

# **Postsecondary Nominee Presentation Form**

#### ELIGIBILITY CERTIFICATIONS

#### **College or University Certifications**

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

- 1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
- 3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
- 6. The college or university is in good standing with its regional or national accreditor.
- 7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

# U.S. Department of Education Green Ribbon Schools Postsecondary 2015-2018

Dublic 4-Year X Public 2-Year Private Non-Profit

Name of President/Chancellor: Dr. Bryan Albrecht

Official College or University Name: Gateway Technical College

College or University Street

Mailing Address: 3520-30th Avenue, Kenosha WI 53144-1690

County: Kenosha IPEDS Number\*: 238759

Telephone: (262) 564-4592

Web site/URL: <u>www.gtc.edu</u> E-mail: albrechtb@gtc.edu

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

yan Alleko

Date: 3/29/18

(President's/Chancellor's Signature



#### Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Name of Nominating Authority: University of Wisconsin System (SHEEO) Dr. Raymond Cross

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Date: March 29, 2018 (Nominating Authority's Signature)

### **SUBMISSION**

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2018

#### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



# Application

College/University Name: Gateway Technical College

Street Address: 3520 30th Ave.

City: Kenosha State: WI Zip: 53144

Website: www.gtc.edu

President/Chancellor Name: Dr. Bryan Albrecht

President/Chancellor Email Address: <u>albrechtb@gtc.edu</u> Phone Number: 262-564-3610

Basic Carnegie Classification	Carnegie Associates, Colleges: High Career & Technical- High Nontraditional	Minority-Serving Institution (check all that apply):AANAPISIANNHHBCUHSIPBITCU
Enrollment Profile	Size and setting Undergraduate Enrollment: 19,565 Graduate Enrollment: 0 Percent of Undergraduates Receiving Pell Grants: 30 percent	Graduation rate (150% of normal time): 25 percent Average Institutional Net Price: \$4,152



## Questions and Narrative

1. Is your college or university participating in a local, state or national program which asks you to benchmark progress in some fashion in any or all of the Pillars?

(x) Yes () No Program(s) and level(s) achieved:

- The American Association of University and College Presidents' Climate Commitment
- The American Campus Act on Climate Pledge
- Second Nature Climate Leadership Commitment

2. Has your college or university received any awards for facilities, health or environment?

- (x) Yes () No Award(s) and year(s)
  - WELCOA Gold Award, 2010 and 2017
  - In 2014, the college was one of 20 colleges from across the United States to be named as a finalist for the Climate Leadership Award (recognizes leadership and innovation in the area of environmentalism and sustainability in higher education)
  - Genome Award in 2014 (a project from SEED, Sustainability Education and Economic Development)

Please discuss your achievements in each of the pillars given below.

### Pillar 1: Reduced Environmental Impact and Costs

*Narrative:* Describe how your college or university is reducing environmental impact and costs by reducing or eliminating greenhouse gas emissions; improving water quality, efficiency, and conservation; reducing waste production; and using alternative transportation. Identify your institution's energy-efficient facilities and practices, ecologically beneficial uses of grounds, and methods of disposal for solid and hazardous wastes.

Gateway believes in the importance of minimizing its environmental impact, through such means as reducing greenhouse gas emissions, conserving water, reducing waste and providing a framework to ensure that its facilities and equipment are energy efficient – now and into its future.

Gateway reduced its **gas emissions** in a number of ways over the past eight years, illustrated through its greenhouse gas inventory – most notably the 2017 report, which shows the largest annual reduction in emissions among the five GHG inventories executed to date.

Total emissions of 26,182 MT CO<sub>2</sub>e for Fiscal 2017 represent a 13 percent decrease in total GHG emissions from all scopes compared to Fiscal 2014 (when 30,009 MT CO<sub>2</sub>e were emitted, and a 5.7 percent decrease from



2011). Since 2009, Gateway has achieved a gradual reduction of 25 percent of total emissions (Scopes 1, 2 and 3), and 29 percent in combined Scope 1 and 2 emissions – those over which the college has the most control.

Year	Emissions Scopes 1, 2, 3 (MT CO <sub>2</sub> e)	Percent Change	Emissions Scopes 1, 2 (MT CO <sub>2</sub> e)	Percent Change
2009	34,900		10,544	
2010	32,000	-8%	9,606	-9%
2011	31,826	- <1%	9,634	+ <1%
2014	30,009	-6%	9,031	-6%
2016	26,218	-13 %	7,502	- 17 %

#### Total GHG Emissions Per Year (2009, 2010, 2011, 2014, 2016)

At the same time Gateway reduced its greenhouse gas emissions, it has steadily increased the number of wind and solar energy systems as part of its **renewable energy** system. Equipment includes:

- Kenosha Horizon Center: Solar photovoltaic system (3 kW) and rooftop wind generator (1 kW)
- Kenosha Center for Sustainable Living: solar photovoltaic system (3 kW); solar water heating system (133 therms per year); 1.2 kW wind generator
- Elkhorn Campus: Solar water heating system at the North Building (222 therms per year)
- Burlington Center: Solar water heating system (222 therms per year)
- Racine Campus: Three wind generators on the main campus rated at a combined 3.6 kW; solar photovoltaic system at the Technical Building (2.88 kW)
- Solar PV panel (3 kW) with sun tracking at the SC Johnson integrated Manufacturing and Engineering Technology (IMET) center in Sturtevant.

Gateway has done much to ensure it follows energy efficient practices and **its facilities are energy efficient and "green,"** including such areas as geothermal energy, green buildings, occupancy sensors and computing systems.

At the Center for Sustainable Living, a **geothermal heating and cooling system** replaced an oil-fired hot-water boiler and an old air conditioning system. The system serves as an energy saver and as a geothermal energy demonstration project. The 5-ton GeoExchange electric groundwater source heat pump from Modine Manufacturing draws energy from five 200-foot-deep wells. Its energy efficiency rating (EER) of 15 is 35 to 40 percent better than for typical residential systems.

Gateway also follows Wisconsin policies which require new buildings and expansions to meet the **U.S. Green Building Council's LEED Silver standard.** Major projects under that standard include boiler replacements on the Kenosha, Racine and Elkhorn campuses, improving efficiencies from 60 percent to more than 90 percent, as well as chiller replacements in Elkhorn and Racine, yielding 30 percent efficiency improvements. Almost all



rooms have occupancy sensors; lights turn off when the room is unoccupied. In more and more of these rooms, the occupancy sensor is tied to the building controls so that heating or cooling also dials down when the room is empty.

Air conditioning units in network closets and server rooms are being replaced with more efficient units. In the main server rooms at the SC Johnson iMET Center and the Kenosha Campus, custom units constantly monitor the cooling load and adjust the cooling capacity to match. When conditions permit (cool weather and low humidity), the mechanical cooling compressors shut off and outside air is bought in to cool the server rooms.

The college continually seeks the most energy-efficient technologies and reduces power consumption from computers:

- More than 80 physical servers have been virtualized so that three high-performance blade servers now provide the same computing power. This eliminated one computer room, reduced cooling requirements, freed space for other purposes and saved energy.
- The entire college telephone system is on a centralized voice over internet protocol (VOIP) system that is much more energy efficient than separate systems at each location.
- The college buys only computers and accessories that are U.S. EPA ENERGY STAR certified and have Silver or Gold ratings under the Electronic Product Environmental Assessment Tool (EPEAT) rating system.
- A new computer center and classroom laboratory on the college's Racine Campus includes energy efficient computers and accessories which reduce power consumption as well as provide a real-life training tool for students so they are familiar with the concepts of green and can advocate for green and sustainable equipment and processes in their future careers.

**The college ensures it follows sustainable and green practices in its facility upgrades and equipment.** The college strives to use energy efficient equipment when building new space or remodeling existing space, and recycles more than 80 percent of demolition and construction waste materials – concrete, metals and wood – generated during building and remodeling projects.

Gateway upgrades existing HVAC systems to improve heating and cooling efficiency and indoor comfort while remaining "green." This includes replacing aging boilers, chillers, air-handling units and ventilation systems. During building expansions and remodels – and wherever feasible – Gateway installs water-saving fixtures, including low-flow faucets, low-flow or waterless urinals, and dual-flush toilets. This has been ongoing for many years, beginning with its Burlington Center more than a decade ago.

Gateway has installed highly efficient LED lighting in all remodels and retrofits, achieving 50 percent savings in electricity and helping to lower cooling costs. New lighting installations also include enhanced controls and daylighting. Major roof replacements to Racine, Kenosha and Elkhorn buildings included enhanced thermal insulation and cool roof designs that reflect sunlight to minimize summer heat gain.



#### The college continually expands its efforts to be environmentally conscious with the environment on its

**campuses.** Kenosha Campus grounds rain sensors tie into the irrigation systems so that sprinklers do not operate when there is already enough moisture in the soil. New landscapes, such as those related to building expansions, use drought-tolerant species in place of high-maintenance turf grass to reduce the need for watering, and some high-maintenance areas have been converted into areas of native prairie grass. Finally, a portion of the Racine Campus Technical Building has a 4,100-square-foot green roof designed to mitigate runoff. It is planted with low-maintenance, drought-tolerant sedum perennials.

Where possible, drainage systems are designed to minimize runoff. Examples include:

- Racine Campus facilities staff worked with the Root-Pike Watershed Initiative Network to add rain gardens at the Lake Building to reduce runoff into storm drains feeding Lake Michigan.
- On the Burlington and Elkhorn campuses, runoff from roofs and parking lots flows into retention ponds. The Elkhorn ponds encompass several acres and have become attractive landscape features.
- On the Kenosha campus, runoff from the Horticulture Building and greenhouse roofs collects in a 5,000-gallon cistern, used for watering plants in the greenhouse.

Gateway emphasizes sustainable transportation methods through on-site opportunities, course delivery options and messaging to staff and students. The college encourages students and faculty to drive greener vehicles. Preferred hybrid car parking spaces are available at all facilities and three have credit-card-operated electric vehicle charging stations. The Horticulture Department uses a small electric vehicle to move plants and supplies. All campuses have bicycle racks and two campuses have been connected to city bicycle pathways.

Travel reduction efforts include course availability through distance learning and for delivery of services online. Thirteen classrooms and 11 meeting spaces are hard-wired with videoconferencing equipment, and 23 mobile videoconferencing units are used districtwide to support classes and meetings. A partnership with the Wisconsin Association of Distance Education Networks' VANguard program has seven dedicated rooms and uses 12 mobile units to support instruction to 10 schools and even the Milwaukee Public Museum.

In addition:

- Internal meetings via webcam are enabled using GooglePlus (Google Hangouts) to reduce travel and increase telecommuting options.
- Virtual desktop interfaces allow staff members to access their work computers from home, helping to reduce commuting.
- LifeSize Cloud enables desktop and laptop computers with software installed to function as virtual endpoints for videoconferencing instruction or meetings.
- Backboard Collaborate, a web-based video teaching and learning tool integrated with the collegewide learning management system, allows anyone with a classroom or laptop with internet access to take part in



live meetings or classes. This means that essentially all classrooms are accessible through distance learning from a technology standpoint.

Each campus building now has a video kiosk where students can use high-definition video and telephone to speak with technicians instead of having to travel to central campuses to meet in person.

Other important efforts Gateway engages in to reduce its environmental impact and costs include:

**Electronics recycling.** The college aggressively recycles 90 percent of computers, monitors, printers, fluorescent lamps and other electronic equipment. The items are collected and taken to certified recyclers, locally based to minimize travel. In addition, Gateway Information Technology students participate in the college's Celebrate Earth Day event, where they take in donated computers from the public and recycle them with an area certified recycler – which also introduces them to a real-world example of reduce/reuse they will take with them into their future careers.

The college uses space in an effort to save energy by centralizing room scheduling and synchronizing schedules with lighting, heating and cooling controls. This enables automated shutoff of lighting and setback of temperatures when rooms, wings or entire buildings are empty.

**Bottled water reduction.** Staff members and students are encouraged to use tap water in refillable bottles instead of buying bottled water. Nearly half on the campuses are equipped with water bottle fillers. Two have been placed near conference center areas rented out to business and other area organizations, which also act as an educational example to the public and other visitors to be "green."

**Green printing.** The green printing initiative reduced amount of printer paper purchased by 53 percent, saving some 3.6 million sheets of paper. Total printing volume decreased by 5.97 percent from 2014-15 to 2015-16. Spending for employee printing decreased by 8.21 percent; spending on printer paper decreased by 12.04 percent.

**Disposal of property.** College policies require disposal of surplus or obsolete equipment and materials costeffectively and sustainably. Typically, items that still have value are sold to bidders or at auction, donated to charities, sold for scrap value, or recycled.

**Sustainable event planning.** The college has established guidelines for ribbon cuttings, groundbreakings and other events which help minimize their environmental footprint. This includes publicizing recycling policies and making sure recycling containers are on site, providing pitchers or water coolers where participants can fill their own water bottles as well as serving food locally grown or provided by local vendors.



#### Pillar 2: Improve the health and wellness of students, faculty and staff

*Narrative*: Describe how your college or university improves the health and wellness of students, faculty and staff by integrating a campus-wide environmental health program and promoting sound health and wellness practices. You should discuss integrated pest management, contaminant controls and ventilation, asthma controls, indoor air quality, moisture control, and chemical management. Address the amount and type of outdoor time that your students and staff have, as well as the types of fresh, local, and organic food that they eat. Other components you may want to include are: health education, health services, counseling, psychological and social services, staff health promotion and family and community involvement.

Gateway Technical College takes a comprehensive approach to make sure indoor and outdoor campus environments are safe and healthy. All appropriate ASHRAE, OSHA and other applicable industry standards are rigorously observed. The college's wellness program has been nationally recognized and was one of only 32 business and organizations in the United States to receive the Wellness Council of America (WELCOA) Gold Award designation in 2017 for its quality wellness practices. The college continuously works to find creative and meaningful ways to provide healthy activities, foods and ways for its staff and students to live healthy.

Air quality is an important component of learning, working and for those who visit Gateway, and all campus buildings have building automation systems that automatically regulate comfort conditions according to programmed settings as well as closely control humidity. Building environments are rigorously maintained to create safe and healthy environments for all occupants and visitors, especially those with special sensitivities such as allergies and asthma.

Potential indoor air contaminants are controlled at their sources. In areas such as laboratories, welding and automotive shop, diesel mechanics area and spray painting facilities, fumes and particulate are removed by hoods or other appropriate exhaust systems. These systems are tested annually to ensure that they exhausting properly and trapping contaminants as designed to. Low-VOC paints are used in painting projects, and low-volatility products are chosen when possible for all other purposes. Facility managers take measures to ensure that buildings are adequately replenished with fresh air and carbon dioxide and carbon monoxide levels are minimized in accord with industry standards.

**Outdoor spaces.** Campus grounds and building exteriors are maintained using a minimum of chemicals and, where treatments are necessary, using the most environmentally benign products consistent with effectiveness. The college uses fertilizers and herbicides only when necessary and uses environmentally friendly salt substitutes like potassium chloride and magnesium chloride to melt ice on sidewalks and some parking areas. Areas around our Racine Campus are planted with native prairie grass – and don't receive any pesticides or herbicides at all.



**Green cleaning.** Proper product selection and best practices for use of cleaning products safeguard the health and safety of building occupants and minimize impacts on the environment. The college employs green practices in cleaning and paper usage in partnerships with local companies JohnsonDiversey and Kranz Inc.

**Gateway's Urban Farm provides fresh food** every Thursday during the growing season on its Kenosha Campus. The farm is run by Gateway students. Many of the foods grown there are organic, and efforts are made by staff and students to keep those gardens pesticide-free.

In addition to chemical reduction and the related health benefits, Gateway also strives to provide the tools and encouragement for its **staff and students to engage in a healthy lifestyle**. Most notably, the Wellness Councils of America (WELCOA) in 2017 again recognized Gateway with a Gold Award which designates it as a Well Workplace and puts it on the List of America's Healthiest Companies published by the group annually.

**Gateway provides free health care on site** to all college insurance carriers through health clinics stationed at the college's three main campuses, making it easy and affordable to access health care. A nurse practitioner is on hand to diagnose medical conditions, prescribe medication and other treatment. The clinic also holds smoking cessation and dietary health clinics.

The college has established a robust **Wellness Committee** which provides ways to encourage healthy living among its staff members, including on-site Weight Watchers program (at a greatly reduced rate), a health and wellness fair, free comprehensive wellness screenings and health challenges to provide a fun way to eat and be healthier. Throughout the year, Group Health Trust, Gateway's health insurance company, also provides healthy interventions and challenges available to employees, including a Fitness Challenge, Healthy Holiday Challenge and Resolution Recharge.

The committee's vision is to cultivate a wellness culture throughout the college community, enhancing physical, emotional and intellectual health, offering improved health, increasing personal performance, and reducing sick leave and medical expenditures. Following the Wellness Council of America model, programs target five basic areas: physical activity, healthy eating/weight management, stress management, tobacco cessation, and medical self-care.

Gateway encourages outdoor physical activity and engaging in the benefits of experiencing nature and the environment through:

- **Nature trail.** A nature trail with exercise stations is located on our Elkhorn Campus on a site with a natural prairie with a pond.
- Walking maps. The Wellness website provides maps of each campus showing suggested walking routes and specifying their distances



- **Green campus walking maps.** An initiative of the college to combine sustainability with physical activity resulted in "green" walking maps to be created for each of the college's three main campuses. These maps point out the locations of various green and sustainability features of each of the campuses, whether it's environmental (natural) or a college initiative (facilities or program related).
- **Brookhouse Arboretum.** This arboretum, developed in 2015-16 next to the Pike Creek Horticulture Center in Kenosha, now includes 54 trees. Plants and trees are selected by professional horticulturists who choose according to native character, strength of characteristics and novelty.
- **Outdoor classroom.** This space on the Kenosha campus between the arboretum and the urban farm is for Gateway classes to use as a break from being indoors. It is also available for community member activities.



#### Pillar 3: Effective Environmental and Sustainability Education

*Narrative*: Describe how your college or university provides effective environmental and sustainability education by incorporating STEM, civic skills, and green career pathways. Provide examples of interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems. Demonstrate how your institution uses the environment and sustainability to develop STEM content, knowledge, and thinking skills. You should also discuss how your institution develops and applies civic knowledge and skills to environmental and sustainability education.

Gateway excels in this pillar. In curriculum throughout all college programs, the college strives to prepare its students for "green collar" careers as well as create pathways for them to engage in workplace and civic sustainable responsibility. The college is a leader in STEM content and knowledge through its collegiate curriculum, but also does so in its many efforts to engage students in kindergarten to 12<sup>th</sup> grade through transcripted credits, summer camps and short-term certifications in such areas as electronics and robotics.

**Center for Sustainable Living.** This 1,884-square-foot house, outbuildings and gazebo on the Kenosha campus provides an environmentally conscious place for project-based, interdisciplinary learning. Its key functions are to provide a living and learning laboratory for students and a meeting place for staff; enable outreach to the community through tours, workshops, group activities, and meeting space for green-focused organizations; and support outreach to K-12 school districts through field trips and hands-on projects. Instructional offerings at the center cover sustainable practices including gardening, renewable energy, home energy systems, food preservation, and smart recycling. Not including Gateway students and staff, more than 2,000 people used the center in the 2016-17 academic year, including 950 K-12 teachers and students.

The house interior has flooring of cork and sustainably harvested wood. One room is dedicated to showing interior decorations and furnishings that use recycled and other sustainable materials. A sustainability library provides books and other materials on green topics.

The grounds include a natural prairie, a creek bed, a small apple orchard and many types of other trees, providing habitat for birds and wildlife. Space is available for creating small urban farm plots. A 1/4-mile Nature Discovery Trail on the property includes five stations with activities involving solar energy, recycling and composting, birds, trees and insects. The trail is available for field trips and a private scholarship has paid for learning backpacks that provide tools for K-4 students to discover and interact with the environment while they are on the trail.

Located on the same grounds as the Center for Sustainable Living, **the bee barn** allows visitors – many of them elementary school children – a closer look at the creatures which play a huge role in the food system. Visitors



can examine the lifecycle of a honey bee, match up a bee's anatomy, and discover why bees are drawn to specific flower species, through a number of educational displays and interactive exhibits.

Gateway offers **green-related training** in many academic programs as well as within the curriculum of other specific diplomas and courses. Examples include:

- Arboriculture/Urban Forestry. Gateway's Arboriculture/Urban Forestry Technician associate degree provides the hands-on skills and natural resource education for graduates to enter this exciting career field of arborists, urban foresters and related occupations. Students learn how to properly and safely climb trees and use associated manual and technical equipment, on Gateway's Kenosha Campus and surrounding areas. Along with insights into Urban Forestry, students will learn skills to become an arborist, urban forester or a professional who handles many aspects of caring for trees and removing unhealthy or unsafe trees.
- **Horticulture Associate Degree.** This program includes a Sustainable Landscape course and training and certification through the national Sustainable Sites Initiative. Gateway's horticulture program facilities include demonstration gardens, learning gardens, a soil laboratory, several greenhouses, and an arboretum. Students and instructors learn the most environmentally friendly methods to grow plants and trees and are introduced to alternative growing methods such as hydroponics.
- Urban Farming Advanced Technical Certificate. A part of the Horticulture associate degree program, this certificate program equips students to intensively farm small plots and bring their crops to market profitably. It combines a farming and market gardening curriculum with entrepreneurial training.
- Environmental Studies certificate. A part of the Horticulture associate degree program, this certificate gives students in introductory look at the horticulture field through courses in sustainable landscape, plant pests, soil nutrition, plant nutrition and beneficial insects.
- Air Conditioning, Heating & Refrigeration Technology Associate Degree. This program prepares students for a variety of careers including residential and commercial technician and installer. Course work focuses on equipment installation and maintenance in new construction and retrofits. Students practice on modern, energy efficient and advanced equipment with microprocessor controls and building automation technology. The program, which includes a partnership with Trane, includes training to apply the most energy-efficient building management technologies in the industry. These include hybrid heating systems that combine an air-to-air heat pump with a high-efficiency gas furnace.
- **Sustainable Design Certificate.** Students can earn this certificate as part of the college's two-year Interior Design associate degree program. The certificate includes a course in Sustainable Materials and Finishes and a practicum at the Center for Sustainable Living, where students create a design for a space in the center and put the design in place.
- **Principles of Sustainability Course.** This course helps students develop sustainable literacy; analyze interconnections of physical and biological sciences and environmental systems; summarize the effects of sustainability on health and well-being; analyze connections among social, economic and



environmental systems; use energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options; evaluate options to current waste disposal and recycling; and analyze approaches used by their communities to promote and implement sustainability.

• Fresh Water Resources Associate Degree. A part of the Civil Engineering Technology program, this offering trains students to become water-quality technicians performing field work and office duties. Students learn civil engineering design and construction, coupled with advanced education in environmental assessment, water treatment, stormwater management and erosion control. They learn to use graphic techniques to produce engineering drawings, use modern surveying methods for field measurements, design storm systems for hydrological events, understand water treatment processes, and design construction site erosion controls.

Gateway provides opportunities for students to be sustainable in ways outside the classroom. These are education and learning-related, but in ways students can explore other ways to be sustainable.

**Green Scholars** provides students the opportunity to learn about sustainability, get involved in green and sustainable efforts and earn recognition when they graduate. They earn points for specific green activities, from using compact fluorescent or LED light bulbs, to packing waste-free lunches, to riding a bicycle or public transit, to buying an energy-efficient refrigerator. Those who collect at least 50 points graduate as Green Scholars. They are honored each year at the college's graduation ceremony. **The Sustainable Living** student group practices renew, reuse, refuse, reduce and recycle concepts promoted by the college. Members also run workshops that repair electronic equipment for reuse and donate used clothing to local shelters. They are planning to partner with the college's Fab Lab to build a high-mileage vehicle for competition in Australia.

**Green observances.** The college sponsors annual community celebrations designed to share information and engage residents in living in more environmentally friendly ways. One event is held each year on each of the college's three main campuses.

- Celebrate Earth Day. Held on the Saturday closest to Earth Day, these events on the Kenosha and Elkhorn campuses celebrate the environment with displays, workshops, and hands-on activities. Hundreds of community members attend the events, sponsored by Snap-on Incorporated. The Elkhorn event is also supported by that community's parks and recreation department and Chamber of Commerce.
- EcoFest Racine. This annual event is organized in partnership with Greening Greater Racine. It offers cooking demonstrations, informational presentations, children's activities, and displays from more than 50 product and service vendors, educational institutions, nature centers and parks, and community organizations. A new aspect will be eco-art and eco-music featuring regionally-known artists and musicians. Admission is free, and healthy refreshments are available.



Gateway's STEM and environmental educational outreach doesn't end with its enrolled college students and "green" events. The college offers many opportunities to its communities to provide educational opportunities for students of all ages. Gateway instructors have taught Boy Scout Merit Badges for Energy and Soil and Water Conservation, as well as hosting many Girl Scout troops for sustainable-focused activities. The college's Sustainable Energy Systems instructor has worked on STEM camps for the Boys & Girls Club of Kenosha, emphasizing solar power and human body and health. Gateway has also hosts SkillsUSA competitions. The college's three primary horticulture instructors are sought-after speakers and workshop presenters in our communities and for media outlets, offering information on sustainable gardening, composting, vermiculture and much more. One of those instructors has advised several Eagle Scouts on their projects in the areas of urban farming and other horticulture-related questions as well as writing a horticulture column for a Kenosha-area newspaper and online gardening publication.

Gateway's **summer camp program**, offered with the Boys and Girls Clubs of Kenosha County with Snap-On Incorporated, includes two week-long sessions with environmental themes. A solar energy week includes hands-on activities that include cooking in solar ovens and building and racing solar-powered cars. A sustainability week covers horticulture, native birds, renewable energy, recycling, and exploration of the Center for Sustainable Living. Summer camps are also held at the college's Fab Lab, where middle school students use 3D software to design and produce pieces in this educational maker space.

### **Other efforts include:**

**Green communities**. Gateway has joined the Racine Sustainable Business Network to support improvements in the community, the college and the environment.

**Water Council.** Gateway is an active member of The Water Council, a Milwaukee-based organization of business, education and government leaders dedicated to aligning the regional freshwater research community with water-related industries. As part of this, Gateway is a partner in the implementation of a National Science Foundation grant to train teachers and others in water industry career opportunities.

**Web page.** A sustainability web page helps students and community members review college goals and view dashboards showing energy saving and other initiatives are progressing.



*Summary Narrative*: Provide an executive summary of 500 - 750 words describing your institution's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative, yet replicable, practices and partnerships. Be sure to cover every ED-GRS Pillar and Element.

Gateway Technical College is committed to sustainable practices which positively affect students, staff and the community in which we live. Gateway takes energy-saving measures, improves the health and wellness of its staff and students as well as trains the green career workers of tomorrow.

Every Gateway campus includes some form of renewable energy -a mix of wind, solar and geothermal. All new buildings and expansions are constructed to LEED Silver standards. We consistently upgrade facilities with high-efficiency boilers and air conditioning, efficient lighting, and power-saving computing equipment.

Gateway signed on to three different efforts to demonstrate its support for strong climate action: American Association of University and College Presidents' Climate Commitment, The American Campus Act on Climate Pledge and the Second Nature Climate Leadership Commitment.

Gateway is one of only 32 employers to earn the Wellness Council of America (WELCOA) Well Workplace Gold Award for results-oriented wellness programs, earning it twice – in 2010 and then again in 2017. Our integrated wellness program follows the WELCOA model in promoting physical activity, healthy eating, tobacco cessation, stress reduction management and medical self-care.

The college recently initiated a free, on-campus health clinic, providing health care quickly, affordably and efficiently to staff members. The on-site nurse practitioner and nurse provide health wellness coaching to staff, as well. Gateway offers nature trails and maps of campus walking routes, plus team-based activity challenges with incentives to promote healthy living. Healthy eating and weight management programs include on-site Weight Watchers meetings and special seminars and contests. Farmer's markets and an and urban farm make healthy food choices available.

Gateway invests time and effort to conserve and reduce waste and to eliminate air emissions.

The college also works to improve water quality, efficiency and conservation. From developing an outdoor classroom, to providing bike racks for students who prefer this green use of transportation, or initiating a program to upgrade pneumatic and early generation electronic HVAC control systems with newer models which save time, energy and reduce our carbon footprint, Gateway strives to be sustainable and green.

Our commitment in these areas is embodied by the Center for Sustainable Living, a house with acreage on our Kenosha Campus that provides a learning laboratory for students and a place where community members of all



ages can learn. We expanded that environmental learning through an adjacent bee barn, with a goal of helping to educate students and the public about bees and the epidemic that has plagued this pollinator worldwide.

Gateway strives to provide green and sustainable learning to our students and community through a number of different means, including the colleges' curriculum, environmental events for the public and working with k/12 districts to provide hands-on education tailored to their environmental education. Gateway has initiated several popular programs and projects which provide education to members of the public to help them to be more sustainable and gentle on the environment, offering many different green and sustainable workshops to staff, students and communities the college serves.

The college, in all ways, seeks to train the workers of today and tomorrow with the skills to enter green and sustainable careers in such programs as Arboriculture/Urban Forestry, Fresh Water Resources, Sustainable Design, Urban Farming, and Air Conditioning, Heating and Refrigeration Technology. Sustainability-related learning is embedded within all areas of the curriculum.

In modeling respect for the environment, Gateway reaches out to its communities with a host of activities. More than a thousand attend our annual community celebrations designed to share information and engage residents in adopting more sustainable lifestyles. Two Celebrate Earth Day events and EcoFest Racine offer displays, workshops and demonstrations.

We are committed to sustainability in all aspects of our operations and college culture.