



UNIVERSITY OF
CALGARY

Institutional Sustainability Strategy

Enriching learning. Growing leaders. Accelerating change.

Every university expresses a character that reflects the people and practices within it. The University of Calgary incorporates a wide range of individual personalities and belief systems. However, the people who work and study here share values that reflect the University's vision as a community. These core values will help the University of Calgary achieve its strategic goals.

— Eyes High: *University of Calgary 2011 Vision and Strategy*





Table of Contents

Introduction	1
The institutional commitment to sustainability	7
The impetus for an Institutional Sustainability Strategy	9
Sustainability at the University of Calgary: a 2015 view	11
Overall performance	11
Academics	12
Engagement	12
Administration and operations	14
Sustainability at the University of Calgary: a forward view	15
Guiding principles	16
Supporting frameworks	18
Goals and strategies	20
References	28
Appendix A - Acknowledgements	31
Appendix B - Process	35

Introduction

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.

The University of Calgary aims to become a Canadian post-secondary education leader in sustainability, in our academic and engagement programs, administrative and operational practices, and through supporting community and industry in their aims for leadership in sustainability. The Institutional Sustainability Strategy (ISS) provides a roadmap for continuous improvement in our pursuit of excellence and leadership in sustainability. It is derived from our three interdependent frameworks including:

1. Framework for Advancing Sustainability Education and Research,
2. Framework on Engagement for Sustainability, and,
3. Framework on Sustainability in Administration and Operations.

The ISS serves to fuse these three frameworks into a conceptual whole in support of our vision of an integrated sustainability strategy. While each framework is designed to stand alone in terms of presentation, no one framework alone satisfies our vision. Each framework has critical dependencies on

the others. The ISS confirms the University of Calgary's values and impetus for action, provides an overview of our current foundations in sustainability, sets forth guiding principles, and finally, it confirms a renewed set of goals and strategies.

The University of Calgary's *Eyes High* Strategic Vision and Strategy (2011a) confirms the values that will help us to achieve our 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 eight core values that we embrace as we reach toward this goal. Further, the University of Calgary's approach to sustainability is itself differentiated by our core values, which explicitly inform how our campus community works together, and with our broader 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**, relying 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).

The second differentiator of the University of Calgary's sustainability practice is our commitment to providing opportunities for students to thrive in programs rich with research, formal education and experiential learning. This too emerges from our *Eyes High* Strategic Vision and Strategy (University of Calgary 2011), and from our 2012 Academic Plan (University of Calgary 2012a). At the University of Calgary students will have unique opportunities for experiential learning and applied practice through research and co-curricular activities situated in a context of sustainability. The campus will serve as a vibrant learning-laboratory for sustainability education and research, and will offer co-curricular programs that build essential core competencies for sustainability leadership. 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. Equally important, the university's 2012 Academic Plan also includes the priorities of Interdisciplinarity, Teaching and Research

“We commit to leadership in sustainable ways of living, working and learning. We take care of the physical, natural and social environment. We uphold balanced budgets, positive social relationships, and the health of the planet that we call home.”

— *Eyes High: University of Calgary 2011 Vision and Strategy*

Integration, Connection with Community, Internationalization, and Leadership, each of which have essential underpinnings to achieve second-order change in advancing sustainability.

Sustainability at the University of Calgary is not a new endeavor 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 enable a sustainable future. We will confirm the momentum towards our aims by continuing to benchmark our performance through participation in the STARS™ assessment system and through publishing institutional sustainability reporting to highlight our progress.

The institutional commitment to sustainability

The University of Calgary's Sustainability Policy (2009) defines sustainability as it was first defined in the Brundtland Report (UNWCED 1987). Sustainable development is understood to be “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” This continues to be the definition embraced by the university, and it is a useful conceptual paradigm that helps us critically think about what sustainability means in general. The emphasis is on understanding the interaction of human and natural systems within a context of purposeful human action and social justice. A university focusing on sustainability leadership will emphasize these concepts through innovation in the academic curriculum, through research and operations, and through institutional and community-wide engagement.

“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

The impetus for an Institutional Sustainability Strategy

“(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 the earth’s capacity to replace them and to absorb or adapt to wastes. It is clear that our earth’s support system is under increasing pressures, 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 multi-disciplinary 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 (Calhoun et al. 2005; Sterling 2011; Bone and Agomar 2011).

Located at the core of Canada's energy industry, access to decision makers, technology receptors, environmental groups, and corporations uniquely positions our university to be the leader in Canada in addressing the fundamental regional and global challenges associated with ensuring safe, clean and secure energy supplies while concurrently protecting and restoring environmental systems and embracing social responsibility. Two of the four grand challenges in our Energy Research Strategy (University of Calgary 2013b) are "toward low carbon energy" and "cumulative effects of energy-related processes." These focus

on transformative changes to quickly and deeply cut greenhouse gas emissions from fossil-based supply, and innovation to deploy carbon-neutral, low environmental impact renewable energy sources among other priorities. Our Energy Research Strategy has an inherent and strong connection to the broader issues of sustainability. Our Strategic Research Plan (University of Calgary 2012b) confirms additional research priorities with strong sustainability connections such as "Human Dynamics in a Changing World: Smart and Secure Cities, Societies, and Cultures."

Through our International Strategy (University of Calgary 2013a) we aim to be a global intellectual hub where students, faculty and staff will promote new discoveries, ideas and applications that will have global impact. Sustainability is also one of the aims of this strategy. Through sustainability-related research partnerships with institutions around the globe, providing students with meaningful international experiences and an understanding of different world views as part of their programs of study, and through increasing the international diversity of our student body, we are positioned to have a global reach in sustainability.

Sustainability at the University of Calgary: a 2015 view

Overall performance

In response to the unprecedented scale and complexity of the critical decline in social and environmental conditions, 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 Canadian research institutions peers (U15), the challenge to keep pace with the growing depth and breadth of engagement in sustainability — and more critically, to meaningfully contribute to the sustainable challenge — demands vigilance, foresight and resolve. Through our renewed Institutional Sustainability Strategy we will build upon our strengths and continue to pursue a leadership position in Canada if not North America. Our pursuit of excellence and the values we uphold in this pursuit will help us to attract and retain exceptional students, faculty and staff. In turn, we will strengthen our institutional capacity for leadership in sustainability.

The Sustainability Tracking, Assessment and Rating System (STARS™) is one standard for measuring sustainability practices within the post secondary education sector. 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 a benchmarking of an institution's overall performance within the broad categories of academics, engagement, planning and administration, and operations.

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). At the time of the 2013 submission the university had the highest score in Canada. While STARS™ presents a common standardized means to benchmark sustainability performance across higher education in North America, it is important to note that our vision goes far beyond the STARS™ benchmarking tool.



The continuously rising scores within the STARS™ framework reflects the maturing of sustainability practices across Canadian and American post-secondary institutions, further the number of institutions participating in sustainability assessment is growing. This reflects increasing societal expectations for post-secondary institutions to not only lead in sustainability but to demonstrate tangible progress towards their sustainability commitments.

Academics

Within curriculum and research there is a tremendous amount of activity related to sustainability on our campus, though this currently is relatively uncoordinated. The University of Calgary offers several graduate degree options in various aspects of sustainability. There is currently no parallel concentration at the undergraduate level. When compared to U15 peers, the University of Calgary is competitively positioned, offering at least 350 graduate and undergraduate sustainability-related courses across all faculties and areas of research. Further, more than 250 faculty members from over 25 departments are engaged in research and teaching that directly or indirectly advances knowledge about sustainability, despite the absence of an organizing

academic sustainability framework. As such, the university is well positioned to become a Canadian leader in education and research for sustainability. University administration and faculty have demonstrated an increasingly strong commitment to issues of academic sustainability. Advancing education for sustainability is an important goal for the University of Calgary and significant progress toward this end has been made through the establishment of the Academic Committee for Sustainability (ACS) in 2012, the appointment of an academic coordinator in 2013, and the development of a formal academic sustainability framework in 2015.

Engagement

Our students, faculty and staff continue to demonstrate strong engagement in sustainability. The importance of sustainability to our students is perhaps most tangibly demonstrated by their choice to self-organize into over 50 sustainability-related clubs currently active on campus. To address the growth of student interest in sustainability, the university has developed a diversity of successful co-curricular programs to support student aspirations. Faculty and staff currently engage local and global communities, municipal, civic and industry partners through a variety of collaborative research







Administration and operations

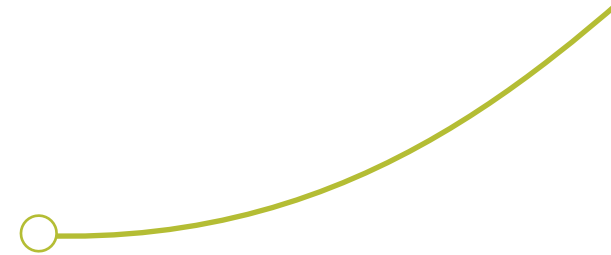
The University of Calgary has a long history and strong success in embedding sustainability across administrative and operational practices. This success has been enabled through the leadership across a diversity of operational units, particularly within the portfolios of the vice-president (facilities) and the vice-president (finance and services). The University of Calgary Students' Union has also demonstrated strong leadership. One mark of success is our high ranking within the STARS™ category for operations. For example, within the STARS™ operations category the university was among the top five scoring North American higher education institutions in 2013. Also noteworthy is the third place ranking of the University of Calgary by Corporate Knights in their 2014 Future 40 Responsible Leaders in Canada rankings. While good progress has been realized, we still have opportunities to deliver upon to fulfill our commitment to excellence and leadership in sustainability. Following an extensive campus consultation process, we have developed a clear and shared vision of the next leg of our journey and we will continue to strengthen our community of practice leaders to help us realize the full potential of this new vision.

and operational activities that support sustainability. While there exists a diversity of community engagement initiatives related to sustainability, there has been no overarching institutional strategy to guide this engagement. On campus staff collaborate across business units to enhance operational sustainability practices the results of which can be seen in the positive direction of our operational sustainability performance indicators. Unique attributes of this engagement, both on campus and in the community, include a cross-disciplinary approach and a commitment to collaboration and community partnerships. This approach has begun to differentiate the University of Calgary and underpins the rapid growth and associated success we have realized in advancing sustainability to date. Recognizing engagement successes to date, looking forward a much greater scale and depth of engagement is essential to realizing our goals and meeting the needs of society. Our new Institutional Sustainability Strategy is aimed at encouraging the exponential growth in our engagement approach.

Sustainability at the University of Calgary: a forward view

Looking forward, the Institutional Sustainability Strategy builds on our established foundation in academics, engagement, and operational practices, and confirms how we will fulfill the sustainability commitments of the *Eyes High* Vision and Strategy, and our Academic Plan. We foresee an institution that is recognized for our sustainability programming, and in particular, how we collaborate within the academy and within the community that result in a differentiated student experience at the University of Calgary. Our students will become actively engaged and intelligent leaders for the future, and our faculty will both demonstrate excellence in teaching and research and support a differentiated student experience through exploring sustainability within an integrated lens of teaching, research and service. Our operations will model the way by putting ideas into practice, embracing opportunities to use the campus as a learning-laboratory for exploring sustainability, and demonstrating principled practice in social responsibility throughout our operational and administrative endeavours. Guided by our Framework on Engagement for Sustainability and our Framework for Advancing Sustainability Education and Research, our students, faculty and staff will engage in an integrated sustainability practice to realize these aims. Together we will engage with local and global communities around sustainability challenges in urban and rural contexts, and their related bi-lateral connections.

By bringing together research and education and by fully engaging the communities we both serve and lead, the University of Calgary will stand as a model for sustainability leadership, creating and nurturing a place for its enactment in a spirited, high-quality learning environment. Here our students will thrive in programs made rich by research and hands-on experiences. The successful development and implementation of sustainability strategies and practices at the University of Calgary will further foster integration both within the institution itself and between the institution and the broader community.



Guiding principles



An extensive campus-wide consultation process has informed development of the Institutional Sustainability Strategy. This included over 30 face-to-face engagement events, an online crowd-sourcing ideas forum, student-led engagement initiatives, as well as extensive institutional committee and governance council discussions (see Appendix B). From this process six guiding principles emerged, which characterize the foundational assumptions and attributes that anchor our approach to sustainability practice. These guiding principles confirm the assumptions that inform our strategy and they are interwoven across the goals and strategies presented below.

Social Responsibility

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

Engagement

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

Experiential Learning

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

Capacity Building

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

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

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



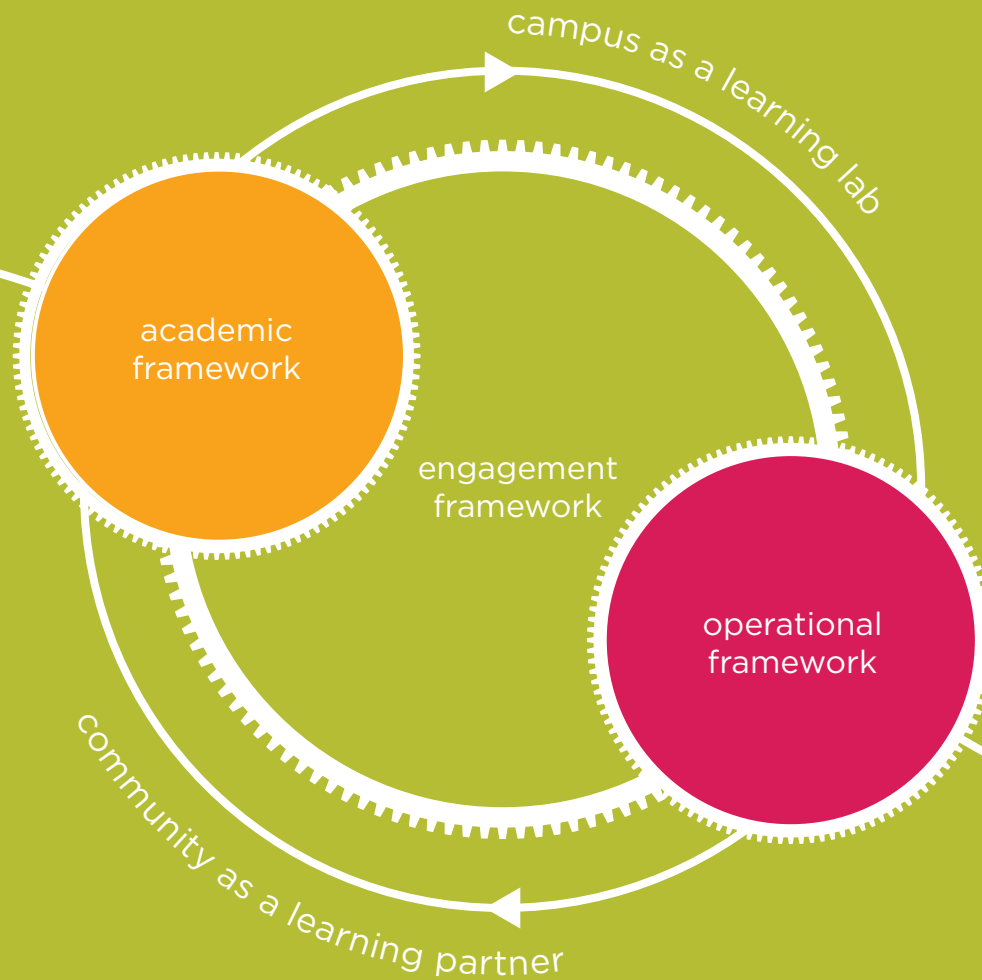
Supporting frameworks

Three interdependent frameworks inform the Institutional Sustainability Strategy (ISS), each developed through an extensive and iterative community consultation process. The three interdependent sustainability frameworks include:

1. Framework for Advancing Sustainability Education and Research;
2. Framework on Engagement for Sustainability; and,
3. Framework on Sustainability in Administration and Operations.

While each framework is designed to stand alone in terms of presentation, the overlap in goals and strategies serves to integrate the frameworks into a conceptual whole, and all are informed by the institutional core values and the above guiding principles. Among these frameworks the Framework on Engagement for Sustainability serves as the bridge that connects our campus community, integrates the diversity of our sustainability practices, and links our campus with local and global communities. Together our frameworks stand stronger in combination than each alone. The goals and strategies section summarizes the aims of our interdependent frameworks. Each embraces an intentional overlap reflecting our commitment to an integrated practice. Our frameworks also include important long-term aspirational objectives and near-term performance targets.

University of Calgary Integrated Practice Model for Sustainability



Goals and strategies

The goals outlined below are inspired by and derived from a number of sources, including cumulative experience to date, extensive campus stakeholder engagement, best-practice evaluation of other campuses and an evaluation of the unique attributes and strengths of the University of Calgary.

1. ADVANCING SUSTAINABILITY EDUCATION

The following goals and strategies are drawn from our Framework for Advancing Sustainability Education and Research. The objective is to define undergraduate programs of study in sustainability and to specify a suite of course offerings that provide the opportunity for interested undergraduate students to be exposed to courses with a sustainability focus or content early in their University of Calgary experience. This value-added component promotes opportunities for students to graduate with sustainability literacy, fully aware of contemporary problems facing society today at local, regional and global levels and scales. We will graduate students who have a sophisticated understanding of the complex nature of the solutions needed to contribute positively to the resolution of contemporary issues. Complementary to the goals and strategies below, sustainability education and research will also be advanced through the goals and strategies of our International Strategy, and the strategic research themes of our Strategic Research Plan.

Goal 1.1: Establish an undergraduate embedded certificate program in sustainability studies.

Strategies

- 1.1.1 Define natural groupings of sustainability courses that will comprise a satisfactory sustainability certificate curriculum.
- 1.1.2 Develop proposals for sustainability certificates that will form an integrated program of study.
- 1.1.3 Work with faculty to determine the potential research areas that will link the Academic Strategy to operations through experiential learning.
- 1.1.4 Create experiential learning opportunities by working with faculty members to determine links between academic sustainability opportunities and those that exist in operations.
- 1.1.5 Develop formal and informal learning opportunities in sustainability using existing courses and resources offered in all departments and campus programs.

2. INTEGRATING RESEARCH AND EDUCATION IN SUSTAINABILITY

The goals and strategies of this section are also drawn from our Framework for Advancing Sustainability Education and Research. A key theme of the general proposal for a new initiative in sustainability programming is to forge stronger linkages at the undergraduate level among research activities and formal curricular and co-curricular activities. In order to accomplish this, we propose to further develop the campus as a living research and educational laboratory. This creates a framework for students to directly engage in the practical aspects of research in sustainability through a combination of participation in a formal curriculum, co-curricular activities, and direct research experience.

This approach should help build the bridge between academic and operational activities and creates an educational model that promotes experiential learning and creatively uses existing and new educational resources and infrastructure as active, experimental environments for interdisciplinary learning and applied research and practice. Experiential learning inspires personal and social action in ways that a formal classroom experience cannot always do, and it encourages students to apply theory and practice in equal measure.

Goal 2.1: Create an institutional environment that engages students and faculty in all aspects of interdisciplinary research in sustainability.

Strategies

- 2.1.1 Identify thematically situated research themes in the social and natural sciences, the arts and humanities, business, the biomedical sciences, education, and in all disciplines with an interest in education for sustainability.
- 2.1.2 Promote faculty interaction with undergraduate students through informal seminars, formal and informal introductions to ongoing research activities, laboratory tours and demonstrations, field trips, and direct experience in research activities.

2.1.3 Promote opportunities for undergraduate students to actively engage with faculty from other universities, particularly faculty who collaborate as interdisciplinary partners on sustainability-related research teams with faculty from the University of Calgary. This will broaden and enhance student exposure to alternative ways of thinking, introduce them to other institutional cultures, and familiarize them with the value of “networking” as they advance in their education and future careers.

Goal 2.2: Promote the University of Calgary as a national leader in sustainability research and education.

Strategies

- 2.2.1 Work to improve the capacity for faculty to offer interdisciplinary courses that are team taught in collaborative and synergistic ways, and to promote the formal recognition of interdisciplinary education by the university.
- 2.2.2 Work to promote cross-disciplinary faculty collaboration through formal research activities related to sustainability.

2.2.3 Work to highlight the relevance of existing and new research activities at the University of Calgary for addressing local, national and international needs and concerns, and to actively engage undergraduate students in activities related to this research.

Goal 2.3: Promote a research and educational portfolio that more actively engages faculty and students in a well-integrated combination of co-curricular and formal research activities.

Strategies

- 2.3.1 Promote and expand opportunities for undergraduate students to engage in research activities on the campus and throughout the broader community of Calgary. This is a component of the proposed certificate program in particular, broader sustainability programming initiatives in general, and is designed to broaden the undergraduate educational experience.

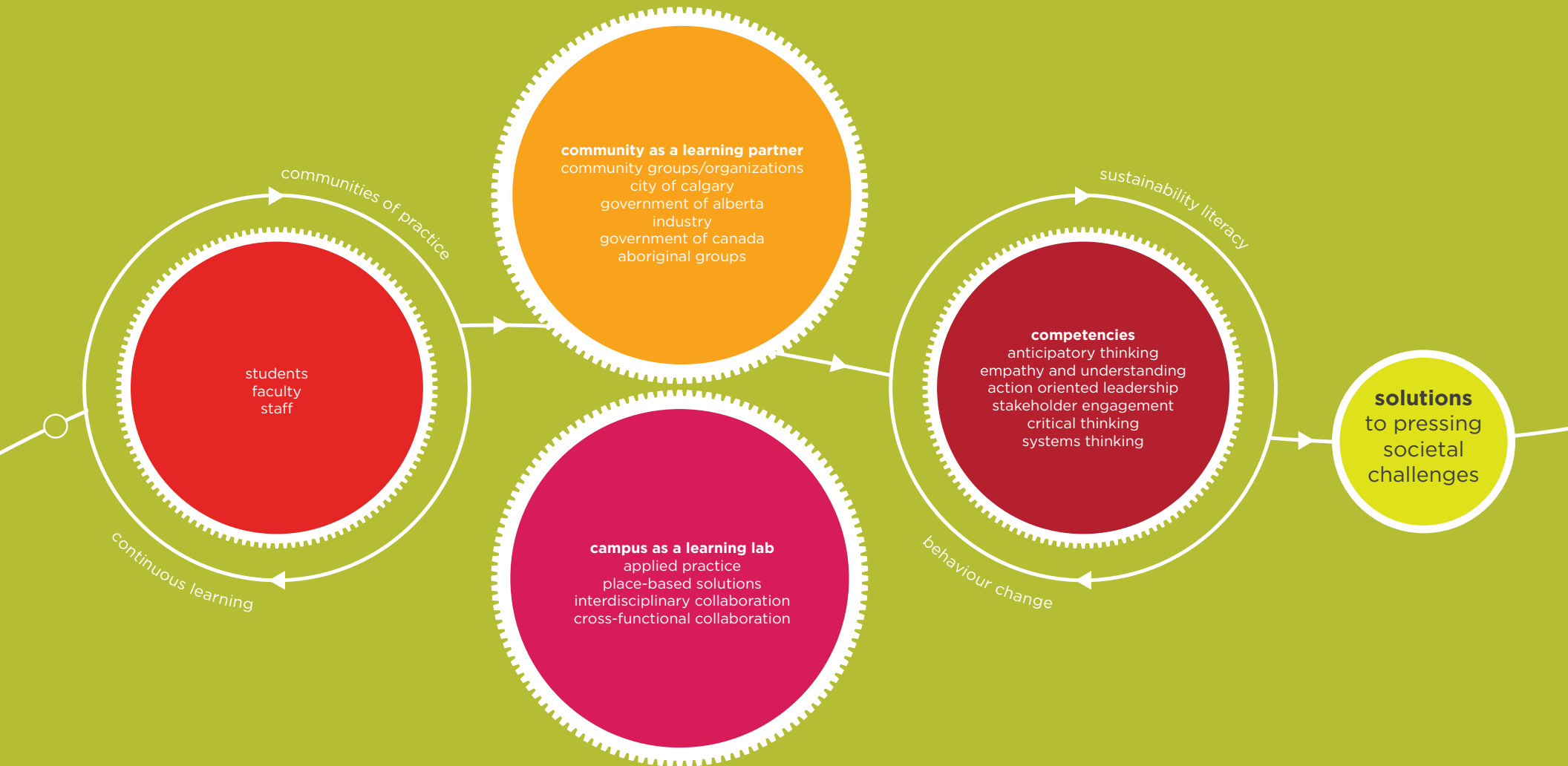
2.3.2 Promote student research activities through formal acknowledgement of these activities through recognition and awards, scholarships, and opportunities for internships and specialized but advanced research activities that go beyond what is formally required through the co-curricular model.

2.3.3 Identify and promote research opportunities in the many ongoing sustainability activities in the operations group, including, for example, the Energy Management Strategy or the co-generation facility, to name but two possibilities.

3. ENRICHING ENGAGEMENT FOR SUSTAINABILITY

Our goals for enriching engagement for sustainability are drawn from the University of Calgary from the Framework for Advancing Sustainability Education and Research and the Framework on Engagement for Sustainability. Building upon experience gained from sustainability engagement experience to date, our campus community knowledge and best practice reviews, our approach is aimed at enabling meaningful and ongoing engagement at all levels, as well as deepening capacities for — and engagement in — transformative action. Our approach recognizes the need to go beyond declarative knowledge about

Framework for Engagement on Sustainability





sustainability or aspects such as functioning eco-systems, to also include procedural knowledge (awareness of how to undertake action or develop strategy), effectiveness knowledge (awareness of the influences of perceptions and beliefs on behaviors), and social knowledge (awareness of the influences of social norms) (Frisk and Larson, 2011). Through applied practice and project-based learning we aim to cultivate six foundational competencies for sustainability practice including:

- Anticipatory thinking and long-term foresightedness
- Empathy and understanding of different worldviews and relationships
- Capacities for stakeholder engagement and group collaboration
- Action-oriented leadership skills and change agency skills
- Critical thinking and decision-making capacity within complexity
- Systems thinking and an understanding of connectedness.

We will also continue to focus our engagement efforts on fostering behavioral change in support of embedding sustainability practice in day-to-day action and decision-making.

With a clear focus on supporting our students, we also recognize that our approach to enriching engagement for sustainability must concurrently encompass our faculty and staff, as well as the external communities we serve.

Goal 3.1 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.

Strategies

- 3.1.1 Enable, recognize and stimulate campus-based applied-practice sustainability projects delivered through co-curricular programs, formal curriculum, and within the Sustainability Studies Certificate Program.
- 3.1.2 Evolve the current co-curricular campus sustainability projects approach to deepen learning outcomes and core competency development, and to broaden student participation.

- 3.1.3 Enhance core programming to foster behavioral change in support of embedding sustainability practice in day-to-day action and decision-making.
- 3.1.4 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.

Goal 3.2: 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.

Strategies

- 3.2.1 Improve communication 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. Faculty, students and staff must collaborate for this to be successful, and collaboration is essential for all parties involved to be sufficiently invested in successful outcomes.

- 3.2.2 Evolve the existing tier of co-curricular sustainability programs to strengthen the pathways to student engagement in sustainability, energize student communities of practice in sustainability, and support student-led collaborative action.
- 3.2.3 Evolve the current Sustainability Stewardship Working Group operational practice model to further strengthen cross-portfolio collaboration, and institutional capacity to advance the Framework on Sustainability in Administration and Operations.
- 3.2.4 Host community events that foster discussion and deliberation about sustainability, share University of Calgary sustainability research and practice, and support the development of communities of practice within the larger external community.

- 3.2.5 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.

Goal 3.3: More directly engage the City of Calgary, the broader community around Calgary, and the province of Alberta, including the private sector.

Strategies

- 3.3.1 Utilize the Sustainability Studies Certificate Program as a way to organize community outreach activities and a community speaker series to feature research projects that are of direct relevance to issues facing rural and urban communities today. The intent is to expose students to multiple faculties and research programs, multiple ideas and perspectives, both disciplinary and interdisciplinary.

- 3.3.2 Work with the broader Calgary community to form working partnerships for collaborative research initiatives that will enhance research at the University of Calgary, serve the needs of the City of Calgary and surrounding communities, and enhance the undergraduate educational experience.

- 3.3.3 Form working partnerships with municipalities, nonprofit organizations and entities to create internship opportunities for undergraduates to engage in community-based service work, active research projects, and community coalition building as part of their undergraduate educational experience.

- 3.3.4 Foster non-academic working relationships and partnerships with industry as well as the public and voluntary sector at local municipal (particularly the City of Calgary), provincial, and national levels, with an aim to expedite attainment of the goals in our Framework for Sustainability in Administration and Operations, and to accelerate the advancement of sustainability beyond the campus through collaborative partnerships and knowledge mobilization.



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Goal 3: Develop collaborative partnerships for research and education with aboriginal groups and communities.

Strategies

- 3.4.1 Form active and fully engaged collaborative partnerships with aboriginal communities to identify their research strengths and needs, and to work directly with them to identify funding streams that will support research to enhance and share these areas of strength.
- 3.4.2 Create a summer research academy and internships that provide opportunities for rural and urban aboriginal students to attend the University of Calgary campus to work with students and faculty in any one of the sustainability programming initiatives. This includes the Sustainability Studies Certificate Program, work with graduate students and/or faculty with specialized expertise in some aspect of sustainability, and the opportunity to experience and engage with our university campus.

4. MODELING THE WAY WITHIN ADMINISTRATION AND OPERATIONS

Our goals and strategies for sustainability in administration and operations are drawn from the University of Calgary Framework for Sustainability in Administration and Operations. Given the institution's long-standing commitment toward sustainable operations, this framework is well developed. Building upon this strong foundation, our aim is for continuous and steady progress towards our aspirational long-term objectives and near-term performance targets across our administrative and operational practices. Our approach will be informed by our core values of collaboration, communication, curiosity, support, globalization, balance, and excellence. We aim to demonstrate principled practice for our students and for the communities that look to us to model and lead the way in social responsibility.

We recognize the importance of building 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. The Office of Sustainability will facilitate an integrated practice, one that is supported by effective measurement and management systems. We will leverage our unique capacity

to influence larger scale systems-level change through internal cross-functional collaboration and efficiencies, and through external partnerships both within the public sector system and with industry. Further, we will embrace our unique opportunity to utilize our campus as a learning-laboratory for sustainability, support students with applied practice learning, and leverage our research capacities to advance our sustainability practice.

Goal 4.1: Continually improve our sustainability performance and infuse sustainability into the campus experience through modeling principled practice in social responsibility across our administrative endeavors.

Strategy:

- 4.1.1 Continue progress towards the long-term aspirational objectives and the interim performance targets for administrative practices as articulated in our Framework for Sustainability in Administration and Operations.

Goal 4.2: Continually improve our sustainability performance and infuse sustainability into the campus experience through modeling principled practice in social responsibility across our operational endeavors.

Strategy:

- 4.2.1 Continue progress towards the long-term aspirational objectives and the interim performance targets for operational practices as in our Framework for Sustainability in Administration and Operations.

Goal 4.3: 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.

Strategies:

- 4.3.1 Enable, recognize and stimulate campus-based applied-practice sustainability projects delivered through co-curricular programs, formal curriculum, and within the Sustainability Studies Certificate Program.
- 4.3.2 Our business units will actively participate in campus as learning-laboratory partnerships delivered through curricular and co-curricular pathways.
- 4.3.3 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.

Goal 4.4: 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.

Strategies:

- 4.4.1 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.
- 4.4.2 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 on Sustainability in Administration and Operations.
- 4.4.3 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



Frisk, Erin, and Kelli I. Larson

- 2011 Educating for Sustainability: Competencies & Practices for Transformative Action. *Journal of Sustainability Education 2*: vol.2, March 2011, issn: 2151-7452

Sterling, Stephen

- 2011 *The Future Fit Framework: An Introductory Guide to Teaching and Learning for Sustainability in HE*. Report prepared for the Higher Education Academy. Centre for Sustainable Futures, Teaching and Learning Directorate, Plymouth University, Devon, UK.

Bone, Elizabeth, and Agomar, Jamie

- 2011 *First-year attitude towards, and skills in, sustainable development*. Report commissioned by the higher education academy.

United Nations World Commission on Environment and Development (UNWCED)

- 1987 *Report of the World Commission on Environment and Development: Our Common Future*. Electronic document available at un-documents.net/our-common-future.pdf

University of Calgary

- 2009 *Sustainability Policy*. Electronic document available at 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*.
- 2013A *Becoming a Global Intellectual Hub: Highlights of the University of Calgary International Strategy*.
- 2013B *Energy Innovations for Today and Tomorrow: Energy Research Strategy*.



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Appendix A



Appendix A – Acknowledgements

We thank the students, faculty, staff and community members who contributed their expertise and time to the development of this document:

Academic Committee on Sustainability

Barker, Susan	<i>Student and Enrolment Services</i>
Campbell-Arvai, Victoria	<i>Department of Geography</i>
Carter, Ralph Victor	<i>Department of Biological Sciences</i>
Draper, Dianne	<i>Department of Geography</i>
Eggermont, Marjan	<i>Schulich School of Engineering</i>
Feng, Patrick	<i>Department of Communication & Culture</i>
Gerlach, Craig	<i>Department of Anthropology and Archaeology</i>
Habib, Allen	<i>Department of Philosophy</i>
Hedges, Peggy	<i>Haskayne School of Business</i>
Herremans, Irene	<i>Haskayne School of Business</i>
Hettiaratchi, Joseph Patrick	<i>Schulich School of Engineering</i>
Jackson, Leland	<i>Department of Biological Sciences</i>
Jardine, Gail	<i>Werklund School of Education</i>
Kadri, Hana	<i>Students' Union</i>
Keough, Noel	<i>Faculty of Environmental Design</i>
Lowan-Trudeau, Greg	<i>Werklund School of Education</i>
Marshall, Dru	<i>Provost and Vice-President Academic</i>
Mclaren, Lindsay	<i>Department of Community Health</i>
Ngo, Van Hieu	<i>Faculty of Social Work</i>
O'Rae, Amanda	<i>Faculty of Nursing</i>
Perdue, Joanne	<i>Chief Sustainability Officer</i>
Shapiro, Bonnie	<i>Werklund School of Education</i>
Sinclair, Brian	<i>Faculty of Environmental Design</i>
Smith-Watkins, Heather (Admin)	<i>Office of the Provost</i>
Webster, Mike	<i>Graduate Students Association</i>
White, Anne	<i>Department of Religious Studies</i>

Institutional Sustainability Strategy Advisory Committee

Aldridge, Rae Ann	<i>Associate Vice-President (Risk)</i>
Barker, Susan	<i>Vice-Provost (Student Experience)</i>
Brownlie, Mark	<i>Chief Executive, Responsibility Matters</i>
Buchholz, Marcia	<i>Associate Vice-President (Human Resources)</i>
Cocolakis, Voula	<i>Executive Director (Ancillary Service)</i>
Crowell, Darlene	<i>Associate Vice-President (Strategic Communications)</i>
Dantzer, Steve	<i>Associate Vice-President (Facilities Development)</i>
Evans, Caron	<i>Executive Assistant to the CSO, Administrative Support</i>
Gasser Steven	<i>Associate Vice-President (Facilities Management)</i>
Gerlach, Craig	<i>Academic Sustainability Coordinator</i>
Groves, Christina	<i>Graduate Student Representative</i>
Perdue, Joanne	<i>Chief Sustainability Officer (CSO), Chair</i>
Phipps, Barry	<i>Representative for Vice-President (Research)</i>
Pollock-Ellwand, Nancy	<i>Dean, Faculty of Environmental Design</i>
Pylychaty, Rhonda	<i>Director, Total Rewards</i>
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

Academic Planning and Priorities Committee
Dean's Council
General Faculties Council
Campus Strategic Initiatives Group (CSIG)
Executive Leadership Team-Operations (ELT-OPS)
Board of Governors and Environment Health Safety & Sustainability Standing Committee (BOFG AND EHS&S)

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Laatson, Justin
Lacasse, Jacqueline
Lachapelle, Annie-Claude
Lam, Dexter
Larrea, Esteban
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Lehti, Madison
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Lind-Kosten, Melanie
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Neogy, Rita
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Ng, Donna
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Appendix B



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, a new 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 (see above) 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 April 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 Faculties 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 (see above), 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 recommendation
Board of Governors Environment, Health, Safety & Sustainability Committee	discussion and recommendation
Board of Governors	discussion and approval

Framework for Advancing Sustainability Education and Research

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 on Engagement for Sustainability, and Framework for Sustainability in Administration and Operations

Campus Strategic Initiatives Group	discussion and recommendation
Executive Leadership Team Operations	discussion
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	Hotel & 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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