SUSTAINABILITY NEWSLETTER

FALL 2018

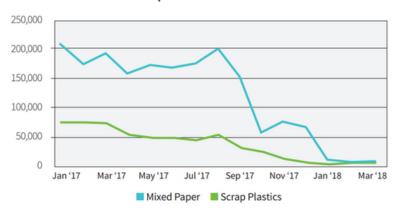
RECYCLING IS CHANGING: HERE'S WHAT YOU NEED TO KNOW

If you've been following the news, you've probably heard that recycling is changing throughout much of the United States. These global changes are affecting us locally at Millersville University and in Lancaster County.

Why is this happening?

Historically, many of the materials recycled in the U.S. were sent to China where they were used as source materials for products developed by China. As China's economy has grown, it has turned toward sourcing the materials internally and restricting what it accepts from other countries. Other factors such as large amounts of trash being mixed in with recyclables and increased awareness of poor working conditions for individuals in the Chinese recycling industry have also played a role. Collectively, these factors have dramatically affected the market for recyclables in the U.S.

U.S. Exports to China of Scrap Plastics & Mixed Paper



Source: Waste 360. China's Changing Import Regulations

What can I recycle?

While many of us want to recycle as much as we can, over recycling or "wishful-thinking recycling" does more harm than good by contaminating the bin. Focus on the Big 4 and when in doubt, throw it out.



Source: Lancaster County Solid Waste Management Authority http://www.lcswma.org/lcswma recycling.cfm

GOING FURTHER WITH WASTE DIVERSION

The changes in what we can recycle provide an opportunity to reflect on what and how we consume. In his book, Cradle-to-Cradle, William McDonough, advocates for making products out of either biological nutrients (materials that decompose after use) or technical nutrients (synthetic materials that can be disassembled and turned into new products in a continuous cycle). These concepts have been used to develop a Cradle-to-Cradle certification for products that follow these design principles. Several pieces of furniture in the new Lombardo Welcome Center were made in this way and are Cradle-to-Cradle certified. In fact, over 40,000 pounds of recycled materials were used to make the furniture in the Lombardo Welcome Center and 60% of all the furniture can be recycled at end-of-life.



Furniture in the Lombardo Welcome Center is Cradleto-Cradle certified. It can be sent back to the manufacturer at end of life and made into new furniture.

TerraCycle

Dr. Nadine Garner runs a campus TerraCycle program that collects non-customary materials such as energy bar wrappers, empty toothpaste tubes, and Brita filters. The materials are sent to TerraCycle where they are converted into new products that are sold through TerraCycle's online retailer, DwellSmart. The proceeds go to SmileTrain to provide cleft repair surgery to children.



Dining Hall Composting



When you deposit your tray at the Upper Deck, behind the scenes staff work to sort the waste and send all organic materials off to be composted at Oregon Dairy. Millersville composts about 60 tons of waste annually through this effort. While this waste has a beneficial reuse, the best thing we can do is cut down on food waste. Faculty, staff and students can help by taking only the food you'll eat.

AMERICA RECYCLES DAY

Learn more about campus waste diversion efforts at the America Recycles Day Event

When: November 15th, 2018. 11am - 1pm Where: Student Memorial Center, Atrium





POSITIVE ENERGY NEWS

Opened in the spring of 2018, the Lombardo Welcome Center is designed to generate as much energy as it uses. This fall, Millersville University will begin a year-long effort to certify the Lombardo Welcome Center as a zero-energy building with the Living Future Institute.

To be certified, the Lombardo Welcome Center will need to generate as much energy as it uses for an entire year. Getting there will require a combination of careful monitoring, proper system maintenance and performance, and energy-conscious behaviors by the staff and students who work in the building.

In addition to the dozens of prospective students that visit the Lombardo Welcome Center each day, numerous Millersville University partners and community members have toured the building to learn about sustainability and sustainable design, including the Lancaster Chamber, Eurofins Lancaster Labs, and the Keystone Energy Efficiency Alliance.

In August, Berks County TV (BCTV) toured the Lombardo Welcome Center to film two episodes for "Building Green," a local TV show focused on sustainable design. The episodes will air on September 18th and October 16th at 10am on BCTV.

Monthly Energy Use (Yellow) and Production (Green), May - Aug 2018



The 500 solar panels on the roof of the Lombardo Welcome Center generated almost three times more energy than the building used over the summer. The extra energy helped power other campus buildings.





Representatives from Xinyang Normal University
Tour the Lombardo Welcome Center



The lobby ceiling of the Lombardo Welcome Center features flags representing the countries of all Millersville University students.

SUSTAINABLE MILLERS VILLE

What's something you do to help make Millersville sustainable?



Dr. Nadine GarnerPsychology Professor,
Sustainability
Committee Chair

"I talk passionately with everyone I can about the campus TerraCycle program I created. We now have enthusiastic alumni working in businesses and schools who partner with us to generate even more funding for SmileTrain. Please check 'Ville Daily in the coming months to learn about the TerraCycle expansion to residence halls and the whole campus, and how you can get involved."



Abbey Ford
Junior,
Government & Political
Affairs and Economics

"I skipped the parking pass this year in favor of taking the bus or biking. It lowers carbon emissions, saves me money, and reduces the stress of looking for a parking space!"



Josh Belice
Assistant Director of
Admissions

"Sometimes the squirrels on campus pull things like Cove burger wrappers out of the trash can, so if I see trash lying around, I pick it up."



Mamie Covell
Sophomore,
Secondary English
SGA Sustainability Chair

"I carry a pack of reusable straws and silverware in my backpack. Independently avoiding single use plastic is a great way to make a difference and feel accomplished within that."

Faculty Focus



Dr. Kathleen Schreiber

DEPARTMENT
Geography

Geography professor, Dr. Kathleen Schreiber chairs Millersville University's Climate Action Plan Subcommittee. Released in 2016, Millersville's Climate Action Plan presents the University's approach for being carbon neutral by 2040.

Most of Millersville's greenhouse gas emissions come from using energy to power campus buildings. "We can all be part of the solution," says Dr. Schreiber. "Simple steps like turning off lights when you leave your dorm or classroom, help to save energy and reduce greenhouse gas emissions."

Dr. Schreiber also teaches about the impacts of, and solutions to, climate change in classes such as Climate and Society. "I'm always inspired by how engaged students become when talking about climate change. With their help, I believe we're capable of meeting the climate challenge."

In 2018, Dr. Schreiber received the Pennsylvania Environmental Resource Consortium's Sustainability Champion award.

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MARK OF DISTINCTION

Millersville University recently received a Mark of Distinction from Second Nature for reducing our greenhouse gas emissions and for maintaining our commitment to achieve carbon neutrality by 2040.

To learn more about how Millersville plans to go carbon neutral, check out our Climate Action Plan.



SUSTAINABLE SUMMER

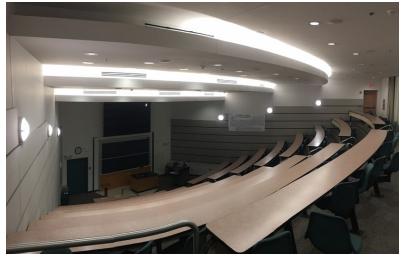
The summer of 2018 saw work completed around campus to make places and spaces more sustainable as well as international travel to see sustainable practices abroad. Here are some highlights:

- Dr. Len Litowitz's ITEC 304: Energy Resources, Sustainability & the Environment class traveled to Iceland to learn about the country's sustainability efforts.
- Faculty and staff cleaned up the Conestoga River as part of Lancaster Water Week.
- James Street was repaved and the old aggregate was repurposed to make a gravel roadway for ground's access roads.
- The Facilities Department retrofitted the lights in room 210 of Caputo Hall to convert to LEDs.
- Faculty and staff grew vegetables in the Center for Sustainability's organic gardens.
- Staff in the Lombardo Welcome
 Center and around campus
 celebrated the summer solstice by
 using natural light in their offices as
 part of the daylight hour project.













Recycling right doesn't have to be hard.









JUST FOCUS ON THE $\mathbf{B}[\mathbf{G}, \mathbf{4}]$ PLACE ONLY THESE ITEMS IN YOUR BIN.









Emptied, Rinsed, & Lids Removed

All other items, such as those below, **do not** belong in your recycling bin.



It's okay to throw everything else away. It will be turned into energy.

Lancaster County has an advanced waste-to-energy process that converts these materials into renewable energy, powering local homes and businesses and helping to reduce our reliance on non-renewable sources of energy. So, when in doubt, throw it out.

Visit recyclerightlancaster.org for more tips.



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STAFF FOCUS



Gil Brown, Interim Vice President of Finance and Administration



@GuilBrown

Formerly of Edinboro University and the State System Office, the new Interim Vice President of Finance and Administration, Gil Brown, sees Millersville University and the City of Lancaster as hidden gems that deserve global attention.

"I am excited to be joining Millersville at a remarkable time in its history.
Lancaster has always been a crossroads for the world, modeling sustainability and offering provisions for individuals seeking prosperous futures. Under President Wubah's leadership we will build on Millersville's legacy to reach new heights as an institution with sustainability as one of our core values and commitments."

Gil sits on the board of the Association for the Advancement of Sustainability in Higher Education (AASHE) and the Sustainability Advisory Panel of the National Association for College and University Business Officers (NACUBO). Gil blogs about his experiences at Millersville (a) Gil on the 'Ville.

http://gotville.us

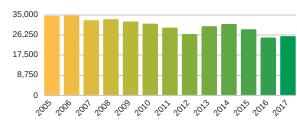
BY THE NUMBERS

Led by the work of our Facilities Department, Millersville University has reduced our carbon footprint by 26 percent since 2005, primarily through energy conservation and fuel switching efforts. While there is more work to be done, efforts to date are not only reducing our carbon footprint, they're providing substantial cost savings.

Millersville Greenhouse Gas Emissions: 2005 - 2017







Most of Millersville's greenhouse gas savings, primarily carbon dioxde (CO2), are associated with switching from electricity to natural gas to heat many campus buildings.





Converting to natural gas saves us approximately \$500k annually.

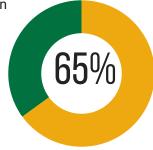
Millersville also invested in our electrical infrastructure, including installing meters on our 40 largest buildings so that we can closely track building energy use.

188

2017

10 buildings account for:

- 65% of campus energy use,
- 60% of energy costs, and
- 40% of University GHGs.



Each spring, the three week energy conservation campaign, 'Ville Unplugged, encourages faculty, staff and students to conserve energy through simple steps like shutting off computers when not in use.

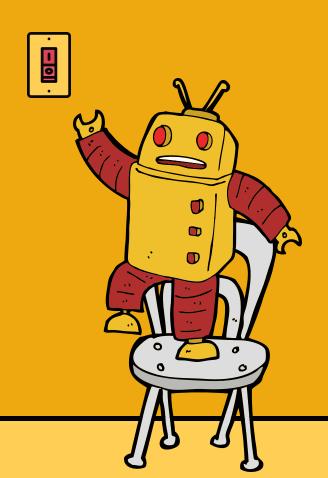




Someday EVERYTHING will be AUTOMATED.

For now, before you leave the classroom please:

- Shut off the lights
- Shut off the projector
- Close open windows



Where possible, I think using natural light during class would be especially lovely.



OCTOBER IS GREEN COMMUTE MONTH

Help MU Keep the Green Commute Title

Throughout October, our partner, Commuter Services of Pennsylvania, encourages faculty, staff and students to switch from driving alone to trying a green commute. Last year, Millersville University was the top-performing university, earning champion status. Help us retain the title and earn rewards by walking, biking, taking the bus, or carpooling to campus. Promote your trips on social media. Stay tuned for more information on 'Ville Daily.



Interested in carpooling, but don't have a carpool partner?

Click here to check out Commuter Services of Pennsylvania's ridematch service. https://pacommuterservices.org/carpool/

Electric Vehicle Charging Stations



The community of electric vehicle drivers on campus is growing and the number of electric vehicle charging stations is growing along with them. Millersville installed four electric vehicle charging stations several years ago in parking lots adjacent to the Francine McNairy Library and Stayer Hall. In response to an increased demand for electric vehicle charging stations, the Facilities Department will add two additional electric vehicle charging stations in the McComsey Lot. The charging stations are currently available for use free of charge.

As a courtesy to other EV drivers, please move your vehicle after it has charged.



Need a car, but don't have one on campus? Want to leave the car at home, but have access to all the fun downtown attractions? Zipcar has the answer. Zipcar is a campus carsharing service. Simply sign-up online and then rent a zipcar by the hour or day. Gas and insurance are included in the rental fee. To learn more check out Millersville's Zipcar website. A 30-day free trial membership is available through September 30th.

Check out Millersville's Zipcar website.





Chris Steuer Sustainability Manager

Do you have an idea for how to improve sustainability at Millersville, a story you would like to share or a tip for how you make Millersville sustainable?

If so, please contact Millersville's Sustainability Manager, Chris Steuer, (Chris.Steuer@millersville.edu) to be included in future editions of the sustainability newsletter.

