



- 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 goal

SDG Accord Reporting 2022 CASE STUDY

Food Security – Controlled Environment Agriculture Centre of Excellence

In 2021 we installed an off-grid grow pod at our College Drive Campus. The pods building envelope consists of solar panels and includes a battery storage system to capture any unused solar energy for use after sundown thereby displacing the use of fossil fuels.

The pod operates 24 hours a day and can produce approximately 30,000 pounds of food annually. It offers experiential learning and applied research opportunities to our staff and students, and fresh herbs and vegetables to our culinary programs.

Our food security project and demonstration site offers a replicable solution to create food sovereignty in rural and remote communities and helps to offset climate change, drought, and the extra heat and changing landscape we live in. This off-grid solution will also be an excellent option for indigenous communities that are reliant on diesel generators for electricity generation.

“Canadore College is committed to exploring, innovating, and learning about new ways to improve food security for northerners as part of our ongoing sustainable development efforts”

- Shawn Chorney, Vice President Strategic Infrastructure, Indigenous and Learner Services

Benefits:

1. Off-grid solution displaces the use of fossil fuels and stores any excess solar energy for use in after sundown.
2. This initiative helps to target a number of important SDGs and offers a replicable solution that is climate resistant and will help to create food sovereignty by offering produce that is healthy, sustainable, and affordable.
3. Provides continuous experiential learning and research opportunities to our staff and students to help further promote sustainable energy and production.

Challenges / Learning Opportunities:

1. COVID-19 delayed construction by two years. We used this as an opportunity to conduct additional research on growing hydroponically and consulted with indigenous communities to obtain feedback.
2. We learned that for some indigenous communities, cultural norms indicate that food grown hydroponically lacks nutrients. This has provided us with an additional research opportunity for phase 2 where we intend to grow simultaneously using soils and hydroponics and conduct genetic and nutritional analysis to measure relative nutritional value with a potential goal of establishing a food security program for indigenous communities.

Conclusions:

Post-secondary institutions play a vital role in the communities they serve. Through partnerships, research and innovation we can help to promote SDGs and find solutions to problems of today and tomorrow. In 2022, we will move into phase 2 of this project, which will include a water treatment facility.

View our ongoing initiatives here: canadorecollege.ca/sustainable

Phase 2 plan below – See video for Phase one [here](#)

