

# sustainability annual report 2020











#### Friends and stakeholders,

We are pleased to share with you our latest sustainability report. Gateway has placed a high value on the importance of sustainable practices and fulfilling our commitment to reaching the President's Climate Commitment of reducing our carbon footprint.

Throughout this report, we provide evidence of our effort to embrace the goal of carbon neutrality and environmental awareness by all students and staff. Investments in professional development, community engagement programs, career training and facility upgrades serve as examples of our long-term commitment to sustainability.

In 2019, we added a new energy management system called C3 Green in partnership with TRANE Corporation. This strategic partnership will help us better manage peak energy utilization and reduce operational costs for our SC Johnson iMET Center. Together with our corporate partners, we will continue to make progress in our building automation and environmental sustainability.

Gateway's commitment to serve as a community resource is modeled in our Center for Sustainable Living on our Kenosha Campus, a facility dedicated to educating youth and adults on the environmental impacts humans have on insects, birds and plants. Through hands-on activities and lectures, citizens can participate in Gateway's vision for an educated and environmentally responsible society.

We invite you to join our effort by visiting any of our campuses or centers to learn more about our sustainable practices.

Respectfully,

Bryan Albrecht, EdD President & CEO Gateway Technical College



### Green Scholars & Green Career Education

#### **Green Scholars**

Students who enroll in our Green Scholars program document their hands-on sustainability activities by earning at least 75 Green Points throughout their time at Gateway to graduate with the Green Scholar distinction after making a real difference in their community. Students earn one point for practical, ecologically wise activities, like dusting the coils of their refrigerator to increase efficiency or making a cleaning solution with baking soda and vinegar. They can earn up to five points for more involved activities, such as attending workshops at the Center for Sustainable Living or incorporating locally produced food into their meals.

### 2,450+ points

logged by Gateway's graduating Green Scholars between 2016 and 2019

### **Green Career Education**

Gateway prepares students for careers in a growing green economy, with training in sustainable practices through programs like Electrical Engineering Technology, Civil Engineering-Fresh Water Resources and Interior Design, as well as Greenhouse Operations and Arboriculture/Urban Forestry. Many Gateway programs feature core courses on sustainable principles and practices within their industry. In addition, students from any program can take our Principles of Sustainability course to develop sustainable literacy, investigate alternative energy options and summarize the effects of sustainability on health and well-being.



101 students enrolled since 2016 in 806-112 Principles of Sustainability — an 80% increase from the first two years it was offered after being introduced in the 2014-2015 academic year.

"I think the Green Scholars program was great! It gave me simple tasks and ideas to complete that help the environment. I have since then continued to be aware of my carbon footprint and make choices to lessen my impact on the environment."

- Alexis Burkholder, Graduate

### **Community Events**

## **Campus Improvements**

#### **Celebrate Earth Day**

On the Saturday closest to Earth Day in April, Gateway celebrates our environment with displays, workshops and hands-on activities for people of all ages. Our Celebrate Earth Day event started on Gateway's Kenosha Campus in 2008 and was extended to the Elkhorn Campus in 2012. Hundreds of community members participate in the event every year to learn how to live a more eco-friendly lifestyle and show their support for green community practices. The event features dozens of environmentally focused local exhibitors and vendors across the Elkhorn and Kenosha campuses. Celebrate Earth Day has been generously supported by Snap-on, Inc.



#### **EcoFest & Celebrate Earth Day 2019**



Campus

communities



Hands-on children's activities





Environmental workships & demonstrations



Exhibitors and vendors

**EcoFest** is a free, annual event that features informational displays and presentations, eco art, and children's activities hosted by Gateway in partnership with Greening Greater Racine. Each family receives a free sustainability-inspired gift. Started in 2016, EcoFest takes place every March at Gateway's Racine Campus Lake Building. This event focuses on our environment, sustainability and community, and it offers a place to learn and be inspired. Gateway's Information Technology program students partner with an area professional electronics business to provide free recycling of electronic devices at the event.



#### **Around our Campuses**

At the SC Johnson iMET Center the college installed, with help from TRANE Corporation, a C3 (Capture, Conserve, Condition) Green Energy System to monitor new robotics equipment. An eco-friendly rain garden was also created at the center.

On the **Elkhorn Campus**, building facade updates to the South Building and the Veterinary Sciences Building enhance weatherproofing, increase thermal insulation and reduce heating/cooling costs. The college is installing a new chiller with ice bank storage in Elkhorn to reduce the chiller from 120 tons to 70 tons, decreasing overall energy usage, as the ice (which is created during off-peak hours) is utilized during the day to help cool the building.

On the **Kenosha Campus**, updates were made to the roof and interior of the Madrigrano Conference Center and the Academic Building second floor, where LED lighting was installed. In 2018, the college partnered with the State of Wisconsin and Edison Energy to conduct a retro-commissioning project for the Kenosha Campus. On the basis of an audit and recommendation from Edison Energy, the college updated building controls and sequences, optimized sensors and replaced some outdated systems/ parts. The Kenosha Campus is now saving an estimated 497,000 kWh of electric energy and 28,000 therms of natural gas. The campus chiller and boiler system received an overhaul.

On the **Racine Campus**, in addition to a new roof on the Technical Building, the Technical Building third floor and Racine Building second floor were both upgraded with new high-efficiency lighting and heating and cooling systems.



1,990 trees planted worldwide by the reLeaf program, which offsets 16,586,743 standard pages printed across college facilities since April 28, 2016



**318,568** plastic bottles saved through new dispenser water fountains placed throughout campuses

# Center for Sustainable Living



The Center for Sustainable Living on the Kenosha Campus continues to provide a hands-on learning space for Gateway students as well as others in the community, drawing a total of more than 3,300 individual visitors to the Center from July 2018 to June 2019.

### By the numbers for July 2018 - June 2019: 3300 total individual visitors 1840 area K-12 students 800

members of the general public The Center offers hands-on experience for a number of academic programs. Interior Design students design and refurbish one room at the Center every spring with sustainable and recycled materials, the Law Enforcement Academy program uses the building in training scenarios and Arboriculture/Urban Forestry Technician students tend the trees on the five-acre property.

In addition to the other departments that use the building for meetings and gatherings, the Center draws community visitors through its involvement in Celebrate Earth Day, hosting the High School Environmental Summit Gateway each spring and by offering free community workshops.

### Informational displays promote pollinators

The Center increased its impact by adding an outdoor bat house display, butterfly gazebo and an interactive nature trivia display, along with redeveloping the prairie in the center of the Nature Discovery Trail into an oak savanna and pollinator prairie in 2019. Because there were already dedicated spaces for bees, the Center's gazebo provided a great location to highlight butterflies' agricultural role, and the old pump house served as a place to explain the important but unexpected role bats play as pollinators.



"The new displays have been well-received by both 🎙 the Gateway community and visiting K-12 school groups. Every group comes away saying, 'I never knew that before!' about something they've picked up from the information there."

– Kallie Johnson,

Center for Sustainable Living Program Manager



While oak savannas are found in other parts of the United States, they have all but disappeared in Wisconsin. Once a dominant vegetative type that covered about 30 percent of Wisconsin, more than 99 percent of oak savannas have been wiped from the state -- making Gateway's effort to help re-establish it even more important.

Gateway's location, abutted by residential land and buildings, prevents the use of fire to control vegetation, so invasive species and undergrowth are controlled by a yearly mow to prevent unwanted plants from flourishing. By planting native species, the Center is supporting native pollinators including bees, moths and butterflies.

**30+** native plant types in the pollinator prairie support nearly 800 different nectar-seeking native pollinators

\$5,000 from Feed a Bee covered the seeding of a pollinator prairie

**1.5** acres = total area of oak savanna and pollinator prairie

99.99% of Wisconsin's original oak savanna has been eliminated



#### Nature trail redeveloped into oak savanna and pollinator prairie

Thanks to Gateway's Arboriculture/Urban Forestry students and a grant from Feed a Bee, Gateway redeveloped the central area of the Nature Discovery Trail into a pollinator prairie and oak savanna to help promote pollinators and agricultural health, as well as to preserve a rare and endangered environment.

In collaboration with Arboriculture/Urban Forestry instructor Aaron Schauer, Gateway revived the area by removing invasive species and planting native Burr Oaks.

# Greenhouse Gas Inventory

Each year, Gateway completes a greenhouse gas inventory to measure the college's greenhouse gas emissions and understand areas where sustainable practices could help reduce emissions. The below chart illustrates year-over-year changes in the college's greenhouse gas emissions, including a 32 percent cumulative decrease in greenhouse gas emissions from 2009-2018.

Total Greenhouse Gas Emissions Per Year 2009-2018 (with exceptions)						
FY	Emissions Scopes 1, 2 & 3 (MT CO <sub>2</sub> e)	Year Over Year Change in %	Cumulative Change in %	Emissions Scopes 1 & 2 (MT CO <sub>2</sub> e)	Year Over Year Change in %	Cumulative Change in %
2009	34,900	Х	Х	10,544	Х	Х
2010	32,000	-8%	-8%	9,606	-9%	-9%
2011	31,826	->1%	-9%	9,634	+ < 1%	-9%
2014	30,009	-6%	-14%	9,031	-6%	-14%
2016	26,182	-13%	-25%	7,502	-17%	-29%
2017	24,771	-5%	-29%	6,811	-9%	-35%
2018	23,838	-4%	-32%	5,903	-12%	-44%

This table compares greenhouse gas inventories since 2009 for both total emissions (Scopes 1, 2 & 3) and those emissions over which Gateway has the most control (Scopes 1 & 2 only), as well as annual and cumulative changes in emissions over time.



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Since 2009, Gateway Technical College has cut greenhouse gas emissions by a cumulative 32%.