



KENT CAMPUS SUSTAINABILITY TOUR

Follow along as Melanie Knowles, manager of sustainability, shares some recent Earth-friendly initiatives on the Kent Campus.

BY JAN SENN



PHOTO BY BOB CHRISTY, BS '05

On a warm but windy April day, about 40 faculty and staff gather at the squirrel statue near the Kent State University Library for a noontime “Wellness Walk & Talk” tour organized by the Employee Wellness office and led this day by Melanie Knowles, Kent State’s manager of sustainability. We expect to get some exercise and learn about recent sustainability initiatives on the Kent Campus.

“A couple locations are going to require you to use your imagination, because some things don’t always happen on schedule and other things are inside buildings,” Knowles says, as she sets out at a brisk pace.

Providing Alternative Transportation



Heading past Risman Plaza along the Lefton Esplanade, Knowles points out a stand for eBikes and eScooters—although there’s only one bike left at this spot as the rest have been checked out. They are part of the Department of Recreational Services’ new partnership with SPIN, a leading micromobility company that operates dockless electric scooters and bikes on campuses and in cities across North America and Europe.

The program launched in March with 100 eBikes and 100 eScooters on the Kent Campus and within the city of Kent for use by students, faculty, staff and the community. The goal is to reduce traffic volume, connect riders to local businesses and reduce greenhouse gas emissions. The scooters and bikes provide a convenient way for users to get to class and run errands—and they’re a fun recreational activity for the community. Participants can download the SPIN app, view the safety videos and take a safety quiz to earn a \$5 ride credit and a free helmet.

“We’re always working to make the campus more bike friendly so people can get where they need to go without having to own or use a car all the time,” Knowles says. “I’m not taking anyone’s parking pass away, but we want to make it easy and convenient to use alternative transportation as much as possible.”

So far, one month after the launch, she says there have been “20,900 trips on bikes and scooters, more than 5,000 individual users, 23,545 miles traveled—and 75% of the checkouts are for the scooters.”

Charging Electric Vehicles



Kent State currently has five electric vehicle charging stations for electric cars and trucks on the Kent Campus, located in the parking lots of Harbort Hall, Heer Hall, the Center for Philanthropy and Alumni Engagement, the DI Hub and the Kent Student Center visitor lot.

“We received a grant from the Ohio Environmental Protection Agency to add six more charging stations, but thanks to COVID-19 and supply chain issues they don’t have the computer chips that go into the stations,” Knowles says. “The new charging stations are already roughed in, so we are hoping to have them in operation by the end of the calendar year. The new locations will be here [she points to a spot near Bowman Hall], behind the Liquid Crystal Institute and by the Center for the Performing Arts.”

Turning Food Waste Into Renewable Energy and Fertilizer



Knowles stops outside the DI Hub for another “use your imagination” talk. “One of the things we have at the DI Hub is the Grind2Energy system,” she says. “For years we’ve been looking at how to divert food waste on the Kent Campus away from the landfill. I’m not talking about unused food that can be eaten; if we can feed people, that is our first priority. I’m talking about kitchen scraps and leftovers from people’s plates.

“For the Grind2Energy system, all those food scraps go into bins,” she adds. “Throughout the day, staff members take the organic material in the bins to a processing table, which is basically an industrial size garbage disposal made by InSinkErator. It grinds up the food waste, mixes it with a little water and that slurry goes directly into a holding tank inside the building. It’s contained so there is no odor. When that tank is full, a liquid waste hauler from Quasar Energy Group transports the slurry to a local anaerobic digestion facility in Collinwood.”

Anaerobic digestion—a process in which bacteria break down organic matter in the absence of oxygen—creates two main products. One is natural gas that can be converted into electricity by a turbine or used for vehicle fueling stations—so the truck that picks up the waste is fueled by the waste. The other product is a nitrogen-rich fertilizer—so nutrients from the food waste restore nutrients in the soil to grow more food.

The Grind2Energy system recently was added to the Eastway Dining Facility through a grant from the Ohio Environmental Protection Agency. “Between these two facilities, so far we have diverted more than 80 tons of food waste from the landfill,” Knowles says. “That translates into reducing our carbon impact in a way that’s equivalent to 134,000 miles *not* driven in a vehicle and it produces 4.6 tons of fertilizer.”

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Connecting with Farmers



Before leaving the DI Hub, Knowles adds, “I will plug the Kent State Farmers’ Market that’s being held in the DI Hub this semester. You should definitely check it out.”

Kent State University has partnered with Haymaker Farmers’ Market to provide students with opportunities to learn about local farmers, select fresh produce and connect with the broader Kent community. In addition to food, the market includes crafts, educational workshops related to food, and performances (music, dance, theater).

Relocating Trees to Maintain the Tree Canopy



Pausing at the Crawford Hall construction site, Knowles acknowledges that the view has dramatically changed with the removal of Terrace Hall. “But don’t worry, 28 trees in that area were relocated around the campus,” she says. “Kent State has been designated a Tree Campus USA by the Arbor Day Foundation every year the designation has existed (since 2008). Our Tree Advisory Board, which includes people on campus and off, is always looking at how to maintain and expand our tree canopy.

“Moving trees is a big part of that because we don’t want to stop progress. But if you cut down a mature tree and plant a tiny tree, the canopy takes a big hit. So it’s important to us that we maintain the existing trees as much as we can.

“The company we work with, Busy Bee Services in Novelty, Ohio, uses a special tool called an air spade that uses high pressured air to remove soil from around the roots without damaging root tissue. That allows the tree to keep its tiny roots, which helps trees have more success when they’re transplanted elsewhere.”

Knowles heads behind Dunbar Hall to show the group two of the transplanted trees. “The one closest to me is an *Amur maackia*, which is a member of the pea family with showy white flowers for pollinators and appealing bronze bark that adds winter interest,” she says. “The one further away is a dawn redwood, a deciduous conifer that is part of a Planting Partnership memorial for a residential services staff member—and we take special care of the trees that are part of that program.”

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The Planting Partnership is a tree sponsorship program offered by University Facilities Management that gives donors the opportunity to dedicate a tree as a gift or memorial. They can choose from a wide variety of trees and ornamentals that have been selected according to guidelines of the Kent Campus Landscape Master Plan. A \$2,500 donation pays for the cost of purchasing, planting and maintaining the tree—as well as replacing it if it should die.

Aiming for Zero Waste



Stopping at Eastway Center, home of the other Grind2Energy system on campus, Knowles takes the opportunity to talk about Campus Race to Zero Waste, which used to be called Recyclemania. The competition, in partnership with the National Wildlife Foundation, is a tool to help colleges and universities across the United States and Canada advance campus recycling and waste reduction efforts.

“We just finished the competition, so I don’t have the results yet for this year, but last year Kent State won in two categories,” she says. “One was the ‘most electronics recycled’ category. This year we collected 33,904 pounds of electronics for recycling in 30 days. The other category we won last year is called a ‘zero waste’ category. It’s not the whole campus; we picked three buildings and measured all the waste coming from them to see which had the smallest waste per square foot. It was exciting to see Kent State recognized for the work we’re doing in those areas.”

Planning for the Future



Looping around Manchester Field and returning to where we started, Knowles says, “There’s always so much more to talk about than we have time for.” And she reminds the group that in January Kent State embarked on its first comprehensive campus sustainability plan. “There have been a couple opportunities for the general campus community to provide feedback, but there will be more,” she says. “So please keep an eye out; I’m trying to make sure they’re always in FlashLine Alerts. We also have a great advisory group of experts on campus contributing to that effort as well.

“Thanks again everyone for coming out and walking with me. Have a great day!” ⚡

Learn more about Kent State’s sustainability initiatives at www.kent.edu/sustainability/initiatives.

Learn about upcoming “Wellness Walk and Talk” tours at www.kent.edu/hr/wellness/current-wellness-offerings.