

Sheridan

The SDG Accord

The University and College Sector's Collective Response to the Global Goals

Integration of SDGs in

- Institutional governance/strategic level
- SDGs in research
- SDGs in campus operations
- SDGs in curriculum development
- SDGs in student engagement activities
- SDGs into community activities
- SDGs at a whole-institution level

Focus on

- Goal 1 - No poverty
- Goal 2 - Zero hunger
- Goal 3 - Good health and wellbeing
- Goal 4 - Quality education
- Goal 5 - Gender equality
- Goal 6 - Clean water and sanitation
- Goal 7 - Affordable and clean energy
- Goal 8 - Decent work and economic growth
- Goal 9 - Industry, innovation and infrastructure
- Goal 10 - Reduced inequalities
- Goal 11 - Sustainable cities and communities
- Goal 12 - Responsible consumption and production
- Goal 13 - Climate action
- Goal 14 - Life below water
- Goal 15 - Life on land
- Goal 16 - Peace, justice and strong institutions
- Goal 17 - Partnerships for the goals

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Living Labs to educate and engage with students and local communities

Sheridan has accelerated action on SDGs by using its campuses as Living Labs to educate and engage with students and local communities (SDGs 4 and 11). Physical spaces have been constructed to allow visibility into mechanical rooms and unique green building features. The District Energy Centre at our Brampton, Ontario Campus is glassed-in, allowing passers-by to view the equipment inside. Students can see the combined heat and power engines, condensing chillers, and thermal storage tanks that are housed within the district energy centre, while learning about these systems in class. They can also access operating data from the systems or have a guided tour with a knowledgeable Facilities staff person or their instructor to see how these systems operate.

Sheridan invites community stakeholders, equipment suppliers, consultants, engineers and visitors from abroad to tour our facilities and learn about our use of global best practices in buildings, district energy and energy efficiency (SDG 11). In 2017, we initiated partnerships with the Town of Oakville, Ontario and the City of Brampton, Ontario (combined population of approximately 900,000) to develop 30-year, strategic Community Energy Plans, which will help these communities drastically lower energy and greenhouse gas emissions (SDGs 7, 11, and 13). The plans support a 50% reduction in greenhouse gas emissions by 2041, representing an estimated 48.3 million metric tonnes cumulatively between now and then. In accomplishing this, both municipalities expect to repatriate a substantial portion of the \$1.9B of energy expenditure currently leaving the communities, support local economic growth and job creation, and return at least \$33B in cost savings to residents over the plan period. In February and September 2020, both City Councils unanimously endorsed and adopted these Community Energy Plans. With Sheridan's ongoing support, both municipalities are developing not-for-profit community enterprises to implement the Plans.

BENEFITS

1. Accelerating transformational change in the communities we serve
2. Educating the broader community on successful approaches to GHG reduction through energy efficiency and energy-efficient design
3. Opportunities for continuous feedback and learning that improve our campus operations

BARRIERS

1. Market participant behaviour inconsistent with transformational practice, which was overcome by explaining the benefits of supporting new market development in transformed communities.
2. Poor community understanding of the magnitude of change required to meet Paris Accord and Canadian Federal Government targets. Overcome using data-driven simulations and modelling to quantify impact of various interventions.

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The Davis District Energy Centre which supplies heating and cooling for the campus using a combination of energy-efficient technology including combined heat and power engines and absorption chillers.



Oakville Town Council, Oakville residents and members of the Oakville Energy Task Force following the Council's unanimous approval of the Community Energy Strategy in a Special Meeting. February 2020.

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CONCLUSIONS

Post-secondary institutions are a trusted and important partner in the communities they serve. Campus-based leadership in sustainable practice can be expanded to community leadership by thoughtful engagement with partners and stakeholders who are seeking breakthroughs or transformations of technical, social and/or economic systems. In many cases these potential partners are aware of the opportunities for positive change, but require a catalyst to spark meaningful progress. Post-secondary institutions can also provide necessary research, innovation and technical expertise that complements the expertise of community partners. It's important to recognize that transformational change within the community will ultimately require changes in human behaviour and social practices. As with the SDGs themselves that are interlinked social, environmental and economic goals, the change process in any goal area should include simultaneous consideration of impact within these aspects of development.