** Build core competencies for leadership in sustainability, and infuse and embed sustainability into the campus experience by utilizing our campus as a learning laboratory for applied practice in sustainability.

Through the “campus as a learning laboratory” model, students will directly engage in applied-practice projects for sustainability through curricular and co-curricular projects that build essential core competencies for sustainability leadership and foster an understanding of the importance of place-based solutions.

### Strategies

- 3.1 Enable, recognize and stimulate campus-based applied-practice sustainability projects delivered through co-curricular programs, formal curriculum, and within the Sustainability Studies Certificate Program.
- 3.2 Our business units will actively participate in “campus as learning laboratory” partnerships delivered through curricular and co-curricular pathways.
- 3.3 Celebrate our campus as a learning laboratory for sustainability through a communications and engagement strategy that tells our story on sustainability leadership, shares our knowledge, and recognizes our institutional community leaders.



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## Goal 4: Promote meaningful engagement among students, faculty and staff across the university in all aspects of sustainability, and link this to the development of active Communities of Practice.

The approach to sustainability engagement must be dynamic, fluid and responsive to students, faculty and staff needs and demands, as well as reflexive with respect to changing campus sustainability issues and needs. Recognizing the diversity of our campus community, a variety of programs and communications are needed for two-way sharing that results in a vibrant collaborative network.

Establishing a diversity of Communities of Practice is a key strategy to help promote meaningful, integrated sustainability engagement across campus.

9 Calculation that accounts for resident students, full and part-time non-residential employees and students. See STARS 2.0

### Strategies

- 3.1 Improve communications and collaboration across disciplinary lines and business units through face-to-face interactions in the classroom, on research projects, through workshops and panel discussions, and through development of a formal speaker series. Students, faculty and staff must collaborate for this to be successful, and collaboration is essential for all parties involved to be sufficiently invested in successful outcomes.
- 3.2 Continue to evolve the current Sustainability Stewardship Working Group operational practice model to further strengthen cross-portfolio collaboration, and institutional capacity to advance the Framework for Sustainability in Administration and Operations.
- 3.3 Continue to evolve strategies and programs to build the capacity for leadership across our administrative and operational units such that sustainability excellence is a core value and operating norm in all centres of service.

## References

University of Calgary

- 2009 *Sustainability Policy. Electronic document available at <https://www.ucalgary.ca/policies/files/policies/Sustainability%20Policy.pdf>*
- 2011a *Eyes High: University of Calgary 2011 Vision and Strategy.*
- 2011b *Stepping up Together: Institutional Sustainability Plan. 1-39. 2012a University of Calgary 2012 Academic Plan. 1-47.*
- 2012b *University of Calgary 2012 Strategic Research Plan.*
- AASHE *Association for the Advancement of Sustainability in Higher Education 2013 STARS 2.0 Technical Manual. Electronic document available at <https://stars.aashe.org/pages/about/technical-manual.html>*

## Appendix A — Acknowledgements

We thank the students, faculty, staff and community members who contributed their expertise and time to the development of the Framework for Sustainability in Administration and Operations and/or the Framework on Engagement for Sustainability:

### Institutional Sustainability Strategy Advisory Council

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Crowell, Darlene	<i>Associate Vice-President (Strategic Communications)</i>
Dantzer, Steve	<i>Associate Vice-President (Facilities Development)</i>
Gasser, Steven	<i>Associate Vice-President (Facilities Management)</i>
Gerlach, Craig	<i>Academic Sustainability Coordinator</i>
Groves, Christina	<i>Graduate Student Representative</i>
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Rivera, David	<i>Undergraduate Student Representative</i>
Sigurdson, Richard	<i>Dean, Faculty of Arts</i>
Tochor, Les	<i>Associate Vice-President (Finance)</i>

## Institutional Governance Councils

Campus Strategic Initiatives Group (CSIG)

Executive Leadership Team-Operations (ELT-Ops)

Executive Leadership Team

Board of Governors and Environment Health Safety & Sustainability Standing Committee (BG and EHS&S)

## Student, Faculty and Staff Acknowledgements

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Zukowski, Jordan



## Appendix B — Process

Beginning in September 2013 the University of Calgary began the update process of the 2010 Institutional Sustainability Plan (ISP). The primary objective was to draw upon the diversity of expertise and perspectives within the campus community and ultimately to achieve strong ownership of, and commitment to, the finalized Institutional Sustainability Strategy and supporting frameworks. From September 2013 to April 2014, over 30 workshops and discussion forums were conveyed in addition to a World Café. Workshops addressing sustainability in the co-curricular context involved student representatives from a diversity of sustainability clubs on campus.

Students from the Scholars' Academy developed and led twelve student engagement activities involving 65 students, and a sustainability planning workshop was conducted within a graduate level class of over 60 students. In total over 450 campus community members including students, faculty and staff participated in these opportunities with a large Percentage participating in multiple events.

Additionally, the campus community was engaged through campus publications, social media outreach and an online platform to collect feedback and ideas for the new sustainability strategy. From this process a new draft Institutional Sustainability Strategy and three supporting frameworks (academics, engagement and operations) were developed. The draft operational sections were reviewed by the workshop attendees and subsequently further vetted by senior staff (including directors and associate vice presidents) in responsible departments. The draft academic framework was developed through the Academic Committee on Sustainability comprising

representatives from all faculties on campus as well as representatives from the Students' Union and the Graduate Students' Association. The Student Legislative Council, the Students' Union and the Graduate Students' Association were apprised of the initiative and provided opportunities for feedback on draft documents.

From April 2014 to March 2015, development of the academic, operational and engagement frameworks continued with a highly iterative process. The draft of the academic framework underwent an extensive and iterative review process with a diversity of academic governance councils and committees as outlined below. Ultimately, the General Faculty Council approved the academic framework. Drafts of the operational and engagement frameworks and the ISS were reviewed by senior leadership and by senior administrative committees as noted below. Ultimately the University of Calgary Board of Governors approved the ISS and the Executive Leadership Team approved the engagement frameworks for operations and engagement. Throughout this two-year journey, the Institutional Sustainability Strategy Advisory Council, comprising students, faculty, staff and community representatives provided guidance and strategic direction.

# Governance Routing

## Institutional Sustainability Strategy

Campus Strategic Initiatives Group	Discussion and Recommendation
Executive Leadership Team-Operations	Discussion and Approval
Board of Governors and Environment Health Safety & Sustainability Standing Committee	Discussion and Recommendation
Board of Governors	Discussion and Approval

## Integrated Framework for Education and Research on Sustainability

Academic Planning and Priorities Committee	Discussion and Recommendation
General Faculties Council Executive	Discussion and Recommendation
Executive Leadership Team-Operations	Discussion
Dean's Council	Discussion
General Faculties Council	Discussion and Approval

## Framework for Sustainability Engagement Framework for Sustainability in Operating Practices

Campus Strategic Initiatives Group	Discussion and Recommendation
Executive Leadership Team Operations	Discussion and Recommendation
Executive Leadership Team	Approval



## Participants in Events and Content Development

Event/Section Name	Participants	Sessions
Built Environment	Facilities Management, Facilities Development, Project Management Office, Operations and Maintenance, Engineering, Campus Architecture, Campus Planning, students, faculty members, Office of Sustainability	2
Dining	Ancillary Services, Meetings and Special Events, Haskayne Community Relations, Haskayne Events, University Relations, MacEwan Centre Conference and Events, Chartwells, students, faculty members, Office of Sustainability	2
Energy	Facilities Management, Facilities Development, Operations, Information Technology, students, faculty members, Office of Sustainability	2
Health Well-being & Work/Diversity and Access to Education	Human Resources, Health Services, Office of Diversity, Equity and Protected Disclosure, Staff Wellness Centre, International Student Services, Employee Relations, Counselling Centre, Total Rewards, Women's Resource Centre, Risk, Office of Sustainability	2
Investment	Developed by the Director of Treasury and Investments	
Let's Talk Sustainability	Primarily students, but also faculty, staff, and community	1
Class Workshop	ARTS 423 / EVDS 52 Students	1
Purchasing	Ancillary Services, Supply Chain Management, Facilities Management, Facilities Development, Information Technologies, Office of Sustainability	4
Residences	Residence Hotel and Conference Services, Housing Services, Residence Facilities, Residences Education, Residence Students' Association, students, Office of Sustainability	2
Risk	Developed by the AVP (Risk) through engagement within the Risk portfolio	
Transportation	Facilities Management, Parking Services, Faculty members, Bike Calgary, Bike Root, Students' Union, Office of Sustainability	1
Water	Facilities Management, Engineering, Grounds, Residence Facilities, student clubs, faculty members, Office of Sustainability	1
World Café	Students and faculty members	1
Co-Curricular Workshops	Leadership and Student Engagement, Bike Root, Centre for Community-Engaged Learning, Residence Education, Sustainability Club Alliance - various club representatives, Peer Helper, other student clubs	3
Scholars' Academy Engagement Project	Student-led student engagement	12





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