

Dalhousie University Campus

Sustainability Map Tour



Renewable Energy

- 40 solar thermal panels at the LSC.
- Solar wall on the Mona Campbell Bld.
- 80 solar photovoltaic (PV) panels installed in front of a solar duct system on the roof of the Computer Science Bld.
- 46 solar thermal panels (hot water heating on the LeMarchant Place Bld).
- 43 solar photovoltaic (PV) on the Student Union Bld (SUB) and 16 solar pv panels on the Weldon Law Bld.
- Solar Thermal and PV Panels are mounted on C Building for research.
- 12 solar PV panel systems in the soccer field.
- 469 solar PV panels are providing power to Emera IDEA Bld & Richard Murray Design Bld

Energy & Water

- Many projects have been completed including campus lighting upgrades in buildings and outdoor lighting (LEDs), major energy upgrade of the LSC, SUB, and Tupper Bld as well as campus-wide water fixture upgrades and more.

Green Buildings

- Take a self guided tour of the LEED® Gold certified Mona Campbell Bld using the green directory and signs or watch our video. Features include a rain water cistern, building activated art, and green roof.
- Visit The Steele Ocean Sciences Bld (LEED® Silver certified) to use the bike Fixit station and the electric vehicle charge station.
- Visit the LeMarchant Place Bld (LEED® Gold certified) and see solar thermal panels for hotwater heating, low-flow fixtures, vegetative green roof, variable refrigerant flow heat recovery heat pump system, as well as an electric charge station in parking lot behind Bld.
- Visit the Wallace McCain Learning Commons (WMLC) (LEED® Silver certified) Bld to see the first building to have all LED lighting, green roof, FSC certified wood, and refillable bottle station.
- LSRI is a LEED® Silver certified bld. A number of green features include high rates of construction and demolition diversion, energy efficient motor drives, natural landscaping and LED lighting.
- Collaborative Health Education Bld (CHEB) (LEED® Gold candidate) features convenient bus and bike access, chilled beams in rooms (more energy efficient than typical systems), white roof, and carbon cure concrete block. Carbon cure technology captures CO₂ from industrial sources and uses the captured CO₂ in the production of new concrete blocks.
- Emera IDEA Bld & Richard Murray Design Bld (LEED® Gold candidates) have many unique sustainability features including 60 well geo-exchange system, 469 solar PV panels, rainwater cistern, battery storage, and more.
- Fitness Centre (LEED® Gold candidate) has highly insulated walls and roof, day lighting, low flow water fixtures, EV charges, vegetative bioswale, and more.

Storm Water Management

- Permeable pavement at back of the Steele Ocean Sciences Bld.
- Rain garden – Corner of Coburg and Oxford and Killam Loop.
- Green roof between Dentistry and Burbidge buildings help to slow down storm water.

Cycling and Transit

- Hundreds of bike racks are installed across campus. Visit the campus Bike Centre at the Studley Gym. Dal has a student and employee bus pass. Bike Fixit stations are available at the SUB and The Oceans Science Bld, Morris Street and Medjuck Bld.

Gardens and Natural Environment

- Dalhousie Urban Garden Society manages an on-campus food garden behind the Computer Science Bld. Biodiversity replacement programs are restoring native and adapted species. A naturalized pond (ocean pond) was created beside the Chase Bld. Native species have been planted around the LSRI Bld and other locations on campus..

Vehicle Share

- View many idle free signs around campus and ride share parking spots. Dalhousie has signed a workplace agreement with CarShare Atlantic's and Dalhousie departments and faculties can access CarShare Atlantic's fleet of cars around Halifax. Car share spots are located on campus at the Grad House, Dentistry Bld, and in front of Gerard Hall.

Sustainability Offices

- Dalhousie has hundreds of courses and programs on environment and sustainability across faculties. Visit the College of Sustainability first floor of the Mona Campbell Bld., Environmental Science Program 8th Floor LSC (Biology) and School for Resource and Environmental Studies at the Ken Rowe Bld. As well as programs in Bachelor of Env. Design and Env. Engineering at Sexton Campus.
- The University Office of Sustainability, in the Central Services Bld, focuses on campus operations.
- The Dalhousie Student Union Sustainability Office is located in the SUB (2nd floor). There are many Dal student societies that have an environment and sustainability agenda.

Waste Management

Dalhousie recycles electronics, organic material, paper and cardboard, recyclables, construction and demolition material, white goods, and universal waste items like batteries and paint on all campuses. Look for four-bin sorting systems in every building.

Walking Distance & Times

Explore green features and get some exercise:

- University Avenue Walk:** Start at the Killam Library (X and coloured red) to just past the CHEB (Carleton Campus) 12 min (1 km), to Gerard Hall (Sexton Campus) 22 min (2 km).
- Studley Walk:** Start at Computer Science Bld (3) view the LMP Bld solar panels (4) walk by the Bike Centre (21), around Alumni Cres over to the permeable pavement at the Steele Ocean Sciences Bld (11) (1 km) carry on to the rain garden at Oxford and Coburg (19). Walk to the Mona Campbell Bld (10) and end at the Killam Library rain garden (19) 22 min (2 km).

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Renewable Energy



Energy & Water



Green Buildings



Storm Water Management



Cycling and Transit



Gardens and Natural Environment



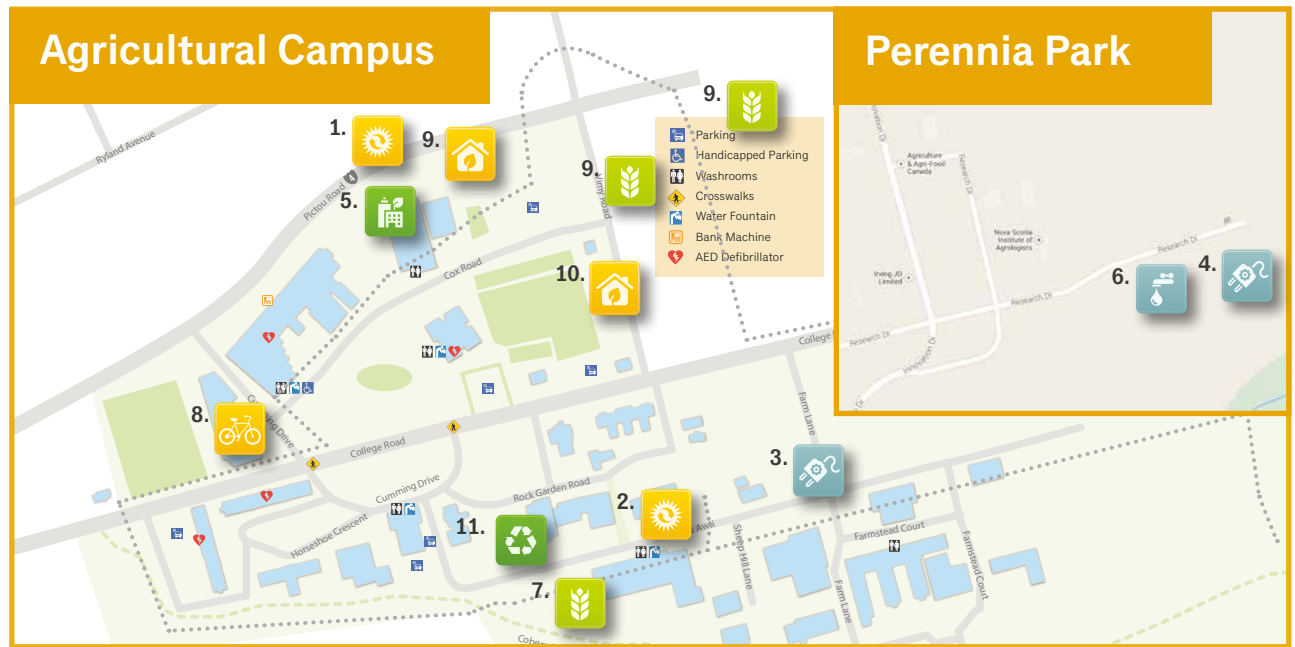
Sustainability Offices/Curriculum



Vehicle Share



Waste Management



Renewable Energy

1. Solar Panels at the Tree House.
2. The main campus heating plant provides heating to 95% of the campus on a district energy system using biomass as the main fuel. Through the project, the steam distribution system has been replaced with a district hot water system which is 30% more energy efficient. The old wood biomass steam boiler has been replaced with a biomass fired based thermal oil heater. The thermal oil heat moves a 1 MW turbine used to create electricity. This efficient organic rankine cycle (ORC) system is a first installation of its kind at a University campus in North America.

Energy & Water

3. Many projects have been completed including campus lighting and housing energy upgrades. A renewable energy study for the campus has been completed. Energy efficiency projects such as high efficiency pumps and fridge-freezer exchange have also been implemented.
4. The Bio-Environmental Engineering Centre (BECC) is a research and demo site exploring issues such as grass-based heating fuel and anaerobic organic energy production.

Green Buildings

5. The Tree House is a bungalow that provides space for graduate students. The House has efficient lighting, including LED tube lighting, low-flow fixtures, and different types of insulation that are being monitored for thermal performance.

Storm Water Management

6. Off the main campus at Perennia park at the end of Research Drive, research is underway using natural vegetative systems to manage storm and waste water.
7. A bioswale was designed and implemented to manage stormwater and contribute to the aesthetic value on campus.

Cycling and Transit

8. At the Gym, campus members can borrow a bike. Racks are provided on campus and some fleet vehicles are electric. A bike corridor (Cobequid Trail) passes through the back of campus.

Gardens and Natural Environment

9. The campus has two large gardens: a Chef's garden used for teaching and local food production and a community garden for community and campus members. Native species are being planted. There are many other formal gardens on campus. An active demonstration garden is being cultivated across Pictou Rd.

Curriculum

10. The Agricultural Campus offers a variety of environment and sustainability courses across the four departments. Visit the Env. Science and Integrated Env. Management program at the Banting Bld.

Waste Management

11. Dalhousie recycles electronics, organic material, paper and cardboard, recyclables, construction and demolition material, white goods, and universal waste items like batteries and paint on all campuses. Look for four-bin sorting systems in every Bld. Manure and ash from the Biomass plant on campus is composted for field application.

Walking Distance & Times

Explore green features and get some exercise:

- **4 km – 50 Min Walk:** Start at the Biomass plant (2) walk behind the residences on the Cobequid Trail. Go up to the Bike loan at the Gym (8) go over to the treehouse (5) keep going to the gardens (9) along Vimy Rd up to College Rd to the municipal park to the back of the Cobequid Trail along the back of the farm to the plant (2).
- **1 km Walk:** Along Cobequid Trail, start at River Rd to the municipal park.