



ANNUAL ACTION PLAN

Fleming College
2019 - 2020

Introduction

In 2018 Fleming completed its 5 year sustainability plan and has completed a draft version of the 2019 – 2022 plan. The plan sets the roadmap for Fleming College over the next three years in supporting the 17 Sustainable Development goals while achieving carbon and waste reduction targets. The plan also reflects the priorities of College stakeholders, staff, students and the broader communities that we serve.

Fleming College has aligned its sustainability goals with the 17 United Nations Sustainable Development Goals (SDG's) which support the vision for worldwide Sustainable Development. The SDG goals are highlighted within the five categories in the plan: Green Campus; Green Culture; Green Curriculum, Green Research and Green Community, connecting our local and regional work at Fleming College with these important global targets. The targets are also aligned with STARS.

In 2019 Fleming will begin to prepare and submit an application for an updated ASSHE STARS rating. In 2016, Fleming achieved the Silver award for STARS, <https://flemingcollege.ca/news/fleming-college-receives-stars-silver-rating-for-sustainability-achievements/> the most recognized international sustainability benchmarking report for higher education. This award reflects accomplishments in the areas of operations, curriculum and research, engagement, planning and administration, leadership and innovation. We aspire to achieve a STARS Gold rating this year.

Fleming has also been recognized as one of the 13 Centers for Sustainability across the curriculum, the only Canadian institution selected by the Association for Advancement of Sustainability in Higher Education (ASSHE) <http://www.aashe.org/partners/centers-for-sustainability-across-the-curriculum/> . This year we continue to embed sustainability across the curriculum with a focus on enhanced faculty resources.

Fleming also has plans to further reduce our campus carbon footprint and is well poised to continue to be a leader in sustainability. We lead because of our programs; our research; our beautiful campuses; and our work with communities, but most of all, we lead because of our staff and students!



THREE YEAR PLAN GOALS, STRATEGIES AND TARGETS	2018-19 ACTION PLAN PRIORITY	LEADS	BENEFITS
<p>Green Campus:</p> <p>1.1 Reduce CO2 emissions toward 30% by 2030 and 80% by 2050 through measures identified in the Climate Action Plan</p> <p>1.2 Reduce water consumption by 20% per square metre by 2021</p> <p>1.3 By 2021, Fleming will have implemented a comprehensive sustainable landscape plan for all campuses based on ecological design principals</p>	<p>GGCRP Projects Completion (boiler upgrades, LED and window, alternative energy etc.) Investigate Tools to reduce/better track CO2 such as RET Screen and the Mohawk Campus Carbon Toolkit Recalculate GHG's & Update GHG Inventory for STARS submission – complete 17/18 GHG inventory (energy)</p> <p>Track water usage at CAWT and at Hatchery and include in water tracking</p> <p>Frost Campus: Comprehensive inventory by correlating existing department databases Bio Data – Student Engagement in annual Bioblitz Develop Naturalization Plan for Geothermal Field Continuation of Arboretum Trail Expand green roof Invasive species plan Pollinator Garden Expansion</p>	<p>Physical Resources Office of Sustainability /</p> <p>Physical Resources Office of Sustainability /</p> <p>Office of Sustainability/SENRS/Physical Resources</p>	<p><i>SDG 6 Clean Water and Sanitation</i></p> <p><i>SDG 7 Affordable and Clean Energy</i></p> <p><i>SDG 9 Industry, Innovation and infrastructure</i></p> <p><i>SDG 12 Responsible Consumption and Production</i></p> <p><i>SDG 15 Life on Land</i></p> <p>Increase our efficiency in how we measure / track our CO2 emissions in order to achieve goals in action plan as well as achieve a Gold rating with AASHE Stars program</p> <p>Better capture of campus water consumption</p> <p>Measures to support sustainable landscape plans at Frost and Sutherland/campus naturalization</p>

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<p>1.4 Build all new construction projects to LEED Gold standards</p>	<p>Calculate Tree Canopy Value: carbon offset Develop options/plan to reduce salt use/employ alternative salting mechanism</p> <p>Sutherland: Implementation of row gardens Expansion of birdhouse and bat city Expansion of meditation garden</p> <p>Inventory and publish current LEED standards in current structures</p> <p>Broader involvement of stakeholders in new builds during the design phase/e.g. build in proper C&D disposal/recycling in contract to improve corporate diversion rates</p>	<p>OOS/PRD</p> <p>OOS/PRD/Purchasing</p>	<p>Aligning infrastructure with shift in green building technologies being taught in curriculum</p>
<p>Green Culture: 2.1 Reduce waste to landfill by 20% and improve waste diversion to 70%</p>	<p>Waste Diversion: Deep Diversion Implementation - Battery, Pens, Cigarette Disposal Bins, Eco Trays No Straw Campaign Roll-out</p>	<p>OOS/PRD</p> <p>Folletts/OOS</p>	<p><i>SDG 6 Clean Water and Sanitation</i></p> <p><i>SDG 10 Reduced Inequalities</i></p>

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<p>2.2 Reduce Paper usage by 60%</p> <p>2.3 Implement Sustainable Procurement Guidelines for all college purchasing and a new Board Sustainability Policy to guide decision-making for the College.</p>	<p>Eliminate plastic bags in Bookstore Evaluate Fill it Forward Campaign effectiveness Use Waste management course to run waste audit programs at Frost and Sutherland Add metrics and “advertisements” to SAC monitor system to promote waste diversion Support Paper Planter program ENACTUS through project support/grant writing Expand Wastebin program Provide waste reduction information on electronic monitors</p> <p>Reduce the allocation of staff “funds” from 10,000 to a lower number Run Paperless course workshops</p> <p>Launch the Sustainable Procurement Guidelines Document with Procurement Department</p>	<p>Aramark/Food Series/ OOS</p> <p>ITS/OOS</p> <p>LDS/OOS</p> <p>Purchasing/OOS</p>	<p><i>SDG 11 Sustainable Cities and Communities</i></p> <p><i>SDG 12 Responsible Consumption and Production</i></p> <p><i>SDG 13 Climate Action</i></p> <p>Aligning waste diversion with targets, college community feedback and Ontario’s direction re: waste free legislation and the circular economy</p> <p>Reducing GHGs from Waste</p>

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<p>2.4 Improve Local food services in our food services to 40%</p> <p>2.5 Improve alternative transportation use to 60% of students and 20% of staff</p> <p>2.6 Provide every staff and student an opportunity to engage in sustainability</p> <p>2.7 Provide every staff and student an opportunity to participate in workshops offered through our Living Planet at Campus and Living Planet at Work Programs</p>	<p>Re-launch Local Food Website Investigate partnership/proceeds from Sustainable Agriculture Garden to Culinary</p> <p>Complete Frost Shuttle Business Case Re-establish Bike Program at Frost and improve infrastructure</p> <p>Install bike signage at Frost and Sutherland Develop Sustainable Transportation Plan Investigate One card for bus pass</p> <p>Shoreline Cleanup – Cobourg and Del Crary Park CN Tower Climb for Nature Challenge World Wildlife Fund, Envirothon</p> <p>Engage with city of Lindsay to run clean up on Mary Street</p> <p>Run a Living Lab workshop to connect to Living Planet at Work</p>	<p>Aramark/OOS/School of Business/SENRS</p> <p>SENRS/OOS/FSA</p> <p>PRD/City of Peterborough Transportation One Card Project Implementation Team</p> <p>Office of Sustainability/World Wildlife Fund</p> <p>Office of Sustainability/World Wildlife Fund</p> <p>Office of Sustainability/World Wildlife Fund</p>	<p>Reduce transportations related GHGs and improve access to alternative forms of transit (e.g. international students).</p> <p>Supporting community sustainability and embedding Fleming within our communities /strengthening partnership with World Wildlife Fund and developing students through engagement (volunteers) and national identity.</p>
Green Curriculum:			<i>SDG 4 Quality Education</i>

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<p>3.1 Maintain the number of sustainability courses at a minimum of 25% of total Courses and further develop tools for faculty to support quality learning.</p> <p>3.2 Include the sustainability learning outcome in 100% of the Diploma programs.</p> <p>3.3 Launch a comprehensive sustainability and climate change general education Course.</p> <p>3.4 Implement a sustainability literacy assessment available for all graduating Students.</p> <p>3.5 Launch a living lab in the Kawartha Trade and technology Centre for alternative</p>	<p>Perform inventory of current courses to ensure targets are met or exceeded/ Review applied projects inventory</p> <p>Faculty development workshop (June 14/19), work with program review teams to support the sustainability VLO mapping and development</p> <p>Perform inventory of current sustainability GNED's to determine if any could be used</p> <p>Engage WWF living Planet at Campus Develop a literacy assessment</p> <p>Develop and Run Living Lab for Frost (March 2019) and Sutherland</p>	<p>LDS/Office of Sustainability</p> <p>LDS/Office of Sustainability/OCUSP</p> <p>GNED Coordinator/Office of Sustainability</p> <p>Office of Sustainability/World Wildlife Fund</p> <p>PRD/Office of Sustainability and School of Trades and Technology</p>	<p><i>SDG 10 Reduced Inequalities</i></p> <p><i>SDG 11 Sustainable Cities and Communities</i></p> <p><i>SDG 13 Climate Action</i></p> <p><i>SDG 16 Peace, Justice and Strong Institutions</i></p> <p><i>SDG 17 Partnerships For the Goals</i></p> <p>Accurate data for 2019 STARS submission and up to date information regarding faculty work.</p> <p>Updating curriculum to reflect Global Goals (SDGs) and climate change issues.</p>

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<p>energy technologies, including wind, solar, geothermal and energy storage Solutions.</p> <p>3.6 Launch new programs supporting sustainability, low carbon building and the circular economy, including Sustainable Urban Design, Geothermal Systems Mechanic, Global Supply Chain and Logistics, Leadership in Sustainable Business Practices and Hydronic Systems Design.</p> <p>3.7 Expand training programs and tools for municipalities through the CSM with a Focus on both climate mitigation and adaptation.</p>	<p>Launch Leadership in Sustainable Business Practices, Geothermal Systems (hydronics), Conservation Biology and Complete analysis/ business case for sustainability related programs (intersection of environmental and urban issues) including Green Infrastructure and Sustainable Transportation</p> <p>Launch Home Flood Protection Program in partnership with the U of Waterloo Intact Centre for Climate;</p> <p>Engage with the City of Kawartha Lakes re: Training identified in the CKL Healthy Environment Plan</p>	<p>SENRS/Contract Training/Trades and Technology – (OOS)</p> <p>Contract Training and Flexible Delivery</p> <p>SENRS/Contract Training and Flexible Delivery</p>	<p>Launch new programs with a focus on low carbon technologies, the circular economy and climate change resiliency</p>

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<p>Green Research:</p> <p>4.1 Increase the number of applied research opportunities for faculty and students in Building science, aquaculture, health and community development programs.</p> <p>4.2 Continue to expand low carbon technology and water and waste water technology/ related research in our CAWT.</p> <p>4.3 Through the CSM, develop further research and tools for municipalities to use in Both mitigation and adaptation to climate change.</p> <p>4.4 Increase applied sustainability and indigenous knowledge research both on campus And with the partners in the Regional Centre of Expertise.</p>	<p>Shift focus of Student grants/projects to research Frost: Apiary monitoring equipment Applied research on Arboretum / Frost Seed Bank Applied research on Vermi composting Pitch Competition – add a research focus</p> <p>Research: Develop options/plan to reduce salt use/employ alternative salting mechanism (brine/beet juice)</p> <p>Complete Phase 1 of the Indigenous ESD and Quality Education for Indigenous Learners and one additional research project as a result of Recommendations from the February/19 Community SDG Forum</p>	<p>OOS/SENRS, EM Program/FASTart,PRD</p> <p>Aboriginal Student Services/Trent University/Kawartha World Issues Centre, Peterborough Kawartha and Haliburton RCE/Green Up</p>	<p><i>SDG 3 Good Health and Well – Being</i></p> <p><i>SDG 6 Clean Water and Sanitation</i></p> <p><i>SDG 9 Industry, Innovation and Infrastructure</i></p> <p><i>SDG 13 Climate Action</i></p> <p><i>SDG 14 Life Below Water</i></p> <p><i>SDG 17 Partnerships for the Goals</i></p> <p>Shift focus of student applied projects and grants to research, with a focus on the SDGS, low carbon economy and climate change resiliency</p>

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<p>4.5 Conduct a comprehensive inventory of all sustainability related research at Fleming.</p>	<p>Complete Faculty Survey to identify research relating sustainability for STARS submission in July, 2019</p>	<p>OOS/Institutional Research Office</p>	
<p>Green Community: 5.1 Provide every diploma student with the opportunity through either curricular or extracurricular experiences a minimum of one opportunity to work on a Community project supporting local sustainability goals.</p>	<p>Living Planet at Campus Shoreline Cleanup – Del Cray Park Cobourg Shoreline Cleanup 2019 Envirothon Competition at Sutherland Pitch Competition – 2019 Eco Conference WWF Living Planet at Work Camp again – Focus on Plastics Bio Blitz for Sutherland Campus - July, 19 CKL Healthy Community Plan – identify student projects Reapply for a Bee Campus designation at Frost Campus</p>	<p>Office of Sustainability /WWF/Cobourg Campus/EM Program/FASTart</p>	<p><i>SDG 1 No Poverty</i></p> <p><i>SDG 3 Good Health and Well – Being</i></p> <p><i>SDG 4 Quality Education</i></p> <p><i>SDG 8 Decent Work and Economic Growth</i></p> <p><i>SDG 11 Sustainable Cities and Communities</i></p>

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<p>5.2 Launch a minimum of one research partnership per year with community Partners under the auspice of the UNU Regional Centre of Expertise.</p> <p>5.3 Provide every staff member with an opportunity for one community service Opportunity annually administered through the Office of Sustainability.</p> <p>5.4 Continue to work with the local community and services to support our international students and new immigrants through adequate housing, language Skills training, transportation and cultural events.</p>	<p>Seed Strategy partnership with Forests Ontario Plant Meditation Garden and Seed Blitz, Secure Community Grant through World Wildlife Fund (done)</p> <p>See 5.1</p> <p>Complete a Frost shuttle service business case</p>	<p>SENRS – EM Program/Forests Ontario/OOS staff</p> <p>OOS/SENRS/Frost Student Association</p>	<p><i>SDG 17 Partnerships for the Goals</i></p> <p>Supporting community sustainability and embedding Fleming within our communities /strengthening partnership with World Wildlife Fund and developing students through engagement (volunteers) and national visibility</p>