



*Since 2018, Dawson College has pledged to be scope 3 carbon neutral and continues to reduce greenhouse gas (GHG) emissions with our Carbon Neutral Forever pledge. Dawson sits on several national committees to share best practices and empower institutes of higher education to engage in climate action as well.*

*Dawson College further pledges to protect biodiversity through social/economic development through our reforestation carbon offsetting measures with Taking Root. Focused in Nicaragua, Taking Root supports a just transition by helping ensure reforestation and perpetual forest use through a sustainable economic model while also strengthening local communities.*

*In 2021, Dawson College joined Race to Zero as a signatory, with the promise to further our efforts by pledging to become scope 1 net zero before 2025 while remaining scope 1, 2 & 3 carbon neutral, forever. Permanent CO2 sequestering options are being actively reviewed.*

## **Race to Zero Pledge by Dawson College**

*Dawson College pledges to continue to be scope 1, 2, & 3 carbon neutral forever and to attain scope 1 net zero greenhouse gas (GHG) emissions by 2025.*

## **Targets**

### **Interim**

- *Further reduce our emissions where possible*
- *Continue our third-party audit tracking for GHG emissions*
- *Strengthen our reporting efforts to reflect our scope 3 emissions values more accurately*

### **Long-Term**

- *Become scope 1 net zero by 2025*

## Our Next Steps

*On-going* – **Continue with third-party tracking**

*On-going* – **Further identify scope 3 emissions from procurement of goods and services, and all inter-course related emissions, including but not limited to travel, food and accommodation**

*On-going* – **Continue to reduce emissions where possible with the third-party tracking reports and further research to reach 50% reduction of emissions since baseline year (2009-2010)**

*On-going* – **Strengthen our composting efforts and reduce contamination levels through recurring extensive awareness campaigns for recycling and composting**

- The cycle of students is 2-3 years as a CEGEP in Quebec, consequently we need to always repeat awareness campaigns to continue to reduce our emissions; we have identified the following areas as part of our short-term, intermediate, and long-term GHG reduction goals.

*2022-2023* – **Research our net-zero carbon capture options to properly offset our fossil fuel emissions, like-for-like**

*2023-2025* – **Become Scope 1 net zero, forever, increase composting by 20%, further research GHG impact of non-food goods coming into the college**

## History of Dawson College Carbon Reduction & Offsetting

1997 – **Scope 1 Benchmark: 1106 mt**

2002 – **Introduction of Energy Reduction Campaign with outside energy service providers documenting college energy expenditures**

- This became the benchmark for future reduction tracking

2006 – **The entire Facilities Management-related sustainability indicators are reviewed from 2006 onwards, including previous energy reduction data from 1991**

**2007 – Eco-waste station installation by a student-led Action Research project**

- A central, permanent collection center in a 'high traffic' area of the college, designated for the disposal of used batteries & ink cartridges (to be recycled), eye-glasses (to be donated), & cell phones (refurbished and donated or recycled)

**2007 – The first of nine Biodiversity Zones takes up permanent residency on Dawson College's**

**Grounds**

- Dawson's landscaping efforts on its grounds, rooftops, and greening of interior spaces have created places where biodiversity can be seen, painted, photographed, studied, and act as a relaxing location for reflection. The Dawson landscape has been used by teachers, classes, staff members, children in daycares, summer camps, and the public for educational purposes and leisure activities. These small areas are micro-restorative locations throughout the campus.

**2008 – Dawson begins tracking its GHG emissions in various ways**

- Includes scope 1 & 2 reporting
- Of scope 3, only landfill waste is accounted for

**2008 – The Dawson Sustainability Policy is adopted by the board of Governors; AASHE STARS**

**indicators are also adopted at this time, but not rated. For these reasons, documentation and planning are also adopted.**

**2009 – Dawson College starts a vast energy efficiency renovation project**

- Dawson College signed a performance contract with an energy service provider and was able to reduce their energy consumption by 26% since 2007-2008
- Dawson College receives most of its energy from Hydro-Quebec, a state-owned electrical utility which produces about 99% of its energy from its network of hydroelectric dams. Dawson begins transferring some systems towards electricity.

**2010 – Major energy-consuming appliance equipment change**

- Four new boilers were added and the old ones retired, as well as 2 chillers, respectively in 2010 and 2018
- Scope 1 emissions reduced by 48% since Benchmark year 1997

**2012 – Began auditing GHG emissions with third-party verifier, annually, including review of previous years**

- Ecometrica Inc. is an international company that specializes in auditing and measuring greenhouse gas emissions
- These assessments have been carried out in accordance with the World Business Council for Sustainable Development and World Resources Institute's (WBCSD/WRI) Greenhouse Gas Protocol; a Corporate Accounting and Reporting Standard, including the GHG Protocol Scope 2 Guidance. This protocol is considered the current best practice for corporate and/or organizational greenhouse gas emissions reporting. GHG emissions have been reported by the three WBCSD/WRI Scopes.
- See [here](#) for our annual GHG reports

**2013-14 – A centralized control system, METASYS, was installed featuring thousands of temperature, CO2 and humidity sensors which relay the information to automatic controls meant to anticipate daily changes in occupation and ensure a temperature-consistency throughout the building. These controls ensure significant energy savings as adjustments are programmed to be automated.**

**2014-15 – Major energy-consuming appliance equipment change**

- Washroom urinals, faucets and toilets were replaced and resulted in a savings in water consumption of 9,239 cubic meters per year, based on past and replaced appliance water use specifications. At this point the two main building water intakes were not metered, however to estimate water savings the new equipment use was compared to the old equipment use..
- Most faucets now have motion detectors with 15-second timers set for running water and automated temperature controls

**2015 – Motion sensors are installed in all classrooms to further reduce unnecessary electricity use**

**2015 – Major 5-year strategic plan created with nine main goals, one of which was goal number 7, that read: *Be a leading Canadian educational institution in promoting and practicing sustainability in all its endeavors***

- Part of our strategy to reach this goal was to be certified AASHE Gold Level, which includes Tracking, Assessing and Rating over 70 sustainability indicators and to reach CEGEP Vert (Quebec) Excellence Level

**2017 – Composting on Campus pilot project**

- During the Fall 2017 semester, students collected organic waste from the cafeteria and had several drop-off locations around the college where they would collect the waste and compost it directly on campus within our four elevated rotary compost bins

- Student-led audits have demonstrated that we can still compost about 60% of our waste, and we hope to reduce our GHG emissions from this waste by 100mt

**2017 – Transportation surveys for employees and students, developed & distributed by the Quality Assurance and Planning Office and the Sustainability Coordinator**

**2017 – Scope 3 tracking of Annual GHG Audit now includes Business Travel, Student Commuting Totals and Staff Commuting Totals**

**2017-18 – 88.28% of expenditures on electronic products are Electronic Product Environmental Assessment Tool (EPEAT) Gold registered; the remaining 11.72% are EPEAT Silver**

**2017 – Dawson begins publishing Annual Sustainability Reports to College Board of Governors**

- See [here](#) for Annual Sustainability Reports

**2017 – Offsetting efforts introduced through partnership with Taking Root**

- This refers to credits purchased institutionally under the voluntary GHG emissions compensation program with “Taking Root”. Dawson has been Carbon Neutral, every year, since 2017-2018 with Taking Root as an offset provider.
- This partnership has helped Taking Root’s project to become the largest reforestation initiative in Nicaragua, creating a movement across thousands of farmers to reforest land across the country. As well as sequestering 3,704 tons of CO<sub>2</sub>, since 2017, the trees Dawson College has purchased go beyond a natural climate solution, helping farmers improve their livelihoods by building reforestation enterprises. In addition, the funding is stimulating local economic development, helping to create hundreds of seasonal jobs annually with landless farmers in the area, some of the most vulnerable in the community. These jobs are an essential source of income for them, helping to reduce inequalities and build local financial resilience.
- Taking Root is a leader in forest monitoring and reporting. At the project’s last verification (every 5 years), Taking Root was awarded “best monitoring and evaluation” by the Rainforest Alliance. Using Taking Root’s proprietary software platform, FARM-TRACE, Dawson College will be able to track its impacts. FARM-TRACE uses mobile, satellite and machine learning data to map and provide impact reporting across each farm. FARM-TRACE will give Dawson College unparalleled transparency into the carbon stored on each farm, forest cover, farmer profiles and farmer activities. As well as reporting, FARM-TRACE offers Dawson College an interactive experience to engage stakeholders and students in its sustainability initiatives.
- You can see Taking Root’s project on FARM-TRACE [here](#)
- Website: [www.takingroot.org](http://www.takingroot.org)
- Plan Vivo certification credentials: <https://www.planvivo.org/project-network/communitree-nicaragua/>

## **2018 – Dawson Board of Governors unanimously vote and pledge to be Carbon Neutral, Forever**

- Minutes of the 409 Meeting of the Board of Governors of Dawson College – October 24, 2018: *“WHEREAS THE OCTOBER 2018 UN INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE REPORT, WHICH STATES THE PLANET ONLY HAS UNTIL 2030 TO STEM CATASTROPHIC CLIMATE CHANGE, AND THE RESPONSIBILITY OF INSTITUTES OF HIGHER EDUCATION TO MODEL POSITIVE CHANGE IN SOCIETY, THAT DAWSON COLLEGE DECLARES ITSELF CARBON NEUTRAL FOREVER, AND CONTINUES TO REDUCE ITS CARBON FOOTPRINT IN WHATEVER MEANS POSSIBLE AND MANAGEABLE.”* The motion was adopted unanimously.
- Dawson's Board of Governors' unanimous vote to declare the college Carbon Neutral Forever applies to every future year of operations and includes any future expansion of Dawson activities and the physical campus. We challenge other colleges to follow with their own declarations and help with meetings or workshops to review our process, funding and awareness campaigns related to carbon-responsible operation.

## **2018 – Institutionalization of composting at Dawson, college-wide**

### **2018 – All waste bins in hallways and most waste bins in offices and classrooms removed, and replaced with 100 uniform waste-sorting stations, including compost, paper, metal, and landfill waste in every hallway**

- These stations are also meant to be a meeting place where people have brief conversations while helping the planet, and are part of our community-building strategy

## **2018 – Dawson adopts a campus-wide Smoke-Free Policy**

- See [here](#) for full policy

## **2018 – Dawson starts to monitor water use in 2018, although not obligatory by provincial regulations**

## **2018-19 – All 7239 lighting fixtures in building are changed to LEDs**

## **2018-19 – 70% Reduction in Natural Gas emissions since Benchmark year 1997**

## **2019 – Data from 2018-2019 Ecometrica GHG tracking report**

- With 2009-2010 as our baseline year, Dawson College has thus far seen a 48% decrease in scope 1 emissions (336 tCO<sub>2</sub>e/yr in 2018-2019), and a 64% decrease in scope 2 emissions (16.8 tCO<sub>2</sub>e/yr in 2018-2019), for a total reduction in scope 1 & 2 emissions of 49% since our benchmark year.
- See [here](#) for our annual GHG reports

**2019 – The paper purchased in the fall of 2019-2020 year are FSC Certified and represents the needs of the college for that year**

- COVID-19 resulted in a mid-March shutdown but the majority of paper consumption happens at the beginning of each semester therefore the statistic for the most recent year was used
- 100% of toilet paper used within the college is FSC

**2019-2020 – Paper reduction campaigns that were implemented previous to 2019 are strengthened with making materials more readily available online**

- The annual report, publicity booklets and Dawson program brochures have all been moved on-line. This has saved approximately 150,000 brochures from being printed and 125,000 pages for booklets. The registrar's office has also reduced paper consumption by 1.3 million sheets by emphasizing on-line options.

**2020 – Facilities Management releases Climate Action Guidelines**

- See [here](#) for full report

**2021 – Dawson College becomes a signatory to the Race to Zero pledge**

**2022 – Sustainable Development Goal (SDG) and GHG tracking pilot commences for all 185 Physical Education courses offered each semester**

- GHG emissions related to inter-course travel, accommodations, food and propane stove use for camping courses are collected in a database. The number of trees needed to offset GHGs in each course is also part of the database.

**2022 – Dawson hosts first Carbon Neutral sponsored Golf Tournament**

- GHGs from transportation, food, and accommodation calculated and offset

**2022 – Begin reporting progress toward Race to Zero pledge**

**2022 – Bioretention project commenced with a Physical Education eco-landscaping course, where students build a raised wetland with native plants as a “living machine” to capture GHGs, filter the copper oxides from our rooftop water (caused by our copper rooftops - Dawson College is a designated heritage building), and increase biodiversity.**