



SUSTAINABILITY PROGRESS REPORT

FISCAL YEARS 2018-2023

Overview

Cuyahoga Community College (Tri-C®) has continued to move forward with sustainability efforts in recent years. This report summarizes some of the important accomplishments from fiscal years 2018 through 2023. Tri-C continues to work toward sustainability goals focused on academics and workforce training; green buildings and grounds; energy, climate and transportation; recycling and waste reduction; sustainable procurement; and communications and community.

Tri-C's long-term sustainability goals are:

- **Academic and Workforce Training:** Infuse sustainability literacy throughout the curriculum so students will recognize and understand the basic concepts and effectively communicate those concepts to others in the community.
- **Green Buildings and Grounds:** Reduce the impacts of Tri-C's buildings by following the Leadership in Energy and Environmental Design (LEED) standards developed by the U.S. Green Building Council (USGBC), as well as implementing other best practices for sustainable design and construction, including creating healthy spaces and programs and improving stormwater management.
- **Energy, Climate and Transportation:** Strive for carbon neutrality at Tri-C by increasing energy efficiency, exploring renewable energy options, and reducing the College's transportation footprint.
- **Recycling and Waste Reduction:** Increase Tri-C's waste diversion rate to 40% by 2035.
- **Sustainable Procurement:** Consider life cycle impacts in purchasing and contracting decisions and reduce the consumption of goods and chemical use.
- **Communication and Community:** Increase awareness of sustainability issues through education and outreach and empower sustainability action on campus and within the broader community.



Academics

First presented in 2016, the **Faculty Leadership in Sustainability Award** recognizes a faculty member who creatively incorporates sustainability in their classroom and on campus or in the community. Winners from 2018 through 2023 are listed below, along with links to more information about their leadership efforts.

- 2018: [Brian Hall](#), Associate Professor, English, Metropolitan Campus
- 2019: [Anne Distler, Ph.D.](#), Professor, Chemistry, Westshore Campus
- 2020: [Casandra Sweeney](#), Assistant Professor, English, Eastern Campus
- 2021: [Derrick Williams, Ph.D.](#), Professor, Communications Studies, Metropolitan Campus
- 2022: [Erica Stevenson, Ph.D.](#), Associate Professor, Biology, Westshore Campus
- 2023: [Margaret Lehnert, Ph.D.](#), Assistant Professor, Biology, Western Campus

In the spring of 2019 and the spring of 2023, Tri-C held events called [Metamorphosis Cleveland](#), which asked students to creatively interpret issues related to sustainability and change in and around Cleveland. The events were produced in partnership with Hospitality Management students in a Banquet Management and Production class, who managed many event logistics and made and served food and drinks related to the event's theme. Students from a variety of subjects, including English, Visual Communication and Design, Biology, Chemistry, Earth Science and English as a Second Language, submitted work displayed at the event. For each event, 15 finalists were selected, and awards were given by campus presidents, community judges and event attendees.



The 2019 edition of *Metamorphosis Cleveland* recognized the 50th anniversary of the infamous 1969 fire on the Cuyahoga River, with a flaming Bananas Foster bread pudding representing the burning river. Winning entries and photos from both the 2019 and 2023 events can be found on the [Metamorphosis Cleveland webpage](#).

Robust **Earth Day programming** took place on campuses through the spring of 2019 before going online due to COVID-19 and then returning in person to campuses in the spring of 2022 and 2023.

Highlights of the Earth Day events from 2018 through 2023:

- Speech Communications students conducted a dramatic reading of sustainability-themed plays at the Metro Campus.



- A pediatrician from University Hospitals gave presentations about the impacts of climate change on human health.





- The Western Campus Galleria displayed English as a Second Language students' poster boards and presentations on sustainability topics.
- The Eastern Campus hosted a nature-themed "Poetry and Prose" public reading event.



- A Metro Campus Speech Communications class produced a video presentation titled [Carl and the Crooked River: The Making of an Environmental Mayor](#), covering the history of pollution and environmental justice in Cleveland and Mayor Carl Stokes's leadership in response. Students researched and presented this history in a pre-recorded video and as a live virtual presentation to a community college in the state of Washington.
- Visual Communication and Design students participated in poster contests at the Eastern Campus.

- Volunteer students, faculty and staff beautified the wooded areas of the Westshore Campus, collecting more than 170 pounds of waste during campus cleanups in 2022 and 2023.
- More than 250 students participated in an in-person event on the Western Campus in 2023, designed to generate awareness of sustainability practices and their significance to our daily lives. The students decorated reusable bottles, colored pollinator pictures, developed recipes to reduce food waste, watched the documentary Chasing Ice, and participated in virtual and in-person scavenger hunts. The event coincided with a composting presentation and succulent planting activity planned by the Office of Student Engagement.





Green Buildings and Grounds

From late 2018 to early 2020, Tri-C completed construction on four new buildings, certified through the USGBC's LEED program. These projects focused on creating a healthy indoor environment for learning and work, energy and water efficiency, and stormwater management. View the links below for more details about each project:

- [Metropolitan Campus Center](#) — LEED Gold, September 2019
- [Stormwater Management at the Metro Campus Center and Central Courtyard](#)
- [Public Safety Simulated Scenario Village Administrative Center](#) at the Western Campus — LEED Certified, December 2020
- [Westshore Liberal Arts and Technology](#) — LEED Silver, January 2021
- [Western Campus STEM Center](#) — LEED Gold, March 2021

In 2018, the College finalized its [Sustainable Renovation Guidelines](#), which focus on energy and resource efficiency as well as waste reduction for smaller-scale projects not certified through LEED. In recent years, numerous spaces have been renovated to improve functionality while simultaneously improving energy efficiency. All lighting in these renovated spaces was upgraded to LED to improve energy efficiency. Also, a significant amount of used furniture and equipment found new use through community partners (see the Recycling and Waste Reduction section for more details).

Water bottle-filling stations replaced water fountains across Tri-C locations in response to COVID-19 in 2020. However, bottle-filling station replacements had begun in some locations prior to COVID-19. The water bottle-filling stations allow for hands-free access to drinking water and make it easier to reuse bottles, cups or other containers — hopefully reducing waste and saving people money.



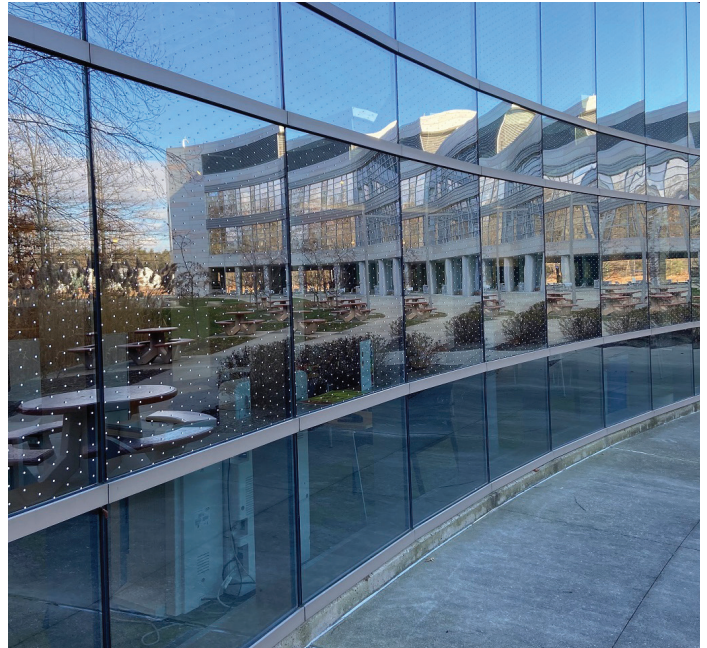
Western Campus Pollinator Garden: Biology Professor Margaret Lehnert, Ph.D., partnered with Cindy Semler and the Plant Operations department to apply for a Faculty Innovation Grant to fund the installation of a pollinator garden at the Western Campus. The pollinator garden was planted in 2020 between Parking Lot B and the Liberal Arts building. It now provides an outdoor experiential learning space. Educational signage about insects and plant species calls attention to how pollinators have been impacted by herbicides, habitat loss and climate change and how the loss of pollinators could negatively impact human agricultural production.



Westshore Campus Outdoor Learning Laboratory: Biology professors Beth Vaidya, Ph.D., and Erica Stevenson, Ph.D., were awarded a Faculty Innovation Grant in 2019 to create an outdoor laboratory at the Westshore Campus to expose students to field biology, stewardship and sustainability. The outdoor lab is near a pond and has a pathway with native plants, bird feeders, birdhouses, bat houses and bee houses. Wooden benches invite students and community members to sit and observe nature and animal behavior. Students have used the Outdoor Learning Lab to collect pond water to observe under a microscope in the microbiology lab. When the pond is frozen in winter, students have collected moss from the Outdoor Learning Lab and soaked it in water to observe the microbes living within.

Bird Collision Mitigation at Westshore Campus: In late 2022, Tri-C installed bird strike mitigation stickers on the exterior of the windows in the Westshore Campus atrium. The windows reflected the image of trees on the north side of the campus, which led to a significant number of bird injuries and deaths after collisions with the glass. The stickers on the outside of the windows break up the reflection and allow the birds to see that there is a solid surface ahead, preventing them from flying into the windows. Stevenson monitored bird strikes and

fatalities, transporting the injured birds to the nearby Lake Erie Nature & Science Center for rehabilitation. After the mitigation stickers were installed, Stevenson continued to monitor the situation. Through the end of June 2023, no new bird strikes occurred in the area with the mitigation stickers.



Energy, Climate and Transportation:

RTA U-Pass for students: Since 2014, Tri-C has provided students with a [Universal Pass, or U-Pass, to the Greater Cleveland Regional Transit Authority](#). The U-Pass removes a financial barrier for students and makes Tri-C more accessible while reducing emissions from single-occupant vehicles.

Greenhouse Gas Inventory: Tri-C measures its greenhouse gas (GHG) inventory annually, using the University of New Hampshire's Sustainability Indicator Management & Analysis Platform (SIMAP). Colleges and universities widely use SIMAP, which allows data collected in relevant categories to be converted to GHG impacts. GHG emissions are measured in metric tons of carbon dioxide equivalent (MTCO_{2e}).

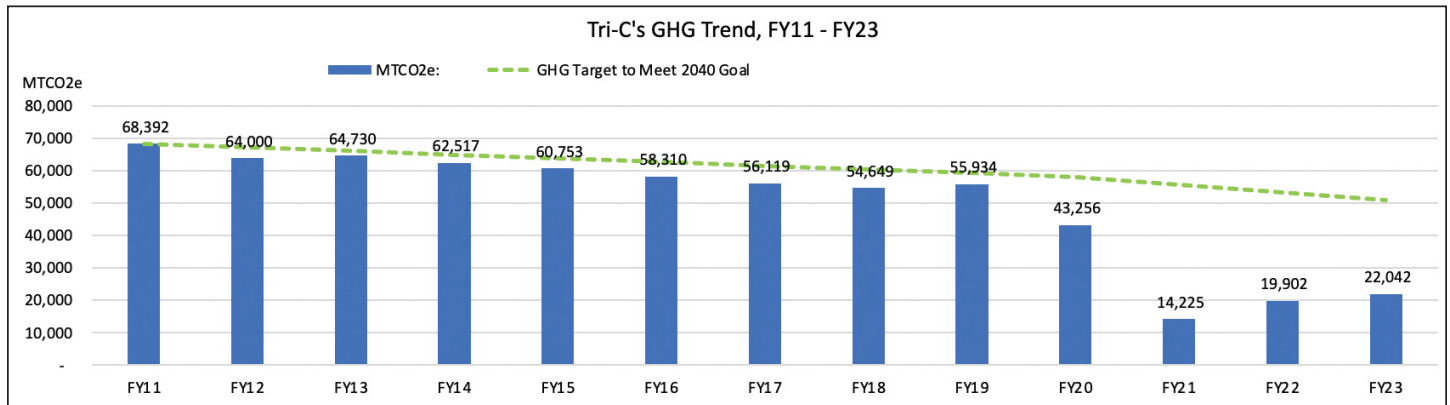
Tri-C's GHG totals dropped significantly starting in FY 2021 compared to prior years as the College is now sourcing 100% nuclear electricity, which does not produce GHG.

COVID-19 significantly reduced student, faculty and staff commuting impacts, starting in FY 2020 and continuing through much of FY 2021. The College's increase in total GHG emissions since FY 2021 is the result of increased commuting emissions, as more students, faculty and staff returned to campus as

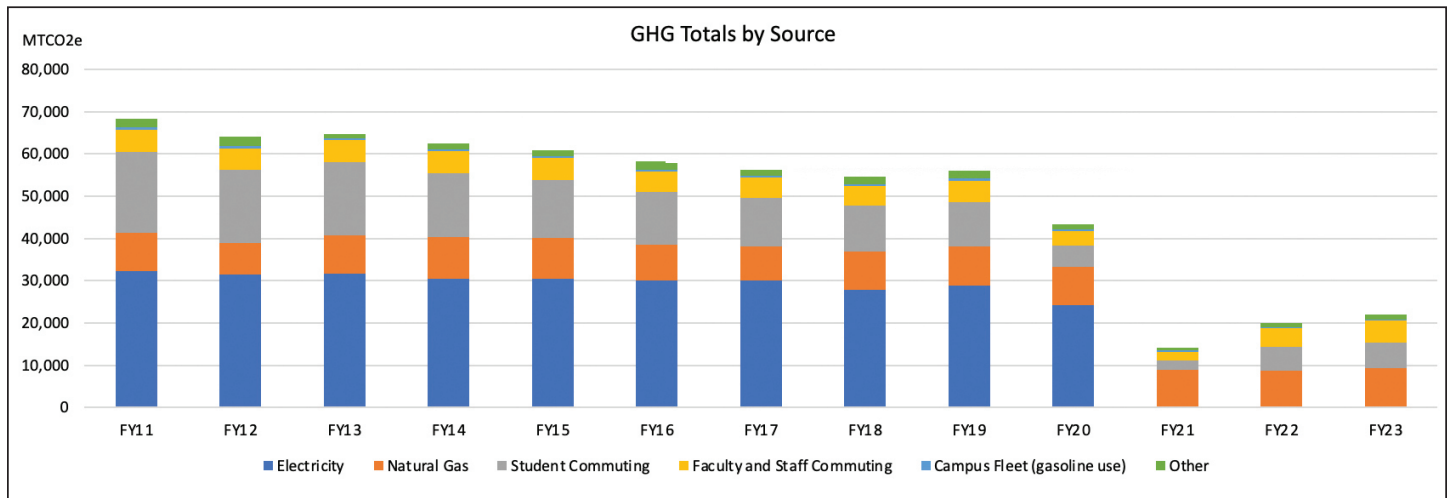
COVID-19 restrictions eased. Commuting emissions remain lower than they were before the pandemic, as more students have opted for online learning, and some employees now have more flexible work schedules. Business travel (in the “Other” category on graphs below) has increased after being eliminated during COVID-19 but remains significantly lower than before the pandemic.

The pie graphs on the following page compare GHG percentage breakdowns by category before and after the College started sourcing nuclear energy and before COVID-19 reduced commuting emissions.

Cuyahoga Community College Greenhouse Gas Inventory By Fiscal Year



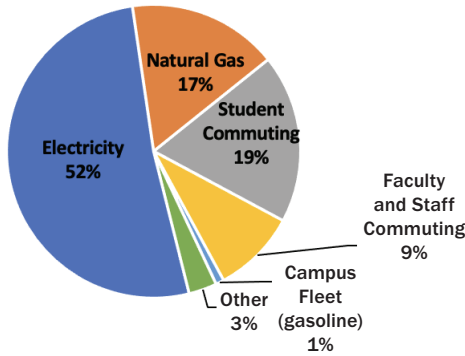
Cuyahoga Community College Greenhouse Gas Totals by Source



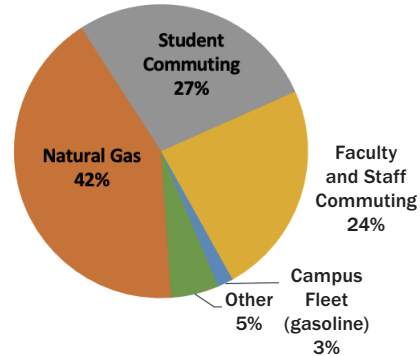
Source	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Electricity	32,283	31,437	31,714	30,509	30,428	30,085	30,054	27,931	28,845	24,128	-	-	-
Natural Gas	9,116	7,541	9,080	9,811	9,763	8,334	7,953	8,958	9,264	9,086	8,854	8,661	9,257
Student Commuting	19,128	17,179	17,245	15,009	13,584	12,485	11,478	10,909	10,402	5,165	2,191	5,581	6,052
Faculty and Staff Commuting	5,170	5,110	5,138	5,324	5,189	4,925	4,946	4,664	5,175	3,262	2,170	4,433	5,190
Campus Fleet (gasoline use)	506	503	433	429	477	439	471	411	511	427	281	379	379
Other	2,188	2,230	1,121	1,436	1,312	2,043	1,218	1,776	1,736	1,188	729	848	1,163
MTCO2e:	68,392	64,000	64,730	62,517	60,753	58,310	56,119	54,649	55,934	43,256	14,225	19,902	22,042
GHG Target to Meet 2040 Goal	68,400	67,260	66,120	64,980	63,840	62,700	61,560	60,420	59,280	58,140	55,746	53,352	50,958

Cuyahoga Community College Greenhouse Gas Totals Percentage by Source

FY19: 55,934 MTCO2e Total



FY24: 22,042 MTCO2e Total



Source	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Electricity	27%	49%	49%	49%	50%	52%	54%	51%	52%	56%	0%	0%	0%
Natural Gas	13%	12%	14%	16%	16%	14%	14%	16%	17%	21%	62%	44%	42%
Student Commuting	28%	27%	27%	24%	22%	21%	20%	20%	19%	12%	15%	28%	27%
Faculty and Staff Commuting	8%	8%	8%	9%	9%	8%	9%	9%	9%	8%	15%	22%	24%
Campus Fleet (gasoline use)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Other	3%	3%	2%	2%	2%	4%	2%	3%	3%	3%	5%	4%	5%
MTCO2e:	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Recycling and Waste Reduction:

Tri-C collects [mixed recycling](#) from all locations, composts food waste from several kitchens and recycles scrap metal, used IT equipment and electronics, and other waste streams behind the scenes. The College also works to sell or repurpose old equipment and furniture whenever possible. Trash and recycling volumes dropped significantly during COVID-19 because fewer people were on campus. However, this also allowed time for some unused items to be removed from campus (more details below). During COVID-19, waste collection schedules were adjusted to significantly reduce pickups, but these have since increased as campuses have gotten busier. Trash, mixed recycling and food waste composting volumes have increased as people have returned to campuses.

- IT and used electronics recycling have remained strong in recent years. Tri-C partners with the local nonprofit RET3 to recycle these materials. RET3 shreds and recycles College hard drives and puts new hard drives in functional computers that can be redistributed in the community. Since 2019, Tri-C's partnership with RET3 has resulted in the refurbishment or recycling of 90 tons of used computer and electronic equipment.

- The College sells or donates well-used furniture and equipment it no longer needs to local organizations. From FY 2018 through FY 2023, it is estimated that more than 75 tons of classroom and campus furniture and equipment were diverted from the landfill through sales on GovDeals.com or donations to the Cleveland Metropolitan School District, Habitat for Humanity and other organizations serving local needs. This includes vehicles, tools and equipment, as well as a wide variety of furniture.



Sustainable Procurement

Nuclear electricity: As noted in the College's greenhouse gas information, the choice to procure nuclear electricity in FY 2021 at no increase in cost had the co-benefit of significantly reducing Tri-C's greenhouse gas impacts. Before FY 2021, Tri-C's electricity supply came from a standard electrical grid mix of supply types, including coal, natural gas, nuclear and small amounts of renewable energy.

Reduced paper purchasing: In the years before COVID-19, increased use of electronic files over printed files for classes and College operations resulted in a 33% reduction in annual printer paper purchases compared to an FY 2014 baseline. Examples include the increased use of Blackboard for classes and paperless invoice procedures within the Accounts Payable department. During and after COVID-19, the increased remote instruction and remote work resulted in even more significant use of electronic files, reducing paper purchases by 75% in FY 2023 compared to FY 2014.

Communication and Community

Stand for Racial Justice alliance: Tri-C's [Stand for Racial Justice alliance](#) works to create a more just and equitable community, making Cuyahoga County and surrounding communities more sustainable places to live and work. The Tri-C Stand for Racial Justice alliance builds upon the College's work in conflict resolution, social justice and sustained dialogue to find meaningful ways to convene and engage our students, faculty and staff, as well as the broader community. The College brought these

efforts together as one unified initiative, with the ultimate goal of effecting positive change within the Tri-C community and throughout Greater Cleveland.

Stand for Racial Justice has put on [many events](#), including some specifically focused on environmental health and sustainability advocacy:

- Dec. 1, 2021: [The Color of Environmental Health](#)
- April 13, 2022: [Let's Talk About Sustainability Advocacy](#)
- Food access and [food insecurity](#) are another area of focus for the Stand for Racial Justice alliance, and numerous sessions have covered a variety of aspects of food access and justice issues.



Newly expanded and renovated [food pantries](#) on Tri-C's campuses play an important role in ensuring more people have access to good and healthy food options, another important aspect of a sustainable community.



tri-c.edu/sustainability

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