

SUSTAINABILITY *undisciplined*

School of Environment and Sustainability 2025



Approved by SENS Faculty Council on December 7, 2018.



UNIVERSITY OF SASKATCHEWAN
**School of Environment
and Sustainability**
SENS.USASK.CA

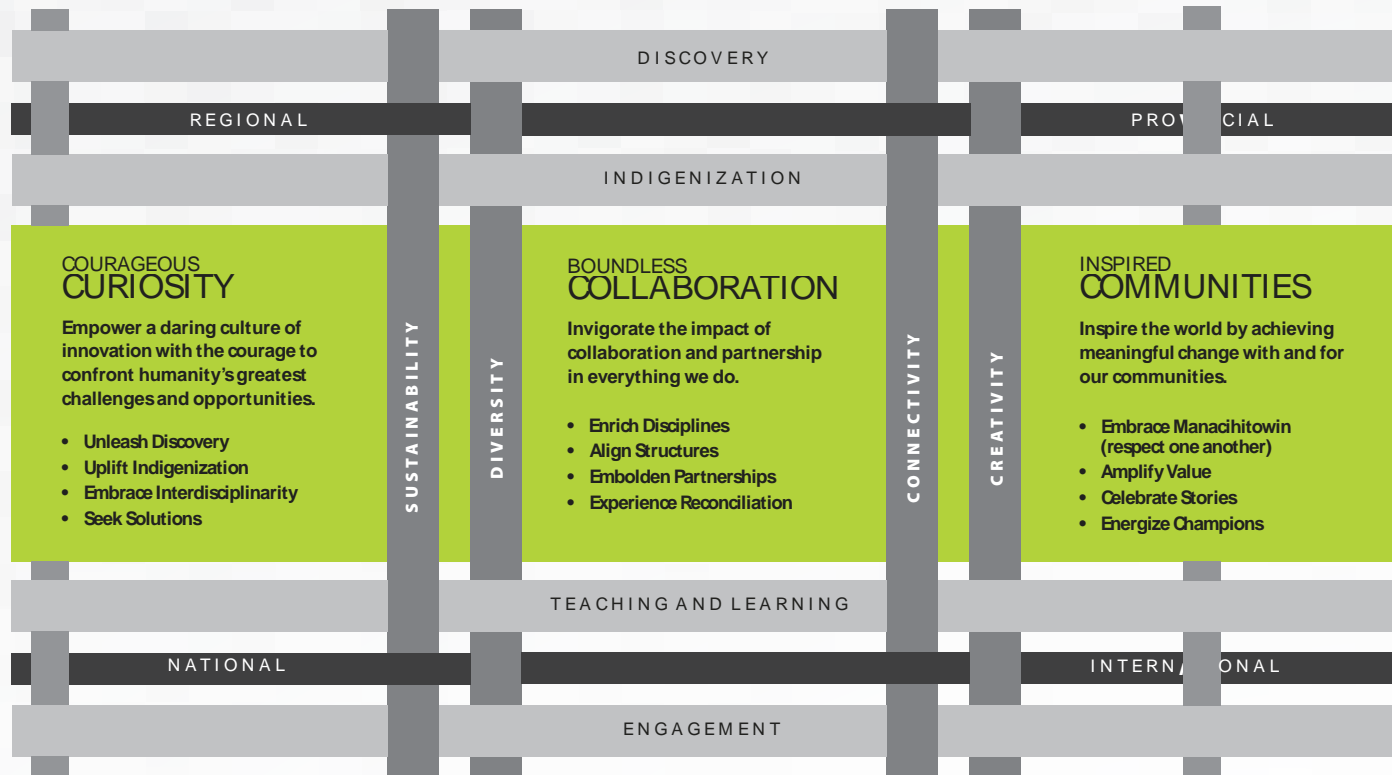
University Framework

THE UNIVERSITY THE WORLD NEEDS

Nīkānītān manāchitowinihk
Ni manachīhitoonaan

INTENT OF THE UNIVERSITY PLAN:

Through this plan, the University of Saskatchewan will be the university the world needs.



2025 ASPIRATIONS

Transformative Decolonization Leading to Reconciliation. Indigenous students, faculty, staff, and communities are holistically strengthening the spirit and methodologies we inhabit.

Productive Collaboration. Community, private-sector, and international partnerships animate every facet of our research enterprise.

Meaningful Impact. Our knowledge, discoveries, and innovations are helping communities achieve their social, cultural, and economic goals.

Distinguished Learners. Our graduates are among the most inventive, collaborative, and sought-after in Canada and around the world.

Global Recognition. Our research, graduates, academic programming, and reputation are recognized as world-class.

STRATEGIC FRAMEWORK FOR THE SCHOOL OF ENVIRONMENT & SUSTAINABILITY

Ambition	<p>At SENS@10, we focused on sustaining ecosystems, sustaining communities and water security. Moving forward towards SENS@20, we will extend our reach to include other aspects of environment, including the Water-Energy-Food nexus, to advance Planetary Health¹. Planetary Health is one articulation of the University of Saskatchewan's vision to become "The University the World Needs". Planetary Health means helping humanity and the natural environment to flourish through identifying and assessing the linkages between global environmental change, and human and ecosystem health and well-being. We will contribute to Planetary Health by using an approach called "<i>undisciplinary</i>"^{2,3}, and adopting the following principles: move from "I" to "We"⁴; challenge norms; embrace multiple ways of knowing; reconcile our relationships with people, nature and spiritual realms; work with communities in a participatory way; co-create meaningful solutions with communities; and contribute knowledge for transformative policies and practices.</p>			
Commitments	<p>SENS-Specific Commitment: STABLE FOUNDATIONS <i>We will provide SENS faculty, postdoctoral fellows, staff and students with the support necessary to successfully achieve our goals.</i></p>	<p>University Plan Commitment #1: COURAGEOUS CURIOSITY <i>Empower a culture of innovation with the courage to confront humanity's greatest challenges and opportunities.</i></p>	<p>University Plan Commitment #2: BOUNDLESS COLLABORATION <i>Invigorate the impact of collaboration and partnership in everything we do.</i></p>	<p>University Plan Commitment #3: INSPIRED COMMUNITIES <i>Inspire the world by achieving meaningful change with and for our communities.</i></p>
Goals	<p>Establish a "Home" for SENS. Establish a physical space that allows for congregation of our diverse members and enables us to meet our full potential.</p> <p>Enhance Financial Security – Create a Culture of Sustainable Prosperity. Increase research and development revenues; expand and renew exceptional graduate programs, courses and certificates that attract more top students; and partner with colleges/schools to enhance our disciplinary capacity.</p> <p>Elevate School Profile and Reputation. Nurture leadership in <i>undisciplinary</i> research and teaching capacity for a changing landscape by facilitating professional development and leadership opportunities.</p>	<p>Conduct and Contribute to World Class Research in Planetary Health. Collaborate with university, government and industry partners and communities to identify and conduct research, while embracing multiple ways of knowing.</p> <p>Engage in Use-inspired Research, Teaching and Learning in the Way the World Needs. Strive to include concepts such as systems- and design-thinking, continuous learning and entrepreneurship in everything we do.</p>	<p>Create and Enhance Internationally-recognized and Sought-after Undergraduate Certificates, and Graduate and Postdoctoral Programming. Engage in mutually beneficial partnerships both within and beyond the academy to enhance and deliver our portfolio of innovative professional and research-intensive graduate programs. Continue to provide sustainability-focused value-added undergraduate options to the campus community.</p> <p>Facilitate the Inclusion of Indigenous Knowledges. Co-create innovative leadership and program strategies for Indigenous and other knowledge holders in</p>	<p>Lead in Community-engaged Scholarship that Tackles Sustainability Challenges. Create research programs that are collaborative, equitable, and involve community and university scholars as equal partners. Combine knowledge with action to achieve social and environmental change; and recognize these achievements through merit, tenure and promotion processes.</p> <p>Embed Research, Teaching and Learning Opportunities within Communities. Create opportunities to spend time in and with communities to co-create and mobilize knowledge for the benefit of everyone.</p>

	<p>Ensure Learning and Research Spaces that Enable Us to Take Care of Each Other. Enable and support a diverse faculty, staff and student body that models social justice and equity, work-life balance, and supports sustainable lifestyles and holistic well-being.</p>	<p>Innovate Pathways for Indigenous and Non-traditional Learners. Establish a learning and research environment within SENS that recognizes their knowledge systems and life/work experiences. Create pathways that increase accessibility of SENS programs locally and internationally.</p>	<p>Saskatchewan and internationally. Nurture Networks and Partnerships to Facilitate Planetary Health and Human Security. Create a governance model to facilitate inter- school/ college/ department collaboration. Co-create research and educational programs with varied external partners that have local and global impact.</p>	<p>Build and Showcase “Living Laboratories”⁵ for Undisciplinary Thinking in Sustainability. Through collaborative learning opportunities, support faculty and partners to create living laboratories for undisciplinary thinking in sustainability. Celebrate stories and energize champions, both internal (alumni, students, staff, and faculty) and external.</p>
Impact	<p>By achieving these commitments and goals, at local, regional, and international levels, all those connected with SENS will be:</p> <ul style="list-style-type: none"> • Innovators in the area of undisciplinary scholarship. • Leaders in breaking down barriers within academia and between academia and society. • Sought-after experts and entrepreneurs that can tackle wicked problems and create actionable solutions. <p>These accomplishments will be attained while working with and learning from our students, colleagues, collaborators, partners, and friends.</p>			

¹ Planetary Health is explained in the seminal report by Sarah Whitmee and others: Witmee et al. (2015) Safeguarding human health in the Anthropocene epoch: Report of The Rockefeller Foundation–Lancet Commission on Planetary Health. *The Lancet* 386.10007: 1973-2028.

² Undisciplinary thinking was first introduced by John Robinson: Robinson J (2008) Being undisciplined: Transgressions and intersections in academia and beyond. *Futures* 40: 70-86.

³ Undisciplinary scholars conduct “use-inspired research – that is integrative, interactive, emergent, reflexive – with strong collaboration across diverse paradigms and knowledge systems” (adapted from Robinson, 2008) and lead societal thinking about the transformative changes necessary for global sustainability. Undisciplinary scholarship requires scholars to be scientifically rigorous (methodologically grounded and epistemologically agile), socially relevant, engaged, and reflexive with a measure of self-awareness and self-care (<https://sesscholars.wordpress.com/category/reflections-provocations/>).

⁴ By moving from “I” to “We,” we acknowledge that many problems cannot be solved individually but require us to work together across disciplines and with all communities.

⁵ A “living lab” is a user-centered, open-innovation ecosystem, often operating in a territorial context (e.g. city, agglomeration, region), integrating concurrent research and innovation processes within a public-private-people partnership. Sources:

(<https://www.google.ca/search?q=define+living+laboratories&oq=define+living+laboratories&aqs=chrome.69i57.6317j1j7&sourceid=chrome&ie=UTF-8>)

1. Von Hippel, E. (1986). Lead users: a source of novel product concepts. *Management Science* 32, 791–805.

2. Chesbrough, H.W. (2003). *Open Innovation: The new imperative for creating and profiting from technology*. Boston: Harvard Business School Press.

3. Almirall, E, Wareham, J. (2011). Living Labs: Arbiters of Mid- and Ground- Level Innovation. *Technology Analysis and Strategic Management*, 23(1), 2011 pp.87-102.

4. Bilgram, V.; Brem, A.; Voigt, K.-I. (2008). User-Centric Innovations in New Product Development; Systematic Identification of Lead User Harnessing Interactive and Collaborative Online-Tools, in: *International Journal of Innovation Management*, Vol.12, No.3, pp.419-458.

5. Pallot M. (2009). Engaging Users into Research and Innovation: The Living Lab Approach as a User Centred Open Innovation Ecosystem. Webergence Blog. “Archived copy”. Archived from the original on 2012-05-09. Retrieved 2011-06-07.

Vision

Our vision is to support the mutual flourishing¹ of humans and the natural environment.



Mission

SENS aspires to be a global leader in “Sustainability *Undisciplined*”^{2,3}. By choosing this brand, we are stating our intention to work beyond disciplinary and institutional silos, committing to working in partnership with other academic units, communities, governments and industries to:

- Bring the best of our scholarship to bear on the most pressing issues of the day and the future in our areas of expertise.
- Operate in a participatory way, co-create meaningful solutions, contribute knowledge to catalyze transformative policies and practices that emphasize “We” not “I,” and respectfully embrace knowledge in all its manifold forms.
- Make coordinated systems-oriented advances on complex, multidimensional problems by identifying and utilizing synergies among disparate skills and approaches.
- Train leaders for solving real world problems using holistic and systems approaches.

1 Haraway DJ (2016) *Staying with the Trouble: Making Kin in the Chthulucene*. Duke University Press.

2 Robinson J (2008) *Being Undisciplined: Transgressions and Intersections in Academia and Beyond*. *Futures* 40: 70-86.

3 Haider LJ et al. (2018) The interdisciplinary journey: Early-career perspectives in sustainability science. *Sustainability Science* 13: 191–204.

Perspective

The Schools of Environment & Sustainability, Public Health, and Public Policy were developed to raise the national and international reputation of the University of Saskatchewan by becoming interdisciplinary and trans-disciplinary hubs of graduate programming and research at the University of Saskatchewan.

These expectations established an obligation – and a commitment – to generate knowledge that crosses disciplinary, sectoral, political and other boundaries. This plan reflects that commitment, points to some of the many ways we have already achieved it, and identifies the resources necessary to continue on this path towards a healthy planet.

For SENS@20, we have an ambitious plan to go beyond interdisciplinarity to become a leader in *undisciplinary* thinking as it relates to sustainability, the Water-Energy-Food nexus, and Planetary Health. Planetary Health is an articulation of the university plan – to be the university the world needs – as it will help us work together towards a “planet that nourishes and sustains the diversity of life with which we coexist and on which we depend.”⁴ Our focus on putting Planetary Health into practice through *undisciplinary* thinking is unique in Canada and connects with new global research initiatives that are urgent, inter- trans- and un-disciplinary, and includes a focus on interdependent connections between ecological structure and function, human health/well-being, and social justice. We are uniquely positioned in Canada to deliver on this agenda including Planetary Health and Human Security.

“We will create something greater than the sum of the parts – something that the individual schools and colleges could not achieve by just pursuing their own agendas independently.”

- Irena F. Creed, Presentation to the University of Saskatchewan Board of Governors (June 26, 2018)

⁴ Witmee Set al. (2015) Safeguarding human health in the Anthropocene epoch: Report of The Rockefeller Foundation–Lancet Commission on Planetary Health. The Lancet 386.10007: 1973-2028.

Design Principles

SENS is operationally guided by the following **design principles**⁵ to train exceptional leaders in *undisciplinary* scholarship and teaching that leads to transformative societal changes for the mutual flourishing of humans and the natural environment:

1. Leverage our uniqueness and excellence in terms of people, place and resources
2. Fuse intellectual disciplines based on skills and needs rather than credentials
3. Transform society through use-inspired research to innovative public policy
4. Enable student success and socially-aware global engagement
5. Teach, promote and reward both social and technical entrepreneurship
6. Maintain focus and quality by using deliberate, consultative processes to decide what we can and cannot do.⁶

Anticipated Outcomes

SENS will serve its role as an *undisciplinary* hub by providing **the following outcomes**:

- **Research the world needs** including discoveries and innovations in the application of undisciplinary thinking at the Water-Energy-Food nexus, research that supports Indigenous and other ways of knowing and reconciles relationships with the land, and contributes to the redefinition of jobs and associated skills needed by a transforming society.
- **Teaching and learning the world needs** including excellence and innovation in on-campus, blended and/or online learning and community-based educational programming, and entrepreneurial initiatives in both social and technological aspects of solutions to environmental problems.
- **People the world needs** including sought-after experts and entrepreneurs that can tackle wicked⁷ problems and create actionable solutions; collaborators that bridge disciplines and worldviews; and change-makers that will lead the transformation needed by society in reconciliation, sustainability and planetary health.

⁵ Crow MC, Dabars WB (2015) Designing the New American University. Johns Hopkins University Press.

⁶ Pietersen, W. (2017) Strategy Is an Art of Sacrifice: Before you can decide what you will do, you have to decide what you won't. <https://www8.gsb.columbia.edu/articles/ideas-work/strategy-art-sacrifice>. Accessed November 1, 2018.

⁷ Wicked problems are problems that are difficult or impossible to solve because of incomplete, contradictory and changing requirements that are often difficult to recognize.

TRANSLATING COMMITMENTS INTO ACTION

COMMITMENT 1: Stable Foundations



GOAL 1: Establish a “Home” for SENS

Despite enormous research success since its inception, SENSfaculty have not been able to access a dedicated space. Being scattered across multiple sites across and beyond campus threatens cohesion and collegiality among faculty and students, and diminishes capacity to collectively nurture *undisciplinarity*. Space was considered an urgent need by independent reviewers of our programs since our inception. We seek to ensure stable foundations for SENSby providing (a) a physical space that will allow SENSfaculty to congregate, work together and strengthen SENS' identity and sense of community and is inclusive of multiple ways of knowing and doing; (b) new and enhanced revenue streams; and (c) leadership capacity to enable us to meet our goals related to engaged scholarship, teaching and learning in Planetary Health. Working with the Provost, Facilities Management and Campus Planning, we will identify and secure space that encourages *undisciplinary* thinking and is inclusive of multiple working styles and ways of knowing.



GOAL 2: Enhance Financial Security – Create a Culture of Sustainable Prosperity

Undisciplinary research is the key to solving “wicked” problems. SENSis committed to cross-campus leadership in this area, so it is critical that SENSthrives, not just survives. This means supporting significant new initiatives as opportunities arise by soliciting financial support from a broad base of institutions and individuals.

To meet our aspirations, we require new and enhanced revenue streams. SENSwill establish a fundraising target and create a campaign plan to meet that target. Our new and enhanced graduate programs will attract a larger number of high quality graduate students. We will work with other units to develop resource allocation models that fairly assign revenue sharing. We will develop Intellectual Property agreements where the School owns intellectual property developed for the professional master's graduate programs. Building from our pilot experience, we will implement donor support models for teaching and research to

enhance our revenue streams. We will create mechanisms to generate overhead from donor support that can offset the School's operating costs.

We are in a period of rapid transition with significant changes in academic programs, teaching schedules, and development of major research programs (e.g., Global Water Futures). Finding effective ways to cope with the accompanying stress is important in the short term. Over the longer term, it is important that SENS develop and maintain a posture of flexibility and entrepreneurship to foster and effectively manage growth and change. We define success as establishing reciprocal partnerships among faculty across disciplines, with units across campus, Canada and internationally and with communities.



GOAL 3: Elevate School Profile and Reputation

As the student, faculty and staff complement of the School have grown, so too, does its administrative and leadership requirements. We will generate professional development and leadership opportunities for faculty in SENS while maintaining a work-life balance to nurture leadership in *und*disciplinary scholarship. We will restructure governance of the School to include an Associate Executive Director; an Assistant Director, Academic; and an Assistant Director, Research & Engagement to advance the aims related to the School's and University's strategic priorities. These positions, in addition to the Executive Director, will form the senior leadership of the School. Nurturing our leadership will allow SENS to achieve its goals and to elevate the profile and reputation of the School.



GOAL 4: Ensure Learning and Research Spaces that Enable Us to Take Care of Each Other

An enduring value of the School is the collegiality, mutual respect and friendships among faculty, staff and students that provide the foundation for effective *und*disciplinary scholarship and collaboration. We will continue to nurture SENS community and culture through informal gatherings to allow us to implement the School's strategic plan. We will host a recognition and engagement event annually that celebrates the contributions of partners to the School's vision and mission. We will consider new and innovative ways of connecting with our alumni and transitioning our students to alumni.

COMMITMENT 2: Courageous Curiosity

Planetary Health will be a defining *undisciplinary* initiative that connects units across campus - a tangible representation of our commitment to equip graduates with the skills they need to thrive and lead in an increasingly complex and unstable world, and to empower people and communities to improve their lives. We seek to work with our partners to deliver *undisciplinary* graduate program offerings that will “serve the world” by graduating individuals who are transformative thought-leaders, decision-makers, reflexive practitioners and empowered citizens who will enhance the university’s national and international reputation.

Using Planetary Health as an overarching framework, we will conduct transformative research that embraces multiple ways of knowing, includes concepts such as systems- and design-thinking, fosters entrepreneurship, and creates pathways that increase the accessibility of SENS programs locally and internationally, particularly for Indigenous and non-traditional learners. Within this framework, we will focus attention on the Water-Energy-Food nexus, Planetary Health and Human Security.

Presently, SENS is one of the highest performing research units on a per capita basis on campus. We seek to amplify our research trajectory to make a critical impact in the emerging field of Planetary Health through our research and to attract new students into our research and teaching programs in collaboration with university partners and external communities.



GOAL 5: Conduct and Contribute to World Class Research in Planetary Health

We commit to being key contributors to the Planetary Health Initiative at the University with other partners, in particular in the areas of ecosystem science, public health and public policy. By working side-by-side with other units in Planetary Health, SENS will help propel the University to be the first in Canada to deliver on this key strategic priority.

To support this initiative, we will obtain sustaining financial commitments through traditional (e.g. TriCouncil) and non-traditional funding sources (e.g. Donor, Endowments, Foundations) in areas associated with the Water-Energy-Food nexus and Planetary Health. Additionally, we will focus strategic hires in the Water-Energy-Food nexus, Planetary Health and Human Security. Finally, we will demonstrate our global relevance through collaborative initiatives with Indigenous and other communities around the globe.



GOAL 6: Engage in Use-inspired Research, Teaching and Learning in the Way the World Needs

Using Planetary Health as an overarching framework, we will introduce new modes of delivery for graduate programs that nurture existing and develop new networks within and beyond the University. We will generate opportunities for collaborative research partnerships with other units on campus and with external partners, communities and visiting scholars, and especially strengthen connections with the Global Institute of Water Security, the Global Institute of Food Security, and the University of Saskatchewan's Renewable Energy Initiatives through joint appointments, collaborative teaching and other initiatives.

We will create and enhance experiential learning opportunities that bring students and communities together in Canada and abroad. Our research and teaching programs will foster entrepreneurship, innovation, and systems- and design-thinking. We will hire strategically in social innovation to amplify our use-inspired scholarship. We seek innovations to attract graduate students and postdoctoral scholars such as the creation of an entrepreneurship competition to solve real world sustainability problems. Innovations in teaching and scholarship will be recognized and rewarded through revised faculty standards for tenure and promotion and merit guidelines.



GOAL 7: Innovate Pathways for Indigenous and Non-traditional Learners

Recognizing that the world needs programs that are relevant and accessible, we will develop innovative pathways and flexible modes of delivery for our graduate programs including compressed courses, blended or online delivery. Building on our success with the Undergraduate Certificate in Sustainability, we will create an enhanced certificate that will enable non-traditional learners to have direct entry into our professional graduate programs. We will also develop and deliver non-credit/credit workshops and professional short courses to increase access for alumni, community partners, current students and working professionals. Innovations in teaching and scholarship will be recognized and rewarded through revised faculty standards for tenure and promotion and merit guidelines.

COMMITMENT 3: Boundless Collaboration

Presently, SENS offers internationally-recognized, *undisciplinary* graduate programs that place our students in highly-sought occupations following graduation. We will enhance the university's reputation by expanding these programs through collaborative research networks and teaching initiatives that will foster Planetary Health and Human Security.



GOAL 8: Create and Enhance Internationally-Recognized and Sought-after Undergraduate Certificates, and Graduate and Postdoctoral Programming

Our enhanced Undergraduate Certificate in Sustainability will serve as an *undisciplinary* backbone for all undergraduate environmental programs (Figure 1). We will collaborate with other units to reimagine and deliver new proposed professional master's (course, project) programs paralleled with potential research master's and doctoral programs in the Water-Energy-Food Nexus and Biocultural Conservation (Figure 2). We will partner with other units to design and deliver an Executive Master's program in Planetary Health. We will create and honour strategic agreements with international institutions to offer our master's and PhD programs in their countries (e.g. China). SENS will create an opportunity for graduate students and postdoctoral scholars to participate in an entrepreneurship competition to solve real world problems.

Teaching and research are intimately connected – faculty must be engaged in state-of-the-art research to provide the highest quality experience to students as mentors and teachers. In turn, quality of teaching and research drive recruitment of high caliber students. A consistent focus on these fundamentals will establish a stable framework for long-term growth in external (e.g. rankings, legacy donations) and internal measures (e.g. retention of top-tier faculty). We will determine who are aspirational peers are and strive to meet and/or surpass them in our teaching and research.



GOAL 9: Facilitate the Inclusion of Indigenous Knowledges

Recognizing the contribution of Indigenous peoples and knowledge to understanding and addressing sustainability and Planetary Health, we will conduct transformative research and teaching that embraces multiple ways of knowing. We will deepen present partnerships and work collaboratively to create and co-develop programs with Indigenous partners in Saskatchewan's treaty territories and in other parts of Canada and the world. We will continue to design and implement courses and programs that welcome and support diverse worldviews and practices. We will build on the success of our Indigenous Mentor program and create an Indigenous Artist-in-Residence program to strengthen the Indigenous presence in school activities. As a part of SENS' co-learning journey, we will recognize the validity of Indigenous worldviews, knowledges and perspectives. We will identify opportunities for indigeneity to be expressed by everyone in SENS.



GOAL 10: Nurture Networks and Partnerships to Facilitate Planetary Health and Human Security

While our first decade placed a stronger focus on building the internal foundations for the School, our focus in this plan is to build our commitments through strategic partnerships with internal and external partners. We will create an Advisory Circle that will include Indigenous, government, industry and civil society partners to advance our community-engaged research and teaching initiatives. Through research and teaching initiatives, we will deepen existing partnerships (e.g., Indigenous communities) and develop new partnerships (e.g., the City of Saskatoon, Wanuskewin Heritage Park, and government agencies) with a view to sustaining existing network performance as they coalesce to optimal sizes, while also fostering new reciprocal relationships with external organizations and communities committed to defending the living planet and life support systems.

SENS is committed to educating the next generation of social and technical entrepreneurs who can move discoveries into action, define and implement safeguards for environmental and human health and well-being, understand how policy decisions are made, and know how to influence and motivate societal change towards sustainable pathways. Our graduates will become sought-after experts, entrepreneurs and change-

makers that can tackle wicked problems and create actionable solutions. Our graduates will be real-world problems solvers who are pragmatic, principled, provisional, political, pluralistic and participatory.

COMMITMENT 4: Inspired Communities

SENSis proud that our faculty's scholarship is embedded in communities and addresses community needs and interests. We will create a mindset that empowers faculty, students and communities – no matter how skilled they are – to co-develop sustainable solutions to wicked problems. We seek to formalize and strengthen relationships of individuals by School-wide initiatives in Canada and internationally and inspire others through our collaborations.



GOAL 11: Lead in Community-engaged Scholarship that Tackles Sustainability Challenges

We will strategically hire faculty in leadership, entrepreneurship and social innovation to provide teaching and scholarship in the core areas that define the new academic programs (Figure 2). We will strengthen relationships between the School and a range of partners including other units on campus, Indigenous and other communities, government agencies, industry organizations, and build reciprocal North-South connections through course offerings, student exchanges and research partnerships. We aim to co-create teaching opportunities with our partners and showcase the results within and beyond the university. We will draw on our student body to build a School Ambassador program of alumni who can share and foster international connections and build partnerships. Our revised tenure and promotion standards and merit guidelines will recognize community-engaged scholarship.



GOAL 12: Embed Research, Teaching and Learning Opportunities within Communities

Community engaged scholarship means many things to different people. SENSis committed to sustaining reciprocal relationships with Indigenous people and communities, especially in Saskatchewan's treaty territories and Métis homelands, and to act as a positive agent of change to improve lives of Indigenous peoples on a global scale. SENSis also committed to building partnerships with governments, industries,

donors and foundations, to identify and implement sustainable solutions to complex environmental problems facing all Canadian citizens.

We will co-create teaching and research programs with our community partners and embed these through collaborative instruction.

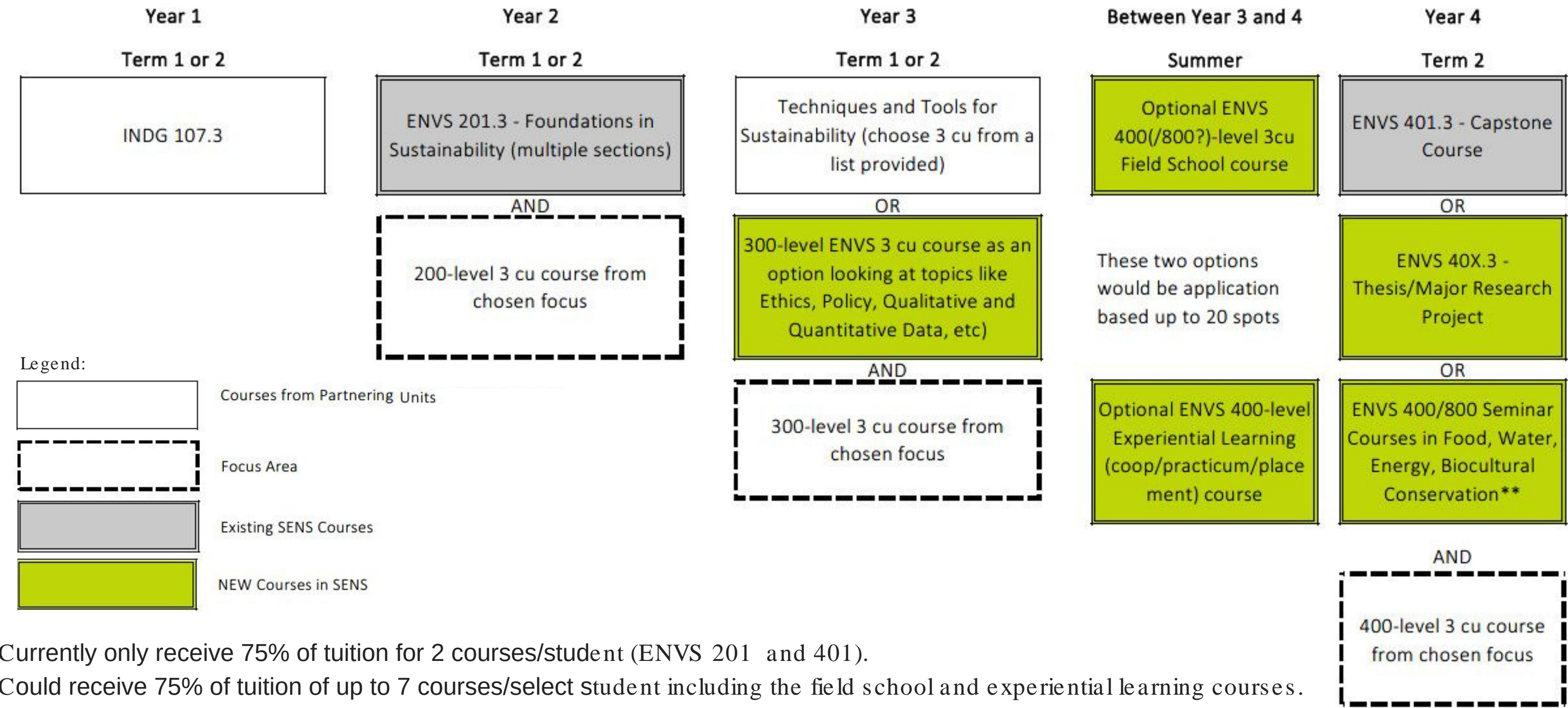


GOAL 13: Build and Showcase “Living Laboratories” for *Undisciplinary Thinking* in Sustainability

SENS is uniquely poised to build and showcase models of *undisciplinary* thinking through “living laboratories” given its participation in the Planetary Health Initiative, the UNESCO Chair program, Sustainable Development Solutions Network, and the Global Challenges University Alliance. We will create incentives and tools for faculty and partners to establish research and teaching initiatives that are designed as living laboratories outside the University campus. These initiatives may include multi-year team-based projects between the School and community partners. We will secure donors and partners who are committed to our vision of community-engaged scholarship.

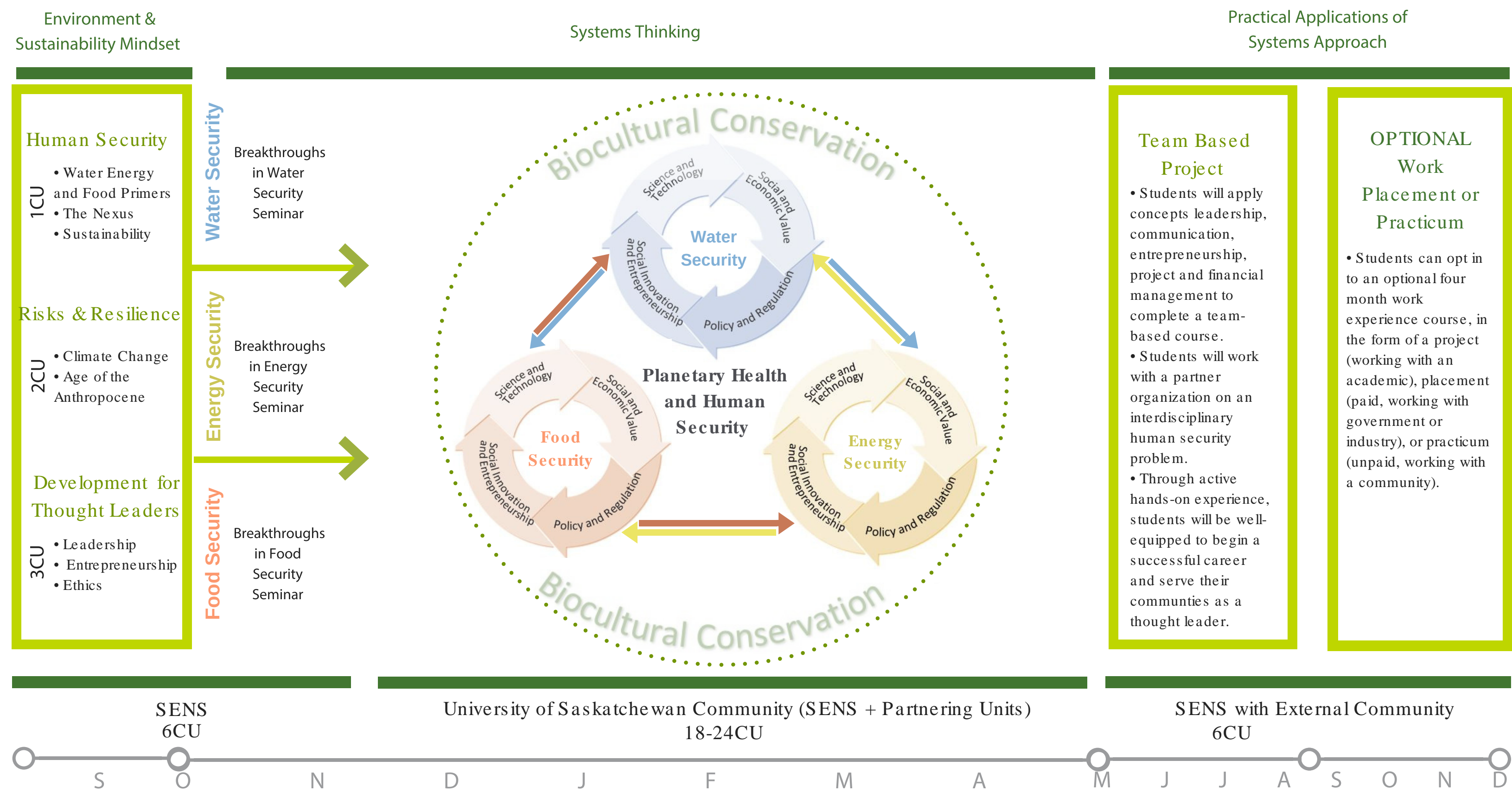
Figure 1: Undergraduate Certificate in Sustainability

- Certificate is a required 21 cu in total. In the enhanced version we will add optional field school, experiential learning and research options.
- Must be a registered student in a degree program in another College on campus to complete the Certificate.
- Students choose from 1 of 3 focus areas: Community and Sustainability, Food Systems and Sustainability, Natural Resources and Sustainability.
- Will look at adding additional focus areas to match with proposed areas of focus in new graduate programs.



- Currently only receive 75% of tuition for 2 courses/student (ENV 201 and 401).
- Could receive 75% of tuition of up to 7 courses/select student including the field school and experiential learning courses.
- In 2017 we had 37 students in ENV 201 and 71 students in ENV 401 and 18 students graduated with the Certificate.
- In 2018 we have 54 students in ENV 201 and estimate 80 in ENV 401 and approximately 25 to graduate.
- In 2019 and 2020 we estimate enrollment of 80 students in ENV 201 and 100 in ENV 401. In 2021 we estimate enrollment of 100 students in ENV 201 and 120 in ENV 401.

Figure 2: Programs in Planetary Health and Human Security at the Water-Energy-Food Nexus



Training **Thought-Leaders** for solving real world problems using systems approaches for decision making at the dawn of the Anthropocene Era. Recognizing our new normal -- there is no reference.

Capital Plan

Creating a home for SENS is a top priority for the School. It has become essential for SENS to design and establish a physical space that congregates our diverse members and enables us to meet our full potential. This may not mean bringing all faculty, staff and students from the different locations together (e.g. 3rd Floor of Kirk Hall, Toxicology Centre, National Hydrology Research Centre, National Research Council), but it will require us having a space, whether renovated or new, that allows for creative and collaborative work to occur. A space that brings in innovative design ideas such as a green wall, hoteling space, ceremonial space, collaborative space for team projects, access to active learning classrooms and laboratories for our faculty and students from here and around the world, and more. This home ties directly to our strategic plan under Stable Foundations for SENS and will allow us to strive to achieve all of our goals throughout our strategic plan. We remain hopeful this move happen in the next 2-3 years.

Discussions are already happening with the Provost and with staff in Facilities Management and Space Planning. A competition for 10,000 square feet of space on the third floor of the W.P. Thompson Building was recently announced. SENS has struck a committee to develop a proposal for submission through this competition. We are excited and believe this to be a great opportunity for the School.

Once a plan has been determined regarding the new home for SENS, it will be important for SENS to do a review of our minor capital projects (e.g., renovations, upgrades, equipment) to ensure we maintain the space and equipment over time.

Financial Plan

SENS faces an uncertain future, with a projected 8 million deficit in 10 years if the status quo is maintained. The SENS Strategic Plan recognizes our significant financial insecurity. Given its relatively large dependence on the provincial operating grant (70%), SENS is taking bold steps forward to diversify its revenue streams and to maintain its strong research revenues.

Enrolment and Tuition Growth and Other Initiatives

SENS will focus on its enrolment growth in its professional and research graduate programs. SENS@20 will transform its existing two professional master's programs (Masters of Sustainable Environmental Management (MSEM) and Masters of Water Security (MWS)) into a total of four proposed programs in the areas of Food Security, Water Security, Energy Security and Biocultural Conservation with professional (course and project) master's, and potential research master's and doctoral options available in each. SENS@20 will offer core courses to instill the mindset of the "New Age" Entrepreneur with a particular focus on Social Innovation and "Human Skills" for each of these revised or new programs, and the specialization will come from the partner units. The powerful suite of graduate programs will result in increased enrollments (for both professional and research programs). We are planning, through advance marketing, for 25 students in each of the 4 professional programs when they launch. To achieve this growth in enrollment, we will need to implement strategic faculty recruitment, in the areas of social innovation (1 hire, CRC Tier 1/2), energy security (2 hires, Centennial Chair, CRC Tier 2) and food security (2 hires, future plans not currently reflected in the strategic plan) as well as an additional Academic Programming appointment to support the course delivery in the Water-Energy-Food program areas. The new professional programs are projected to start in September 2020. We project an increase in tuition revenue by \$1.6M per year (assumes differential rate increased to 2.0). The \$1.6M per year represents total tuition which would be shared among the participating units.

In addition, we are aggressively pursuing parallel offerings for the course/project based programs internationally, starting with China. For example, in 2019, we will launch the MWS project-based program at Beijing Normal University, which is expected to bring in an additional \$225K-\$320K/year, depending on the final decision regarding revenue sharing between SENS and the College of Water Sciences at Beijing Normal University. We have (and will) build these programs in partnership with foreign institutions (recognizing this works outside the TABBS model).

SENS is reviewing its Undergraduate Certificate in Sustainability to make enhancements including new ENVS courses to amplify the value to students and serve as an *undisciplinary* backbone for all undergraduate environment programs. This will increase tuition revenue.

SENS has reduced the number of scholarships awarded by almost half to assist with moving towards a balanced budget. In the future, we plan to increase these, once we realize increased revenue from tuition and enrolment increases and as we continue our success with grant applications for scholarship funding (e.g. Queen Elizabeth Scholars program).

We are also looking at our course offerings to increase the student:teacher ratio to a reasonable level, since a number of our course offerings have a low (<10:1) student:teacher ratio.

Our policy for course releases for Research Chairs will be reviewed. Currently it is 50% of a 9 cu load which affects not only our ability to offer a stable cohort of courses each year (faculty rotate between 3 cu in one year, and 6 cu in the alternate year), but it also reduces our teaching capacity as many of our SENS faculty benefit from Research Chairs. Pending consultation with Central Administration, we are considering a 3 cu (vs. 50%) course release.

Research Revenue / Fundraising

SENS@10 faculty members have been very successful in generating new research revenue and this trend is expected to continue. Based on 2010/11 to 2014/15 data, 85% of our faculty held external awards and 67% held tri-agency funds. Since 2010, SENS faculty have applied as PI or Co-PI for 114 grants with a very high success rate.

The SENS strategic plan proposal includes support to secure 1 Endowed Chair, to hire 2 Tier 1 or Tier 2 CRC positions, to recruit 1 Centennial Chair, and to move Professor Markus Hecker to a Tier 1 CRC within 3 years. These added positions will increase the School's teaching capacity and research revenue.

SENS is in the initial stages of a pilot with University Relations on a research-led development model. The initial focus is on a Renewable Energy in Northern, Remote and Indigenous Communities led by Professors Greg Poelzer and Bram Noble, but we plan to expand this focus to the Water-Energy-Food nexus and communities-at-risk under the banner of Planetary Health. We are working towards a model of charging overhead for these "donor" funds that would feed back to the operating costs for the School. This has not yet been accounted for in the budget model.

Also, we will explore the opportunity to move towards a shared model with central support for a 1.0 FTE development officer fully funded by central.

Central Investment Required

SENS current reserve balance will cover the projected 2018/19 deficit. This assumes \$80K support from the Provost for the added costs associated with an early launch of the “reimagined” Masters of Water Security program 2 years ahead of schedule to meet the requirements of the MOU signed between the University of Saskatchewan and Beijing Normal University. Of this \$80K, \$56K is for the overload/sessional teaching to support offering the “alpha” version of the “reimagined” Masters of Water Security program starting in September 2018, and \$24K is for the design of customized English language training that the University of Saskatchewan Language Centre will complete (i.e., the \$24K will go directly to the Language Centre c/o David Parkinson).

Also, in 2018/19, the Provost will cover the on-going salary and related stipend and start-up costs associated with the new Associate Executive Director (out of scope position). We request 50% funding for the on-going stipend and grant amount for the Assistant Director-Academic and (new) Assistant Director-Research & Engagement positions.

SENS current reserve balances will not cover the projected 2019/20 deficit. A central investment of about \$270K will be required. Further investments will be required in 2020/21 of about \$775K. Beginning in 2021/22, SENS will have surplus balances, to start to repay the investments made by central. By the end of 2023/24, the net investment from central will be about \$320K, plus on-going support for a 1.0 FTE development officer.

Salary growth is the main cause of the deficit, with the following considerations

- Prior to 2018/2019, SENS was operating from the understanding that GIWS/CERC faculty were paid for from central *in perpetuity*. However, the salaries for GIWS/CERC faculty moved to SENS, and we were not adequately compensated for related salary escalations, particularly given the forecasted decrease in envelope funding.
- The two GIWS/CRFREF faculty salaries will move over to SENS effective September 30, 2023.
- Further salary increases may arise as SENS faculty complement is heavily weighted towards faculty members who have a lower turnover rate. The multi-year financial plan assumed a 2.15 salary increase that was based on a USask “average” faculty complement that is significantly different from SENS, where we have a relatively young faculty with no expected retirements within the next five years.

- NOTE Future salary growth does not include faculty positions that are currently not being paid for by SENS (but may in the future be SENS responsibility) (see multi-year financial plan executive summary).
- The multi-year financial plan assumes the Provost will cover the salary and related start-up costs associated with the new Associate Executive Director (out of scope position), and 50% of funds for the stipend and grant amount for the new Assistant Director-Research & Engagement and the Assistant Director-Academic positions.
- The new APA (to be advertised) was added to our plan to contribute to the delivery of the professional programs.
- The start-up and on-going costs associated with the new APA, new CRCs and Centennial Chair were added, including an assumption that one CRC (currently Tier 2) will be renewed as Tier 1 effective May 1st, 2021.
- NOTE no provision has been included for salary amounts for the new CRCs and Centennial Chair given the fact that the end of term for these positions is beyond the period of the multi-year financial plan.
- The anticipated Endowed Research Chair (from projected Development Funds) has not yet been realized.

Central investment will go towards supporting:

- Market research, branding and recruitment for the new and enhanced professional programs (\$50K one time)
- SENS Advisory Circle (\$50K per year)
- SENS Indigenous mentors and artists (\$50K per year)
- 2 new CRCs (one in Social Innovation at the Water-Energy-Food Nexus, a second in Community Energy Planning in Northern, Remote and Indigenous Communities)
- 1 Centennial Chair
- 1 APA appointment (to support the suite of professional (course/project-based) programs)
- Academic Programs Specialist (staff)

The final investment required from central depends on the success of the suite of professional programs, the extent of tuition amounts allocated to SENS as opposed to partner units, realizing TABBS benefits associated with projected increases in qualifications and other TABBS metrics, and the success of the Masters of Water Security program offered at the Beijing Normal University.

NOTE: Since RCM / TABBS has been implemented, SENS has not realized the benefits associated with having strong weighted activity metrics within the TABBS model. If SENS had received benefits accrued through TABBS, the amount of central support required would be less.

People Plan

Academic / Senior Leader Appointments

In 2018/19, we will have 4 new academic appointments, 3 of these positions have already been filled: the Canada 150 chair (70% SENS, 30% GEPL) started July 1, 2018; a Limited Term faculty transitioned to a tenure track Academic Programming Appointment July 1, 2018; and a tenure track Teaching & Scholar faculty started November 1, 2018.

We have received approval by the Provost for a new hire for an Associate Executive Director (out of scope) for the School, with salary, stipend and startup costs to be covered by the Provost.

For 2019/20; we have requested approval from the Provost to cover 50% of the stipend and grant amount paid to existing faculty who will take on the 2 positions: Assistant Director-Research & Engagement (new) and Assistant Director-Academic (ongoing).

Furthermore, we have requested 4 new academic appointments. These include:

- 1 APA (to be advertised) to support new enhanced professional programs
- 1 Centennial Chair (already confirmed)
- 2 new CRCs (one in Social Innovation at the Water-Energy-Food Nexus and one in Energy Security (Social and Economic Values or Community Energy Planning) in Northern, Remote and Indigenous Communities, the latter one may be deferred to 2020/21)¹

Also, SENS multi-year financial plan assumes Dr. Hecker is renewed as a Tier 1 CRC effective May 1, 2021.

Non-Academic Appointments

In 2018/19, we hired 2 term positions to support the academic programs.

For 2019/20, we are requesting a Development Officer, whose salary we are asking to be covered by Central Administration.

¹ The CRC competition feedback indicated interest in the CRC proposal on Social Innovation, requesting we resubmit a more detailed proposal in the next competition. The CRC competition feedback indicated no interest in the CRC proposal on Energy Security, however we are currently working on a stronger rationale for this position, and we plan to submit a revised proposal in the next competition.

SENS recently did a review of all staff positions and as a result we reorganized our staff structure and updated our position profiles. We will carefully review how this is working at both six and twelve months. Following this review, we will consider if the open positions will become permanent going forward.

Summary – New FTE by Fiscal Year

	2018/19	2019/20	2020/21	2021/22	2022/23
Academic	4	4			
Non-Acad.	2 term	2			

SENS@20 Scorecard

Strategic Commitment	Goal	Strategic Initiatives	Launch (Month-Year)	Resources Required	Resources Requested (2018-2019) (Year 1)	Resources requested (2019-2020) (Year 2)	Resources requested (2020-2021) Year 3	Resources requested (2021-2022) Year 4	Resources requested (2022-2023) Year 5	Current Activity	Status	Completion Rate	Tracking Indicators (codes in Appendix)
	#1: Establish a "Home" for SENS	#1a: Identify and secure space that encourages interdisciplinary thinking and is inclusive of multiple ways of knowing, working with the Provost, Facilities Management and Campus Planning	September-17	Central support						Discussions b/w ED and Provost; Initial discussions with FMD and Campus Planning	Slow Progress		Present or Absent
	#2: Enhance Financial Security - Create a Culture of Sustainable Prosperity	#2a: Establish a fundraising target and create a fundraising campaign to meet that target	Not Yet Started	Support from University Relations (Development and for a centrally funded development officer		Investment required - \$270K for faculty salaries	Investment required around - \$775K for faculty salaries	Repayment of loan to Central - \$115K	Repayment of loan to Central - \$400K		Not Started		9.1, 9.2, 10.1, 10.2, 10.5, 10.6
		#2b: Secure funding for base budget (i.e. faculty salaries)	September-17	TBD						SBA, Finance and ED working on	Slow Progress		
		#2c: Increase quality of graduate programs and attract a larger number of students into these programs	September-17	see 4a						see 4a-f	Slow Progress		
		#2d: Develop resource allocation models that reflect appropriate revenue sharing with partnering units (e.g., 60 SENS; 40 partnering unit allocation of revenues for project-based Masters programs, recognizing this works outside of the TABBS model)	March-18	Support from Provost and IPA						Initial discussions with IPA and some partner units	At Risk		
		#2e: Develop Intellectual Property agreements where the School owns IP developed for the professional Masters graduate programs	September-18	Support from Provost, Distance Education Unit (DEU), Contracts Specialist, Lawyer, etc						Initial discussions with various central offices	Slow Progress		
		#2f: Develop new revenue streams via donor support of both teaching and scholarly activities	September-16	Funds and human resources to create advancement toolkits for departments (e.g., development communications, School Annual Reports and websites geared towards Donors)	Full time ASPA Development Officer to be fully funded by central to support School's donor development (with a priority on Renewable Energy Initiative)					Renewable Energy Initiative	Slow Progress		
		#2g: Create mechanisms to charge overhead on donor support targeted to teaching and scholarly activities that would feed back to the School's operating costs	Not Yet Started	Support from University Relations and Finance, SBA							Not Started		
	#3: Elevate School Profile and Reputation	#3a: Nurture leadership in interdisciplinary scholarship	September-17	Mentorship from ED with individuals to facilitate their development; Encourage faculty with leadership potential to pursue leadership positions; Identify leadership training opportunities for faculty; Fund leadership training						Individual mentorship from ED and faculty mentorship committees; Reviewing Mentorship Committee TOR	Slow Progress		1.2, 2.3, 2.4, 3.12, 4.11, 5.2, 5.4, 5.8, 8.1-8.5
		#3b: Restructure governance of the School to include an Associate Director (out of scope), and an Assistant Director, Research & Engagement to advance the aims related to the School's and University's strategic priorities, in addition to the existing Assistant Director, Academic	October-18	Support from Provost Office	Resources from Central for a new faculty hire in the capacity of out of scope Associate ED (salary of -160K + benefits; 25K stipend; 30K to match Central for start-up costs); Resources from Central for stipend/grant for the new position of Assistant Director, Research & Engagement and the Assistant Director, Academic position held by existing faculty member (12K stipend; 5K grant per AD)					Discussions b/w ED and Provost	Slow Progress		
		#3c: Generate professional development and leadership opportunities for faculty in SENS while maintaining work life balance	September-18	TBD - dependent on types of PD faculty are looking for							Slow Progress		
		#4: Ensure Learning and Research Spaces that Enable Us to Take Care of Each Other	September-17	Funds (source TBD) for informal gatherings						Work of SENS Engagement Committee	Slow Progress		8.4, 10.4, 10.7
	#4: Consider new and innovative ways of connecting with our alumni and transitioning our students to alumni	Not Yet Started	TBD								Not Started		
		#4c: Host a recognition and engagement event annually that recognizes the contributions of partners to the School's vision and mission	September-18	Funds for event						Work of SENS Engagement Committee	Slow Progress		

Strategic Commitment	Goal	Strategic Initiatives	Launch (Month-Year)	Resources Required	Resources Requested (2018-2019) (Year 1)	Resources requested (2019-2020) (Year 2)	Resources requested (2020-2021) Year 3	Resources requested (2021-2022) Year 4	Resources requested (2022-2023) Year 5	Current Activity	Status	Completion Rate	Tracking Indicators (codes in Appendix)
	#5: Conduct and Contribute to World Class Research in Planetary Health	#5a: Contribute to the Planetary Health Initiative at the University with other partners, and particularly with Public Health and Public Policy	September-17	Discussions with central and partnering units to determine supports available to move this initiative forward						Building interest and capacity for the planetary health (PH) initiative; Participating in a PH initiative for East Africa; Participating in planning of international PH conference to be hosted at uSask	Slow Progress		5.4-5.8
		#5b: Strategically hire in the Water-Energy-Food nexus with links to Planetary Health. These hires would also support the delivery of the new graduate programs (see 4a-4f)	September-18	Funds to support strategic hires using Centennial Chair and CRC opportunities, including start up funds plus on-going research support						Centennial Chair in the energy or food areas	Slow Progress		
		#5c: Obtain School-wide funding that supports Water-Energy-Food nexus and Planetary Health (e.g., Tri-Council Call for international, interdisciplinary research projects, and Donor/Development model with University Relations to support specific research and training initiatives)	September-17	Support for a centrally funded development officer and to work collaboratively with the Schools' Research Facilitators						Successful Queen Elizabeth Scholar (QES) training program on PH focused in Africa; preparing NSERC CREATE training program on PH for submission to 2019 call	At Risk		
		#5d: Establish initiatives in Planetary Health, particularly those that focus on Indigenous communities across the globe	September-17	Support to find and apply for funding calls to support this work						Renewable Energy Initiative; Otherwise not started	Not Started		
	#6: Engage in Use-Inspired Research, Teaching and Learning in the Way the World Needs	#6a: Generate opportunities for collaborative research partnerships with other units on campus and with external partners, communities and visiting scholars, and especially strengthen connections with the Global Institute of Water Security, Global Institute of Food Security, and USask's Energy Initiatives (e.g., joint appointments)	June-18	Support from the OVPR						NSERC CREATE, QES	Slow Progress		2.1-2.8, 6.1-6.5
		#6b: Foster entrepreneurship, innovation, and systems and design-thinking in our research and teaching (e.g., obtain donor funding to assist with the creation of a entrepreneurship competition for graduate students and postdoctoral scholars to participate in focused on solving real world problems	September-17	Partner with Gwenna Moss Centre for Teaching and Learning (GMCTL) to support faculty to broaden their knowledge in these areas to utilize in the "classroom"						Early stages of discussion amongst SENS and partnering unit faculty	Slow Progress		
		#6c: Create experiential learning opportunities (e.g., field schools, placements, practicums) that bring students and communities together in Canada and abroad	September-17	Staff support to coordinate experiential learning opportunities; Financial support for student's travel, placement/practicums						Planetary Health Field School for QES	Rapid Progress (On Track)		
		#6d: Establish equitable faculty standards to recognize community-engaged scholarship	Not Yet Started	Support from the Vice Provost, Faculty Relations						Review of APA and T&S Standards to recognize community-engaged scholarship - and upgrading tenure to meet promotion standards	Rapid Progress (On Track)		
		#7a: Develop flexible models of delivery for our graduate programs (e.g., compressed courses, blended or online delivery)	October-17	Support from the GMCTL, DEU and College of Graduate and Postdoctoral Studies (CGPS)						Gwenna Moss Change Academy and working group following	Slow Progress		
	#7: Innovate Pathways for Indigenous and Non-traditional Learners	#7b: Enable academic stepping stones for direct entry into graduate program via the enhanced undergraduate certificate (see #4a below)	Not Yet Started	Support from CGPS						see 4a	At Risk		1.7, 1.12, 4.6-4.9, 6.1-6.5
		#7c: Develop and deliver non-credit/credit workshops and professional short courses to increase access for alumni, community partners, current students and working professionals	Not Yet Started	Support from the GMCTL, DEU, CGPS and Institutional Planning and Assessment (IPA)							Not Started		
		#7d: Establish equitable faculty standards to recognize indigenization	Not Yet Started	Support from the Vice Provosts, Faculty Relations and Indigenous Engagement						Review of APA and T&S Standards to recognize indigenization of teaching and scholarly activities underway - and upgrading tenure to meet promotion standards	Rapid Progress (On Track)		

Strategic Commitment	Goal	Strategic Initiatives	Launch (Month-Year)	Resources Required	Resources Requested (2018-2019) (Year 1)	Resources requested (2019-2020) (Year 2)	Resources requested (2020-2021) Year 3	Resources requested (2021-2022) Year 4	Resources requested (2022-2023) Year 5	Current Activity	Status	Completion Rate	Tracking Indicators (codes in Appendix)
	#8: Create and Enhance Internationally-recognized and Sought-after Undergraduate Certificates, and Graduate and Postdoctoral Programming	#8a: An enhanced undergraduate certificate program that serves as an interdisciplinary backbone for all undergraduate environment programs	Not Yet Started	Dedicated advertising/recruitment budget; New faculty hire of an Academic Programming Appointment; Term to Permanent appointment of ASPA staff position to support the delivery of 4a-f						Would like to explore mechanisms so that SENS UG courses can better fit into UG programs across campus	Not Started		4.5-4.9, 4.11, 5.11
		#8b: Create reimagined and new professional Master's (course, project) programs in Energy, Water, Food Security, and Biocultural Conservation in collaboration with other units in a way that enables students to get "dual" degrees by combining professional Masters degrees (e.g., extra semester gets student a Masters in Water and Energy degrees)	October-17	Support from GMCTL and DEU regarding the development of professional courses that are world class for 4b-4; Support from CGPS regarding the "dual" degrees for 4b-c. Hire new faculty Academic Programming Appointment						Redesign of Masters of Water Security (MWS) completed and implemented. Design of Masters of Food Security with interested units underway. NOI to be submitted to CGPS in Term 2.	Rapid Progress (On Track)		
		#8c: Create new interdisciplinary MSc and Doctoral programs in Energy, Water, Food Security, and Biocultural Conservation in collaboration with other units in a way that enables students to get "dual" degrees	September-18	See above						Options for MWS to expand to include course, project and thesis. Plans started for Energy and Food. Plans for doctoral programs not yet started.	Slow Progress		
		#8d: Partner with other units to design and deliver an Executive Master's program in Planetary Health	Not Yet Started	Discussion with ICT regarding investment requirements such as WebEX plugins, webcams, and microphones; access to smart classrooms; Discussions with participating units and central regarding teaching capacity						Waiting for "right to proceed" from the Provost (i.e., if this is a university wide strategic priority)	At Risk		
		#8e: Create strategic agreements with international institutions to offer our Masters and PhD programs in their countries (e.g., China)	September-17	Support from the International Office; Discussion with ICT regarding investment requirements such as WebEX plugins, webcams, and microphones; access to smart classrooms	Resources of \$80K requested to cover the costs associated with unanticipated early launch of reimagined MWS to ensure success of MOU signed between Presidents of uSask and BNU (\$24K to be provided to U of S Language Centre for development of language training at BNU campus)					MOU with BNU (China) completed. Operational Agreement underway. Soft launch of MWS in China expected in January, Hard Launch in September 2019	Rapid Progress (On Track)		
		#8f: Create a competition for graduate students and postdoctoral scholars to participate in an entrepreneurship competition to solve real world problems	Not Yet Started	Funding support - source TBD							Not Started		
	#9: Facilitate the Inclusion of Indigenous Knowledges	#9a: Work collaboratively to create and co-develop academic and research programs with Indigenous partners in Saskatchewan's treaty territories and beyond	Energy Started but not rest of programs	Support from the Vice Provost, Indigenous Engagement, GMCTL and SENS' Indigenous Mentors							At Risk		4.11, 6.1, 6.3
		#9b: (Re)design and implement courses and programs that welcome and support worldviews and practices	September-18	Support from GMCTL and those familiar with different worldviews and practices on and off campus							At Risk		
		#9c: Build an Indigenous Mentor program and Indigenous Artist in Residence program to infuse Indigenous presence in school activities	Mentor - existing; Artist - January 2019	Partner with GMCTL Indigenous Voices Program to provide professional development for faculty and staff; Partner with Jeremy Morgan of University Art Collection for Indigenous Artist in Residence; Funding for mentors/artists						Currently have an Indigenous Mentor; Discussions underway to review Terms of Reference for this position; Discussions underway to add an Indigenous Artist in Residence	Rapid Progress (On Track)		
		#9d: Regularly re-affirm our relationships with Indigenous and other partners through ceremony	Not Yet Started	SENS Indigenous Mentors							Not Started		
	#10: Nurture Networks and Partnerships to Facilitate Ecosystem and Human Security	#10a: Create an Advisory Circle that will include Indigenous, government, industry and civil society partners to advance our community-engaged research and teaching initiatives	Not Yet Started	Funds to create and support activities of the Advisory Circle to advise on implementation of our strategic plan						Initial discussion internal to SENS	At Risk		3.9, 3.10, 4.1-4.11, 5.1, 5.3, 5.4
		#10b: Enrich and expand partnerships (e.g., the City of Saskatoon, Wanuskewin Heritage Park, Indigenous communities, and Provincial governments)	Existing New - Not Yet Started	TBD							Not Started		
		#10c: Create reciprocal relationships with external communities	Ongoing	Funds to create a series of round table discussions inviting external agencies (government, industry) to meet, discuss, plan actions surrounding issues of mutual interest						"Pilot" event was the round table with Lieutenant-Government of Ontario; Next steps not determined	Slow Progress		

Strategic Commitment	Goal	Strategic Initiatives	Launch (Month-Year)	Resources Required	Resources Requested (2018-2019) (Year 1)	Resources requested (2019-2020) (Year 2)	Resources requested (2020-2021) Year 3	Resources requested (2021-2022) Year 4	Resources requested (2022-2023) Year 5	Current Activity	Status	Completion Rate	Tracking Indicators (codes in Appendix)
	#11: Lead in Community-engaged Scholarship that Tackles Sustainability Challenges	#11a: Strategically hire faculty in the area of social innovation and entrepreneurship	September-18	Funds to support strategic hires using Centennial Chair and CRC opportunities						CRC Proposal submitted to uSask call; Revisions underway	Slow Progress		1.7, 1.8, 2.8, 4.1-4.11, 5.4, 8.4, 10.3, 10.4
		#11b: Strengthen north-south connections through course offerings, student exchanges, or research partnerships	September-18	TBD						Individual faculty making connections	Slow Progress		
		#11c: Strengthen relationships between the School and municipal, provincial and federal government agencies through course offerings, student exchanges, or research partnerships	Not Yet Started	Consider new and innovative funding sources to allow increased community-based programming and other engagement commitments							Not Started		
		#11d: Create a School Ambassador program of alumni who can help showcase our scholarship, foster international connections and build partnerships	Not Yet Started	Support from University Relations (Alumni); Funding for program (amount TBD)							Not Started		
	#12: Embed Research, Teaching and Learning Opportunities within Communities	#12a: Co-create teaching and research programs with community partners and showcase the results within and beyond the university (e.g., multi-year team-based projects between the School and community partners)	Not Yet Started	TBD						Initial discussion amongst Curriculum Working Group	Slow Progress		1.7, 1.8, 3.9, 3.10, 5.1-5.4
	#13: Build and Showcase "Living Laboratories" for Undisciplinary Thinking in Sustainability	#13a: Create incentives and tools for research and teaching initiatives to become "living laboratories"	Not Yet Started	TBD							Not Started		2.8, 10.1, 10.2, 10.6
		#13b: Secure donors who are committed to our vision of community-engaged scholarship	Not Yet Started	Support from University Relations (Development and for a centrally funded development officer							Not Started		

Appendix: Tracking Success

Fundamentals: Excellence in Teaching and Research

1. Interest and Engagement of Students and Postdoctoral Fellows

Student Intake

1. Number of our graduate programs that are sought after globally by high quality applicants with diverse life experiences (Number of student contacts, Measures of student satisfaction, Student retention statistics)
2. Number of qualified applications, admissions offered, admissions accepted and registered students
3. Enrollment numbers
4. Number of Indigenous graduate students and PDFs

Student Experience

5. Number of students funded from grants
6. Number of scholarly publications with students and postdoctoral fellows (PDFs)
7. Number of international opportunities (e.g., conferences, study abroad, etc.)
8. Number of students participating in international opportunities (e.g., conferences, study abroad, etc.)
9. Percentage of retention and completion rates
10. Number of on-time completion of students
11. Number of student excellence awards – internal and external
12. Number of students with co-curricular record entries, and number of co-curricular record entries for each student
13. Percentage student satisfaction as measured by surveys at specific points during relationship with SENS (e.g., expressed overall satisfaction/experience of students in our program; expressed overall satisfaction/experience of self-identified Indigenous students in all our programs)

Student Success

14. Number of graduates in relevant employment
15. Percentage of self-identified Indigenous students as graduates in relevant employment

2. Teaching Excellence

1. Predictable course offerings so that students can meet the degree requirements in a timely fashion, in courses of their choosing, at the time of their choosing

2. Number of entrepreneurial competitions annually for graduate students and PDFs
3. Number of awards received by our graduate students and undergraduate certificate holders
4. Number of awards received by our faculty for teaching
5. Number of graduate students with first author publications and presentations
6. Number of graduate students with scholarships
7. Number of graduate students with grants
8. Number of graduate students participating in team-based *undisciplinary* collaborations

3. Research Excellence

1. Research intensity (e.g., publications, citations, H-Index, invited lectures, patents)
2. Number of faculty/student coauthored papers in high impact journals
3. Number of faculty/student coauthored papers that are of an innovative nature and interdisciplinary focus
4. Number of external funding applications
5. Diversity of external funding applications
6. Number of grants/contracts awarded
7. Total annual research funds
8. Total annual licensing revenue
9. Number of collaborative research initiatives
10. Diversity of collaborators
11. Number of research chairs
12. Number of honors, awards, prizes

4. Community Engagement

1. Number of activities held within communities
2. Percentage of **SENS** activities held within Indigenous communities
3. Number of grant applications with shared leadership with collaborators or partners
4. Percentage of grant applications with shared leadership with Indigenous collaborators or partners
5. Number of memoranda of understanding with communities
6. Number of external partnerships (Saskatchewan, Canada, and international)
7. Number of partners involved in development and delivery of graduate programs
8. Number of partners for projects and practicums
9. Number of students working with partners
10. Number and impact of invitations to meet and work with government officials

11. Percentage community and partner satisfaction (e.g., expressed overall satisfaction by community and Indigenous partners in work completed during internships, courses and research collaborations; expressed perceived impact by members of the Advisory Circle)

Institutional Vitality and Sustainability

5. Hub of *Undisciplinary* Collaborations and Connections

Water-Energy-Food Trifecta

1. Number of collaborations between GIFS and GIWS and associated CFREF programs and the Renewable Energy Initiative led by SENS researchers and their students
2. Number of discoveries, innovations and entrepreneurial initiatives in the application of sustainability *undisciplined* in the Water-Energy-Food nexus and Ecosystem & Human Security
3. Number of team-oriented research and development with multi-author final projects

Planetary Health

4. Number of partnerships with external institutions, including other universities, government agencies, industry organizations and foundations
5. Number of faculty engaged in Planetary Health Initiatives
6. Total donor funds awarded to Planetary Health Initiatives
7. Total grant funds awarded related to Planetary Health Initiatives
8. Number of presentations and publications Planetary Health Initiatives

6. Ethnic and Cultural Diversity

1. Percentage of self-identified Indigenous faculty, staff and students
2. Percentage of international faculty, staff and students
3. Number of Indigenous Mentors and Indigenous Artists-in-Residence each year
4. Number of courses and programs that incorporate and affirm diverse worldviews and ways of knowing
5. Percentage of faculty actively engaged in their own learning processes, teaching and research in ways that support indigenization and reconciliation

7. Faculty Success and Happiness

1. Number of faculty assuming leadership positions in the School and at the university

2. Number of faculty engaged in strategic planning activities and priorities to the School
3. Number of faculty participating in faculty mentorship programs
4. Number of outstanding faculty and staff recruited (not only recognized by academic community but as having impact in the world)
5. Number of faculty promoted to Associate and Full within regular timelines
6. Number of faculty recognized for their broader range of impact in scholarship impact, policy/practice initiatives, social, cultural, political impact
7. Percentage of faculty retained

8. School Profile and Reputation

1. Analytics on newsletter, website traffic and social media platforms
2. Number of faculty affiliated with a University of Saskatchewan program with preeminent ranking nationally and internationally
3. Number of faculty nominated and successful in honors/prizes/awards
4. Number of annual celebrations to promote and reaffirm engagement of community, government, industry, and Indigenous partners
5. Percentage of faculty actively participating in School activities (e.g., governance, seminars, celebrations)

Financial Sustainability – Creating a Culture of Prosperity

9. Balanced baseline budget for existing faculty

1. Size of annual financial balance
2. Size of annual financial reserve

10. Funding Diversity and Growth

1. Number of new fundraising initiatives
2. Number of new funding sources
3. Number of new partnerships within the province, nationally and internationally with aligned missions
4. Number of engaged alumni, participating in meaningful experiences and events as volunteers, and donating to the school/university
5. Total donor support
6. Percentage engagement of donors and funders in School activities
7. Percentage expressed satisfaction with Schools vision, mission, strategic plan

To learn more about the School of Environment and Sustainability, visit sens.usask.ca



To read the full university plan, visit plan.usask.ca