

ACADEMIC INSTITUTION	University of Regina	PROJECT NAME	Circularity Center
-----------------------------	----------------------	---------------------	--------------------

NEED AND AUDIENCE

Human beings have greatly increased their GHG emissions, landfill waste footprint, resource extraction rates, and energy consumption rates over the last several decades, most notably after the large-scale use of cheap petroleum-based plastics in manufacturing. This activity has led to exponential destabilization of Earth's natural ecosystems, including the endangerment and extinction of animal habitats (eg: marine debris harming marine life), a rise in air pollution (from unsustainable manufacturing), and threats to global food systems. One of the most infamous of the sets of changes to our global environment is climate change, marked by extreme temperatures, a rise in natural disasters, and unpredictable weather. We believe that one of the major causes of all of these issues is excessive production and consumption, environmental and resource inefficiencies in production and packaging, and the lack of reusing and recycling of existing materials. If we can become more efficient in our production and consumption systems, we can lower our GHG, waste, energy, resource, and water rates, while also increasing population health and protecting our natural ecosystems from waste and pollution.

We believe in the circular economy, or circularity, a framework for production, distribution, and consumption which aims to eliminate waste, excessiveness, and pollution by prioritizing the sharing, leasing, remanufacturing, reusing, repairing, refurbishing, recycling, and recovery of products. It is in opposition to hyper-consumerism, and profit-centric corporatist economic strategies which do not consider sustainability. We have established a research and innovation center based on circularity principles, which will primarily target SMEs by helping them adopt circularity principles, and increase their sustainability profile. A secondary audience is the general public, who should be made aware of the companies they are patronizing, so they can make an informed and educated choice.

ACTION TAKEN

Our main activity thus far has been working with another Enactus Regina project to introduce a sustainable development (social, economic, environmental sustainability) framework into a lecture they gave to 145 trades college students. This is now in the process of becoming part of an official class syllabus in both Delmar College of Red Deer and also Red Deer Polytechnic. We have also created a circularity proposal for the University of Regina campus and its garden system, which has been presented to about 10 people. We are currently working on building guides for byproduct usage, planned obsolescence, and the right to repair, which will be distributed to local businesses in Regina and also posted online. We are also in the final stages of finalizing a nation-wide circularity innovation challenge with IEEE Canada, which we estimate will attract 50 students closer to the end of this year.

IMPACT

- 145 trades college students taught about sustainable social development
- 10 people informed about new ways to make the UofRegina campus more sustainable

STANDARD METRICS				
(These metrics are related only to the project presented and represent work done since March 1 2021)				
Individuals educated on climate action	155	Businesses educated on climate action		
Litres of water conserved		Metric tonnes of waste diverted		
GHG emissions diverted		Dollar value of waste diverted in CAD \$		
PROJECT START DATE	November 2021	IS THIS PROJECT WHOLLY-OWNED AND OPERATED BY THE TEAM?		Yes