



Postsecondary Sustainability Award 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 Sustainability Award

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

Name of President/Chancellor: Dr. Daniel A. Wubah
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official College or University Name: Millersville University
(As it should appear on an award)

College or University Street
Mailing Address: 101 North George Street, Millersville, PA 17551
(If address is P.O. Box, also include street address.)

County: Lancaster IPEDS Number*: 214041
Telephone: 717-871-7001 Fax: 717-871-7930
Web site/URL: <https://www.millersville.edu> E-mail: mupresident@millersville.edu

*Integrated Postsecondary Education Data System

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

Daniel A. Wubah Date: 12/17/2018
(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: Pennsylvania Department of Education

Name of Nominating Authority: Mr. Pedro Rivera

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

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

A handwritten signature in black ink, appearing to read "Pedro Rivera", written over a horizontal line.

Date: 2/13/2019

(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, 2021

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.



PENNSYLVANIA GREEN RIBBON APPLICATION FORM

Nominee Information

School, District, or Postsecondary Institution Name: Millersville University

Category of Nomination (School, District, or Postsecondary): Postsecondary

Address: 101 North George Street **City:** Millersville **State:** PA **Zip:** 17551

Twitter: @millersvilleu **Facebook:** @millersvilleu

Top official: Title (Mr./Ms./Mrs./ Dr.): Dr. **First Name:** Daniel **Last Name:** Wubah

Position/Role (Principal/ Superintendent/ President): President

Email: MUPresident@millersville.edu **Phone:** 717-871-7001

Lead Applicant (if different) Title (Mr./Ms./Mrs./ Dr.): Mr. **First Name:** Chris

Last Name: Steuer

Position/Role (Teacher/ Sustainability Director/ Facilities Director): Sustainability Director

Email: Chris.Steuer@millersville.edu **Phone:** 717-871-5031

Check all that apply:

Early Learning

Charter

Community College

Elementary

Magnet

Career and Technical

Middle

Non-Public

Urban

High

Two-Year

Rural

Public

Four-Year

Suburban

Provide percentages, if any are relevant to your school, district, or institution:

Pell Recipients: 29%

Special Education: N/A

Free and Reduced Price Lunch: N/A

Graduation Rate: 60.1%

Minority: 23%

Attendance Rate: N/A

Limited English Proficient: N/A

Provide the following:

Total Enrolled: 6405 Number of Schools: 1 Buildings: 88 Campuses: 1

Documentation of Sustainability Achievement

Summary Narrative: An Overview of Your Work Encompassing All Three Pillars

Millersville University's efforts to advance sustainability by beneficially impacting the environment and human health permeate all aspects of University activities, from operations to academics and student life. The University's commitment to the various dimensions of sustainability are evident in its coursework, its administrative structure and, increasingly, in its infrastructure.

Notably, this year Millersville completed construction of one of the first zero energy buildings in North America. Located on the center of campus the Lombardo Welcome Center is Millersville's new admissions building—welcoming nearly 10,000 prospective students and other visitors to the University each year. As a zero energy building, the Lombardo Welcome Center greets every visitor with a message of environmental stewardship and stands as a clear testament to the University's commitment to sustainability and carbon neutrality. In its first few months of operation, the Lombardo Welcome Center has generated nearly three times more energy than it has consumed. Excess energy is supplied to other campus buildings, reducing campus energy demand and greenhouse gas emissions, while saving nearly \$25,000 annually in electricity costs.

Millersville is incorporating the Lombardo Welcome Center's zero energy design into daily life through coursework, tours and other campus programs. Faculty from various University departments bring their students through the building to explore green building design and discuss topics such as energy policy, sustainability, and innovation. Millersville's student ambassadors begin campus tours at the Lombardo Welcome Center, where they share information about the building's sustainable features with visitors. The University's Office of Sustainability, which is located in the building, provides tours to various groups, which in 2018 ranged from the local chamber of commerce to a visiting delegation from Xinyang Normal University in China. In 2019, work is planned to conduct STEM workshops focused on advanced energy technologies for education students and local elementary and middle school students.

While the Lombardo Welcome Center demonstrates Millersville's commitment to environmental performance and sustainability in a built structure, the University's efforts run far deeper than just a building.

A charter signatory to Second Nature's Climate Commitment, Millersville has a goal to be carbon neutral; has developed a Climate Action Plan through collaborations among faculty, staff and students; and is currently assisting the local community with climate change response efforts. The University uses the results of our greenhouse gas inventory to guide energy management practices and has implemented numerous measures to conserve energy, increase energy efficiency, and transition to cleaner fuels. These efforts include LED stadium lights, a new high-efficiency data center, upgraded electrical infrastructure throughout campus, among others—saving hundreds of thousands of dollars annually and having reduced campus energy-related greenhouse gas emissions by 7 percent in just the past three years.

Millersville University has a clear commitment to health and wellness buttressed by a strong nursing program. University programs such as run by the University's Center for Health Education and Promotion, University Health

Services, and an Employee Wellness Committee provide continuous support and information to faculty, staff and students throughout the academic year. Through the Center for Health Education and Promotion our student employees provide services ranging from flu shots to information on how to have healthy relationships. Notably, Millersville University is ranked by BestColleges.com as one of the safest college campus in America.

Millersville University's mission is to inspire learners that contribute positively to local and global communities. This mission has at its core a commitment to sustainability, which calls for individuals to interact with each other and their environment in a manner that meets their needs while ensuring that tomorrow's generations can meet their own needs. Driven by mission, these sustainable principles are reflected throughout our curriculum and include recent efforts to restore stream health through an on-campus water quality research station; research, develop and apply sustainable lab practices; and establish a campus apiary and organic vegetable gardens among other efforts. Along the way the University is assessing student sustainability competencies and promoting our work through an annual student-focused research and creativity fair known as Made in Millersville.

The remainder of this application discusses the efforts noted above in greater detail, organized by Green Ribbon School pillar.

Narrative for Pillar I: Your Efforts to Reduce Environmental Impact and Costs

Millersville University's efforts to reduce environmental impact and costs encompasses all aspects of the University's activities beginning with the University's Strategic Plan extending through facility operations and incorporating student outreach and education. Highlights include a incorporating climate and energy goals into the University's Strategic Plan, establishing a goal of carbon neutrality, fuel switching, upgrading campus electrical infrastructure, developing an in-house energy management system, implementing energy conservation measures, establishing a student energy conservation competition and constructing an industry-leading zero energy building.

Millersville University's Strategic Plan includes a goal to be carbon neutral by 2040. Millersville University signed Second Nature's Climate Commitment in support of this goal and developed a Climate Action Plan that outlines specific steps for achieving this goal. The University annually prepares a greenhouse gas inventory in support of this plan and makes management decisions based on it. These activities are all completed in-house by Millersville faculty, staff and students.

Millersville is developing an energy management strategy driven by the University's greenhouse gas inventory, which shows that approximately 65 percent of University greenhouse gas emissions stem from energy use. Millersville University recently completed a multi-year, \$11.5 million project to upgrade its electrical infrastructure to prepare for broader energy management and energy reduction activities. Specifically, the University converted an aged radial-feed electrical delivery system to a loop-feed system that connects over 40 campus buildings. The project entailed running over 42 miles of 15 kV electrical wire and installing 41 loop feed switch boxes to upgrade distribution to each building and replace failing wire and terminations.

As part of the electrical infrastructure upgrade, Millersville installed utility-grade meters on each major campus building—totaling 40 buildings. The University developed an in-house energy management system extracting, compiling and presenting energy use data for each of these building's every 15 minutes and has used the system to drive energy conservation measures. Within months of establishing the system the University used the data to establish new thermostat setpoints during unoccupied hours, which reduced annual energy use by

approximately 5 percent—saving approximately \$120,000 and reducing greenhouse gas emissions by about 800 tons of carbon dioxide, annually.

During this same period, Millersville University switched fuels in major campus buildings from electric to natural gas. The cleaner and more energy-efficient boilers and other systems have reduced greenhouse gas emissions by about 2,700 tons of carbon dioxide and save the University about \$500,000 annually.

The University also recently completed numerous energy efficiency projects, including major projects to convert the stadium lights to LED and upgrade the University's data center. The data center energy efficiency improvements resulted in a 20 percent increase in data center efficiency and reduced the University's electrical use by 280,000 kWh, annually—saving approximately \$24,000 and reducing greenhouse gas emissions by 110 tons of carbon dioxide annually.

The most recent and greatest University sustainability achievement is completing construction of a 14,000 square foot zero-energy welcome center. An EPA Green Power Partnership partner, the beautiful metal and glass building, which is the first of its kind on campus, is the University's new front door and stands as a clear testament of Millersville's commitment to sustainability and to the goal of pursuing carbon neutrality by 2040. A total of 528 solar panels on the roof generate electricity, 20 geothermal wells drilled 400 feet into the ground heat and cool the building, and several rain gardens treat storm water on-site. An additional 20 solar panels are located on a ground array behind the building so visitors and MU students can view the technology up close. In addition to creating its own energy, the building's efficient lighting systems, zoned heating and cooling and radiant floor heat improve comfort and make the building 60 percent more efficient than other buildings on campus. The building's furniture is made from 40,000 pounds of recycled materials and the landscape consists entirely of native plant species. Touchscreen dashboards, located in the lobby provide real-time information the building's energy use and production as well as orientation information for prospective students. The building's features are being incorporated into coursework focused on energy policy, climate change, and green building design, among others.

Millersville University is recognized nationally for its efforts and University faculty and staff strengthen University sustainability commitments by participating in various state and national committees and organizations. Millersville University is consistently featured on Princeton Review's Guide to Green Colleges. Faculty and staff from Millersville University have served on the Executive Committee of the Pennsylvania Environmental Resource Consortium continuously since its inception. The University's Sustainability Director currently serves as treasurer for the Pennsylvania Environmental Resource Consortium. Millersville's University's Chief Business Officer serves on the board of the Association for the Advancement of Sustainability in Higher Education and the sustainability committee of the National Association of College and University Business Officers. Faculty have won national sustainability awards including recent awards from the American Chemical Society for sustainable lab practices.

Water Conservation: Millersville University recently implemented simple fixes that dramatically reduced its water use. The University evaluated water use in the residence halls and found that consumption was considerably higher than anticipated. Analysis revealed that toilet flappers were failing in the suite bathrooms, producing a dramatic spike in water consumption. The University replaced over 370 toilet flappers resulting in savings of 50,000 gallons of water each day!

Water Quality: Millersville University established an on-site stream quality station, named the Watershed Education and Research Institute (WETI). The station contributes to local assessment of water quality and

stream health. The University annually participates in stream cleanups including those hosted on campus as part of a broader regional effort known as Lancaster Water Week.

Waste: Millersville maintains close relationships and frequently partners with the local waste management authority, Lancaster County Solid Waste Management Authority (LCSWMA), to host America Recycles Day and other events on campus. The University has recently had to scale back the types of materials recycled due to regional/national recycling policies; however, Millersville still recycles glass, plastics with a neck, cardboard and metals. Additionally, Millersville composts yard waste onsite and organics from the dining hall. Approximately 60 tons of organics from the dining halls are composted through a vendor and provided to local farmers. Millersville works with a hazardous waste management specialists to responsibly dispose of materials from our science labs and other locations on campus. Millersville also maintains a contract with an electronics recycler that has recycled over 35,000 pounds of electronics from the University and that annually hosts campus collection events. The University's waste diversion rate is 49 percent.

Transportation: Millersville University was recently awarded Gold Star certification from Commuter Services of Pennsylvania in recognition of its advanced transportation efforts. The University partners with Commuter Services of Pennsylvania to provide an online ridematch services to its commuting population. Additionally, the University partners with ZipCar to provide a campus car share. Millersville has an on campus shuttle as well as campus connections to local and regional bus services with connections to Amtrak. The bus services are free for use by students. The University has bike repair stations and electric vehicle charging stations located on campus. Information on advanced transportation options are incorporated into University events, including new student and new employee orientations and promotional events.

Narrative for Pillar 2: Your Efforts to Improve the Health and Wellness of Students and Staff

Millersville University has numerous health and wellness programs for both employees and for our students. The programs and activities described below include a student-run peer educator group focused on promoting health education and wellness, an employee-run committee that uses employee health survey data to plan outreach and a campus health services resource.

The centerpiece of our student-centered health and wellness programs is Millersville University's Elsie S. Shenk Center for Health Education and Promotion, which provides lifestyle education programs, hosts awareness events and information tables, and provides educational resources to students on a wide collection of topics including: alcohol and other drugs, body image, dating violence, domestic violence, healthy relationships, safer sex, sexual assault, stalking, and stress.

The Center for Health Education and Promotion spearheads campus teams and workgroups to coordinate a collaborative approach to addressing student health needs through a comprehensive peer education program. Upwards of 25 students are annually hired, trained and evaluated to provide lifestyle workshops, education tables and outreach, and awareness events across campus. Topics include alcohol and other drugs, body and mind, sexual health, relationships and sexual and relationship violence.

The Center for Health Education and Promotion engages the campus community in promoting wellbeing through events such as a campus-wide health fair; promotion of national health observances such as Alcohol Awareness Week, Teen Dating Violence Awareness Month, and Sexual Assault awareness month, and bystander intervention programs and campaigns. The Center collects student health data to assess current

student health needs, inform and prioritize health promotion initiatives, and educate the campus community about the positive health promoting behaviors of MU students through social norms campaigns. Partnerships with the YWCA Lancaster and DVS Lancaster enable the Center for Health Education and Promotion to provide free advocacy services to students.

The Center for Health Education and Promotion contributes to fulfilling the educational mission of Millersville University through empowering students to make informed decisions and develop life-long skills that enhance their personal well-being. The Center contributes to increasing the academic success, productivity and retention of students through providing current and relevant information about high risk behaviors; raising awareness about personal decision making and the impact decisions have on an individual and their community; and engaging students in meaningful opportunities to create a healthy community in which all students can achieve their personal and academic goals.

Millersville University's Employee Wellness Committee oversees numerous educational events and activities throughout the school year to encourage healthy behaviors within the University community. The activities are informed by annual employee wellness surveys conducted in partnership with Highmark. Recent surveys indicate an interest in addressing topic areas such as stress management, weight management, nutrition, depression, and physical activity. The Wellness Committee uses this information to plan events and activities throughout the school year—involving hundreds of University faculty and staff. Examples events and activities include a Fall Lunch and Learn where experts speak to the University community about relevant health topics—recent topics included social media addictions, mindfulness, and climate change and human health, among others. The Employee Wellness Committee also leads an Earth Day walk around campus to highlight sustainable campus features as well as a Take a Hike challenge, which encourages office teams to compete against each other to walk the furthest. A final example is the Dress Red lunch, which celebrates women's heart health through a lunch and learn centered on heart healthy activities.

In addition to the above student and employee programs, Millersville University offers access to treatment onsite through Health Services, which provides high quality holistic health services to Millersville University students and the campus community. Employees in Health Services assess determinants of health and current health trends in order to provide the most appropriate, relevant, cost-effective health care in a campus clinical setting. They provide clinical services while promoting disease prevention, healthy lifestyle choices, and reduction of risk-taking behavior.

Millersville University is increasingly using the Sustainable Development Goals (a.k.a., Global Goals) as an organizing framework for our sustainability efforts. These 17 goals encompass all aspects of sustainability, ranging from No Poverty and Good Health and Well-Being to Climate Action and supporting Life on Land. The goals provide a powerful organizing framework for the University's sustainability activities with an emphasis on collaborations across disciplines and integrating efforts to address global challenges. As an example, the University's nursing program recently partnered with the Alliance for Nurses for Healthy Environments to raise awareness of the connections between climate change and human health on campus. Additionally, the local nursing Greek chapter (Xi Chi) committed to address the Global Goals of Zero Hunger, Good Health and Well-Being and Climate Action with an emphasis on the interconnectedness between these goals.

Environmental Health and Safety: Millersville University has an effective environmental health and safety program that implements measures to ensure human health and well-being in its buildings and on campus. The University's Environmental Health and Safety program monitors indoor air quality and provides for reporting of concerns, conducts site inspections and provides for external consultation as appropriate. The

University works with indoor air quality consultants as needed to identify issues or resolve areas of concern. Corrective measures are taken by MU personnel or contractors as needed to address any issues with HVAC, moisture, mold and mildew, pests, etc. EHS personnel conduct EHS trainings as part of new employee trainings and campus events to raise awareness of potential issues and ensure timely reporting of any concerns. The staff also work closely with faculty, particularly in the science labs to ensure proper safety procedures are followed. Millersville's Housekeeping department purchases environmentally-preferable cleaning products in alignment with the Pennsylvania State System of Higher Education's policies on green procurement. On campus grounds, the University is beginning to implement measures to provide for more sustainable landscapes, including several campus locations featuring rain gardens and PA native plant species only. The University is an official Monarch Waystation and maintains organic vegetable gardens. The University Pond is a certified wildlife habitat, the Biology Department maintains a campus apiary and conducts studies at the biological preserve.

Narrative for Pillar 3: Your Efforts to Ensure Effective Environmental and Sustainability Education

Engaging learners and sustainability are both strategic goals at Millersville University. Students are engaged in environmental- and sustainability-focused education through coursework as well as through student research, and in co-curricular activities. Examples discussed below include a campus stream quality station, a campus center focused on emergency management, nationally-recognized sustainable lab practices, a campus apiary, endangered species research, climate change resiliency planning and efforts to assess sustainability competencies. All of this work involves students and has been presented at our annual campus student research and creativity fair, Made in Millersville.

Faculty in Millersville's Educational Foundations Department collaborated with faculty members in our Biology Department and local community groups to establish a stream quality study station on campus known as the Watershed Education and Training Institute (WETI). The WETI provides Millersville students with access to equipment to study water quality and stream health directly on campus in streams that feed a local river in route to the Chesapeake Bay. Water quality is a priority for the local region, which suffers from degraded stream health due to agricultural practices. The WETI not only serves as an educational space for students, but also the surrounding community who regularly attend outreach activities.

Additionally, faculty members collaborated with local community groups to participate in National Science Foundation (NSF) research to develop a place-based, problem-based, hands-on set of resources, models and tools to introduce high school students to environmental and geospatial science centered on hydrological modeling. The project's web application, Model My Watershed, consists of an interactive, GIS and hydrological modeling tool that allows students to assess and analyze complex national databases of environmental conditions in their local watersheds to make virtual modifications to the environment to reduce both stormwater runoff and improve water quality. A video featuring the work was selected for a Spotlight on Analyzing & Interpreting Data Across Stem Disciplines by The Community for Advancing Discovery Research in Education (CADRE).

Millersville's Center for Disaster Research and Education (CDRE) conducts research on various issues related to disasters, mitigation and planning. The CDRE has been involved in research funded through the National Science Foundation, Federal Emergency Management Agency, Pennsylvania Emergency Management Agency and in collaboration with other academic research centers. Research focuses on behavioral and

organizational response to disasters and terrorism, climate impacts and emergency management and risk and hazard management. Faculty from CDRE along with those from Millersville's School of Social Work recently led experiential learning trips to Puerto Rico to assist with disaster recovery following Hurricane Maria.

A faculty member in our Chemistry Department researches techniques to reduce chemical use during experimentation and was recently recognized by the American Chemical Society Committee on Environmental Improvement (ACS-CEI) for his incorporation of sustainability into the chemistry curriculum. His research analyzes techniques used during experimentation to identify opportunities for reducing chemical use; thereby lessening demand for chemicals and abating the material and energy costs associated with chemical production. Students involved in the classes incorporate the sustainable lab practices into their lab activities.

Faculty and students in our Biology Department established an apiary on campus. The apiary currently has two hives with a goal to expand to eight hives in the coming years. The apiary provides the opportunity to conduct colony collapse disorder research on campus.

Biology students also recently completed research to assess threats to endangered species. They researched the federal register to summarize the reasons that species were listed as endangered or threatened. By categorizing over 1,400 species, the students found that habitat degradation and loss, invasive species, and environmental stochasticity were the top three threats that causes species to be listed.

Additionally, Millersville University works with the local community on climate change response planning and other environmental activities. Millersville University is a signatory to Second Nature's Climate Commitment and through that Commitment has worked with the City of Lancaster to help prepare the City's first greenhouse gas emission inventory and begin to prepare a Climate Action Plan. Geography students completed a special topics course focused on climate resiliency and through that course developed resiliency assessments that will be incorporated into the University's Climate Action Plan and provided as resources to the City's Plan.

Geography students also recently completed surveys and analyses of sustainability competencies among their fellow students. They researched several topics to assess familiarity with the University's sustainability efforts and interest in alternative transportation options, energy efficiency and climate change. The findings helped to direct the University's future sustainability programs.

Photos:

Attached