



# Accomplishments & Innovations



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## APPRENTICE

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Contemporary Art Museum St. Louis

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## GREEN CITIES

City of Alton, Illinois  
City of Brentwood, Missouri  
City of Clayton, Missouri  
City of Collinsville, Illinois

City of Edwardsville, Illinois  
Village of Glen Carbon, Illinois  
Village of Godfrey, Illinois  
City of Granite City, Illinois

City of Highland, Illinois  
City of Maplewood, Missouri  
City of Webster Groves, Missouri  
City of Wentzville, Missouri

## LEADER

CIC Property Management  
COCA  
ESCO Technologies  
Focal Pointe Outdoor Solutions, Inc.  
ICL Specialty Products  
Mallinckrodt Pharmaceuticals

Metro Transit/Bi-State Development  
MilliporeSigma  
Missouri Historical Society  
Pulitzer Arts Foundation  
Quiet Village Landscaping  
RES

RideFinders  
Roeslein and Associates  
Saint Louis Art Museum  
Saint Louis Science Center  
Shapiro Metals  
Trane Technologies

## CHAMPION

The Advertisers Printing Company  
Ameren Missouri  
AmeriCorps St. Louis  
Bayer  
Bethesda Health Group, Inc.  
Cortex Innovation Community  
Curium  
Graybar  
Hunter Engineering  
Madison County Building & Zoning  
Maritz

Missouri American Water  
Missouri Botanical Garden  
MRC – Midwest Recycling Center  
MTM, Inc.  
Office Essentials  
Safety National  
St. Louis Cardinals  
St. Louis CITY SC  
Saint Louis Zoo  
StraightUp Solar



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## 2023 ST. LOUIS GREEN BUSINESS CHALLENGE

The 2023 St. Louis Green Business Challenge, a program of the Missouri Botanical Garden, delivers Triple Bottom Line results (fiscal, social and environmental) to businesses of all types and sizes across the St. Louis region. The Challenge supports integration of sustainability measures into the kinds of everyday operational practices common to every business. Participants identify and adopt strategies that improve financial performance and engage employees in voluntary measures to reduce environmental impacts.

Since the program launched in 2010, 270 businesses, non-profits and municipalities have joined the Challenge. This participation has engaged over 160,000 employees and nearly 570,000 residents for a total of over 730,000 individuals influenced by this work. Ongoing sustainability commitment is strong: 60% of these companies have participated in the challenge for two or more years, 50% for three years or more.



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## CHALLENGE 2023 BY THE NUMBERS

56 companies, non-profits, institutions, and governments participated the Challenge.

- 100% of participants have formed a **Green Team** to lead sustainability efforts
- 100% have established or are developing **Sustainability Policies**
- 100% kept up or started **Workplace Recycling**, even during remote working
- 100% kept up **Sustainability Communications** with colleagues or constituents
- 99% continued or added to **Special Waste Stream Recycling**
- 98% provided **Green Learning** opportunities or **Green-At-Home** resources
- 95% continued or implemented **Sustainable Purchasing**
- 87% promoted **Nature Connections**, including use of **Native Landscaping**
- 85% supported **Environmental Action**, contributing service, goods, or cash
- 82% participated in two or more **Challenge Events**
- 75% continued or increased **Tracking and Reporting** of resource usage
- 75% actively promoted workplace or personal/community **Wellness**
- 74% are **Doing Business** with another Challenge participant
- 73% promoted or actively supported **Green Transportation** options
- 59% experienced a **Business Advantage** from sustainability engagement
- 48% achieved or renewed **Green Certifications** for buildings or operations
- 23% continued to have a significant number of employees **Working Remotely**

## ABOUT THE CHALLENGE

The St. Louis Green Business Challenge, a program of the Missouri Botanical Garden, assists companies in integrating sustainable measures into daily operations. Originally a partnership with the St. Louis Regional Chamber, the Challenge leveraged Chamber business connections and Garden sustainability expertise to launch and grow a network of companies committed to green policy and practice.

Now in its 14th year, Challenge activity influences the business, higher education, local government, and non-profit sectors of the St. Louis regional economy. The program works for building owners and tenants, supporting companies new to sustainability concepts, those already engaged and seeking to improve, and high-performing multi-year participants.

Challenge companies benefit from customized coaching, including annual site visits, provided by expert staff of the EarthWays Center, the Garden's sustainability division. Services support company Green Teams in efficient and cost-effective sustainability work, through policies and practices, in accord with each company's unique goals and culture.

Events facilitate Green Teams sharing problem-solving processes and best practice outcomes. The Challenge website archives examples of sustainability policies, surveys, reports, and more, shared by participants. Peer learning and B-to-B connection advantages flourish in this network of sustainability leaders, representing a wide range of professional specializations.

## 2023 SPECIAL FEATURES

In-person events resumed! **Cortex Innovation Community** hosted a **Green Biz Showcase** to kickoff 2023 Challenge activity, at the **CIC Venture Café**. Over 250 attendees explored sustainable product and service offerings of seventeen Challenge companies. Full rooms learned *Top Tips for a Successful Green Team* from staff of Cortex, **Saint Louis Art Museum** and **Saint Louis Zoo**, and cheered for **St. Louis CITY SC** being *Green from the Kickoff*, led by Joe Abernathy, Stadium Operations VP and Green Giant in the sports industry.

**RES** sponsored and **Pulitzer Arts Foundation** hosted a **Biodiversity Happy Hour**. We toured RES-engineered and maintained rain gardens, where native plants are uplifting the urban environs of historic Central Baptist Church. Artist and landscape designer Chris Carl, whose **Studio Land Arts** is based in **Granite City**, interpreted Park-Like, the vibrant native plant and rainscaping garden he has created for Pulitzer's mid-town campus.

The super-automated Material Recovery Facility operated by **Republic Services** welcomed Challenge leaders to learn first-hand what *Recycle Responsibly* means for regional recycling system success.

Touring **CITYPARK Behind the Scenes**, Challenge leaders and friends hiked through public and working areas, where Zero Waste strategy is evolving in play as a core value in our new MLS stadium and **St. Louis CITY SC** organization. Thanks to Joe Abernathy and the CITYPARK Green Team for sustainable Happy Hour hospitality.



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## GREEN BUSINESS CHALLENGE LEVELS

**Challenge Apprentice** companies choose action items from a menu of basic sustainability policies and practices to start the process of greening business operations. Apprentice participants meet twice, for a Sustainability 101 training and a report-out seminar, to learn from peers' experience and achievements.

**Green Cities Challenge** participants address sustainability within the range of operational requirements unique to local governments. Participating municipalities incorporated sustainability policy and practice fundamentals, including addressing measures defined by OneSTL, the regional plan for sustainable development.

**Challenge Leader** participants work with a categorized, point-based Scorecard enumerating a range of fundamental sustainability measures for business operations. Scorecards guide choices for Green Team leadership in their company's process of making sustainability work. Each company competes with itself to improve their score over the program year, and through multi-year participation.

**Challenge Champion** participants have the option to develop and report on an Innovation Project that takes on exemplary performance with internal greening measures or is focused in public or client-facing work. A Champion scorecard expands on the operational greening opportunities comprising work at the Leader level.

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## THE CHALLENGE SCORECARD—A ROAD MAP OF STRATEGIES

Challenge scorecards detail a comprehensive range of sustainability options that address the kinds of operations common to every business. Each company earns points by acting on their selected strategies. Challenge participants can choose to:

- Conduct **outreach** by expanding the culture of sustainability within and outside the organization (green teams, purchasing policies, internal and customer/public communications, community partnerships).
- Conserve **energy** (energy efficiency in HVAC, equipment and lighting, renewable energy).
- Improve **indoor environmental quality** (air quality, green cleaning, workplace comfort).
- Reduce **waste** (recycling, paper reduction, food service, disposables).
- Conserve **water** (fixture conservation, stormwater management).
- Provide **clean transportation alternatives** (carpooling, bike-to-work, transit, travel).
- Promote **employee engagement**, through community service, Taking Green Home tips, and more.
- Educate to **Recycle Responsibly**, advancing regional waste minimization goals.
- Promote awareness and use of this region's **Building Energy Exchange** (BE-EX STL), to boost investment in building systems efficiencies, toward regional climate action goals.
- Advance investment in **biodiversity** on corporate, institutional and municipal lands, toward improving both ecological and human health and promoting the benefits of nature connections.

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## WINNING THE CHALLENGE

Challenge participants compete with themselves to boost sustainability performance. Through most of this program's years of service, scorecard tallies have generated point-based outcome honors for Leader and Champion participants. Pandemic constraints prompted a switch to equally recognizing the commitment, persistence, and

resourceful action of all participants. As we piloted use in 2023 of an online scoring platform provided through a grant from U.S. EPA, checklists provided guidance to Green Team planning and action, but not scores. This year, with an impressive array of outcomes reported, the Challenge once again equally honors all work.

## ABOUT THE AWARDS

The 2023 St. Louis Green Business Challenge awards are designed by Stan Gellman Graphic Design and include an illustration created by Jeffrey Johnson of Red Herring Illustration.

This year's awards add to a build-your-own Green Business District concept presented in 2022. They are printed on a cost-effective, high-quality white corrugated cardboard made with primarily recycled content, that is recyclable. The press uses odorless, water-based inks in a single pass to produce high-definition images with zero UV-reactive chemicals and produces zero hazardous air pollutants.

Previous years' designs incorporated sustainably produced bamboo, reclaimed aluminum printing plates, and recycled cork tiles.



We are proud that SGGD was recognized in 2011, 2014, 2017, 2020, and 2022 from Graphic Design USA for their Challenge award design work. The 2022 award design also received 2023 Grand Winner Recognition in MerComm's Galaxy Awards.

## 2023 COLLABORATIVE INNOVATIONS

Supported by the **Missouri Department of Conservation** and the **Mysun Charitable Foundation**, a new **Green Communities Workforce Training** graduated a cohort of eleven individuals. Core curriculum for this training was **Roots of Success**, the enviro-literacy and green jobs training program introduced to St. Louis by the Challenge. Scholars met municipal and green industry employers in a graduation day Job Fair. Coordinating agency **Employment Connection** is planning trainings for 2024.



The **Green Biz Briefings Sustainability Leadership Luncheon Series**, a pre-pandemic Challenge feature, returned to spotlight work at **Edward Jones** and host company **Bunge** to integrate corporate sustainability policy and practice with the **U.N. Sustainable Development Goals**.

In a joint program from **Missouri Gateway Green Building Council** and the Challenge, sustainability leaders from **Edward Jones**, **Graystar**, and **ESCO Technologies** presented about work at the nexus of **ESG reporting** and **LEED** in building operations.

Green Team leaders from the **St. Louis Zoo-Museum District** continued active collaboration, including presenting for a second year five editions of the **Green Living Festival**. These events showcased sustainable living options for over 27,200 guests, in audiences unique to **Missouri Botanical Garden**, **Missouri History Museum**, the **Saint Louis Zoo**, **Saint Louis Science Center**, and **Saint Louis Art Museum**. Festive, functional, and fun!





*The Green Business Challenge gives us a forum to talk about the 20-year environmental journey at The Advertisers Printing Company. More importantly, the Challenge supports our region's businesses to gather and bond around common environmental goals of making life better for all members of our community. Committing to a cleaner and greener region is ultimately a shared value as well as a goal.*

John Heaney  
SVP, Sustainability Director



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## CHAMPION INNOVATION PROJECT

### *Addition by Subtraction: Replacing and Updating Legacy Hardware*

#### Measurable Elements

- Purchase of a Javelin 8600NII plate-setter, for burning metal plates essential to the printing process, has reduced energy use by 60% over legacy technology. Throughput time to burn a plate is 30% faster than a legacy machine.
- New water bottle filling station, made in U.S. by Elkay, rapidly fills employees' reusable bottles; digital counter shows avoided use of over 3,600 single-use bottles since installation.
- Purchased a plug-in hybrid Ford Fusion for sales and deliveries. Vehicle runs the first 22 miles on battery power, averages 39–42 mpg. This in addition to five hybrids and one Electric Vehicle within our company fleet.
- Removed 1992 full size 2/color offset press, a pivotal purchase in the early nineties that had long lost its production advantage; ending use of this legacy machine gave a big uptick in energy savings and efficiency.



#### Qualitative Elements

- Producing a Sustainability video series, highlighting potentials from decreasing our print production footprint, to uphold our Sustainable Green Printer commitment to educating all of our stakeholders.
- Operational gains in speed and throughput translate to lower production times.
- Equipment efficiency supports producing more volume with the same number of employees; less overtime is needed.
- A happier and more satisfying working environment decreases absenteeism.
- Recruitment is easier as current employees recommend new hires.
- More innovation reduces overtime, increases quality of life for our team members.
- Innovation ultimately gives everyone a feeling of achievement and confidence that we're doing things more responsibly in terms of the environment.





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## CHAMPION INNOVATION PROJECT

*Powering a Smart, Sustainable Tomorrow*

### Measurable Elements

- Incentivized 16 businesses to invest within Missouri via Ameren Missouri’s Smart Energy Plan, bringing more than \$450 million in capital investment and creating nearly 1,000 new Missouri jobs.
- Installed solar panels at Delmar DivINe, the City of Maryland Heights, and at Ameren Missouri’s North Metro Operating Center. Part of the Neighborhood Solar Program, the solar canopies provide renewable energy, shaded parking, and educational opportunities.
- Helped save over 20 million kWh in schools in 2022. For one project, a 100-year-old St. Charles School District building improved their ENERGY STAR Rating of 15 to 61, resulting in ~ \$90,000 annual energy savings.
- Supported over 140 social service organizations, including Urban League, through our Business Social Services Program, which redirects energy costs with energy efficiency assistance and has already paid ~ \$3 million in incentives.



### Qualitative Elements

- Supplier Workshop engaged with our suppliers on sustainable practices aligned with Ameren’s goals and targets. We annually ask our top suppliers to disclose sustainability-related strategy via a survey.
- Installed bioretention ponds at our St. Louis Headquarters to support management of municipal stormwater in alignment with St. Louis Metropolitan Sewer District’s Project Clear.
- Chartered a Waste Minimization Program with the goal to set targets in select material streams. We solicited coworker input for circular waste reduction ideas and engaged a network of coworkers to execute applicable solutions.
- Hosted Ameren’s Community Voices Workshop, an annual platform facilitating dialogue with our communities on topics relevant to their needs. Our Community Voices Advisory Board meets quarterly and works to make progress on identified improvement areas.

## 2023 ST. LOUIS Green Business Challenge



*Everything we do at Ameren is centered around people and a passion for offering the best to our customers, communities, coworkers, and shareholders. This year, Ameren continued to take purposeful steps toward our goals including accelerating investments in long-term energy reliability as we lead the transition to a resilient, clean energy future.*

Gwen Mizell  
 Chief Sustainability, Diversity  
 and Philanthropy Officer



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**AmeriCorps  
St. Louis**

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## 2023 ST. LOUIS Green Business Challenge



*This year, AmeriCorps St. Louis built on past Green Business Challenge accomplishments. Continuing our mission to strengthen communities and improve the environment, we introduced new initiatives and partnerships that expanded impacts beyond our operations. While we remain committed to environmental stewardship, the Challenge encouraged us to be creative about how we can implement sustainability elements throughout the organization.*

Tim Elwell  
Development Manager



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## Accomplishments

- Treesilience, a national initiative to grow healthy tree canopies and promote urban forestry workforce development in communities where trees may



be lacking or dying, is administered by The Nature Conservancy with the U.S. Forest Service and Davey Tree Company. AmeriCorps St. Louis assisted by felling hazardous ash trees at a variety of city parks.

- Recipient of a grant from Wild Ones St. Louis Chapter, providing guidance to establish a native plant garden at AmeriCorps St. Louis. Now an officially registered native space!



- Established a partnership with Enterprise Fleet Management to update our trucks to newer, more efficient vehicles. We were able to add six new Chevrolet trucks that will cut in half our average cost per mile.



## Innovations

- Introduced an educational Green Series for our Members to learn more about sustainability. With site visits and presentations from MOBOT (sustainable facilities), New Earth Farm (composting) and Republic Services (recycling), we introduced new topics.
- Invited to participate in a new project called the Life Cycle Evaluation Climate Change Bundle. This project seeks to better understand AmeriCorps programs explicit connection to climate change. We were one of four programs chosen to host a site visit, for field and member data to contribute to Climate Change programming at AmeriCorps at the federal level.





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## Accomplishments

- Replaced equipment throughout the campus to continue increasing energy efficiency.
  - › LED lighting installed in growth chambers.
  - › Replaced dock doors with insulated doors.
  - › Added control scheme to site compressors.
  - › Electric vehicle charging stations installed.
- Recertifying the Creve Coeur campus through Wildlife Habitat Council.
- Hosted Operation Clean Stream event with approximately 50 Bayer volunteers.
- Hosted Earth Day vendor fair at both Chesterfield and Creve Coeur campuses.



## Innovations

- Innovative efforts to improve our wildlife habitat area include:
  - › Prairie burn planned to reduce invasive species and to promote native growth.
  - › iTrack Habitat rollout to streamline volunteer observations for birdbox nest monitoring.
- Landscape irrigation smart sensors installed to reduce water usage at Chesterfield campus.



**2023 ST. LOUIS**  
Green Business Challenge



*Sustainability is a part of Bayer's corporate strategy, and we are committed to reducing the environmental impacts of our sites. At Bayer St. Louis sites, we continue to emphasize waste minimization efforts to decrease our environmental footprint, as we work to conserve energy and water, and maintain habitats for native species to flourish.*

Anna Tang  
 Sr. Manager NA HSE  
 Facility & Lab Operations –  
 Environmental, Sustainability  
 and HSE Management  
 Systems



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## 2023 ST. LOUIS

Green Business Challenge



*In 2023, the Bethesda facilities team focused on continuing energy-efficiency upgrades. This effort included installation of more than 30 new energy-efficient HVAC units, including four roof-top units; high-efficiency window replacements, and LED lighting in our parking lots and new offices. I continue to be very proud that our entire organization has embraced the need for prioritizing energy efficient practices, and that we have continued to implement this strategy so effectively that Bethesda was featured in the July 27, 2023, edition of Clean Air Chronicles.*

Joseph Brinker  
President and CEO

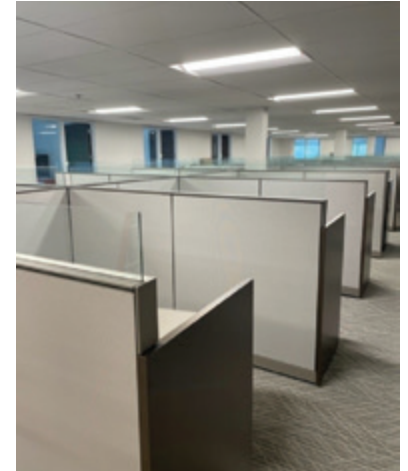


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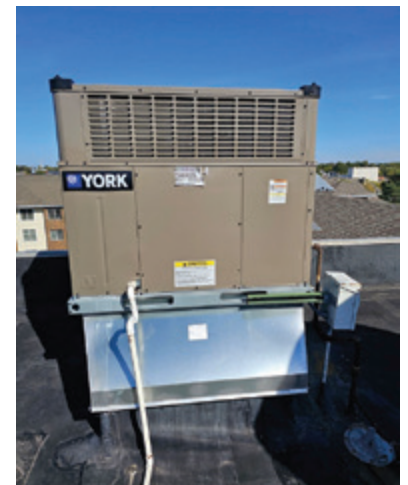
## Accomplishments

- With the move of our Corporate Offices, we upgraded our BETHESDA sign to LED and installed all LED lighting throughout the suite.
- Upgraded parking lot lighting at our Meadow and Village North facilities to LED.
- All windows at our Orchard facility have been replaced with high efficiency windows.
- Completed conversion of the gas fireplaces to be electric fireplaces at our Hawthorne Place facility.
- Replaced in excess of 30 HVAC units throughout Bethesda facilities with more energy efficient units that use more environmentally sustainable coolant, aligned with replacement schedules.



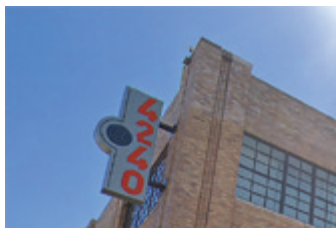
## Innovations

- Continuing to upgrade appliances with ENERGY STAR models as they are replaced or renovated.
- Continued LED lighting upgrades in apartments while completing renovations, to be more energy efficient throughout all buildings.
- Continuing to expand building automation systems to increase energy efficiency.
- At our Gardens facility, replaced two 2-ton and two 4-ton rooftop units for the hallways, to be energy efficient.
- As windows need to be replaced, they are updated with more energy efficient windows throughout all of our facilities.



## Accomplishments

- Assembled the first Green Team across a multiple tenant structure for both 4240 and 4220 Duncan.
- Hosted eight Wellness Lunch n’ Learns.
- Enacted a tech recycling program for the buildings, with the kickoff being the tech recycle drive hosted by the Cortex District team.
- Enacted a battery recycling program. We have recycled over 300 pounds of batteries!



## Innovations

- CIC’s Venture Café hosted a Green Biz Showcase to kick off the 2023 Green Business Challenge.
  - › Over 250 attendees learned about sustainable products and services offered by 17 Challenge companies who tabled for this event.
  - › Panel sharing *Tips for Leading a Dynamic Green Team* featured sustainability leaders from Cortex Innovation District, Saint Louis Art Museum and Saint Louis Zoo.
  - › Special guest Joe Abernathy presented *St. Louis CITY SC: Green from the Kickoff!*



## 2023 ST. LOUIS Green Business Challenge



*2023 was just the beginning. This year gave us a great look into where we are currently and helped us target ways we hope to improve our buildings moving forward. We are looking to grow the team and the program’s participation in 2024.*

Kahley Amiot



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*The City of Brentwood remains committed to ensuring a sustainable and vibrant community future. Elected officials, staff and the Sustainability Commission continue to work toward making the City of Brentwood a community that promotes the responsible use and conservation of energy and natural resources. This will benefit social and economic well-being for the sake of current and future generations. As a Green Cities Challenge participant, we strive to keep learning and incorporating sustainable practices whenever possible.*

David Dimmitt  
 Mayor



is a program of:



## Accomplishments

- Adopted Brentwood's first Sustainability Plan.
- Completed Brentwood Bound, a major flood mitigation project that restored the floodplain along Brentwood's section of Deer Creek, adding trails and greenspaces linking multiple parks in the process.
- Approved a Memorandum of Understanding with the Missouri Botanical Garden to start design of an Urban Wetland.
- Began Master Plan process for Parks & Recreation Department, which will incorporate sustainable recommendations and practices.
- Approved a "No Mow April" campaign for Spring 2024, supporting bees and early season pollinators with access to nutrient-rich wildflowers.
- Revised composting regulations to be consistent with U.S. EPA guidance.
- Planted 72 trees to strengthen the City of Brentwood's urban forest.



## Innovations

- Broke ground for Brentwood Park Destination Playground, which includes a Water Capture System to reuse over 4,000,000 gallons of water from the playground splash pads for park irrigation.
- Began working with Ameren to complete a Fleet Electrification evaluation plan.
- Purchased an electric mower and an electric gator for Parks & Recreation Department.
- Revised the City of Brentwood Municipal Code, restricting lighting Corrected Color Temperature to 2700K.
- Coordinated application of modified aggregate sealant work on residential streets to extend the useful life of the asphalt and reduce the need for mill and overlay work.
- Continued the city-wide residential composting program, distributing composting equipment and encouraging residents to compost at home.



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## Accomplishments

- Completing final phase of a Street & Parks Tree Inventory update to implement BMPs for city trees.
- Continued commitment to community forestry with our 31st consecutive Tree City USA designation and 11th Growth Award.
- Continued commitment to recycling items at the end of their useful life. Chairs and loungers from Shaw Park Aquatic Center had all plastic straps removed and aluminum frames recycled.
- Staff annually collects and stores seeds from native areas over the winter via cold stratification. The seeds are redistributed in spring in gardens and native prairie areas to help establish more habitat for pollinators.
- Replaced approximately 90 CFL can light fixtures with LED lights throughout City Hall. This resulted in a 62% (10,212 kWh) energy savings per light. Utilized incentives from Ameren Missouri to offset the costs.



*Environmental sustainability is a priority for the City of Clayton, as demonstrated by our solar investments, recycling programs, and tree canopy cultivation. Next steps to reduce the city's carbon footprint include the start of citywide energy benchmarking for large buildings and a new master plan for parks and multi-modal transportation. We value the insights and recommendations of our Sustainability Commission and support from the Green Cities Challenge, as the City of Clayton continues to identify sustainability leadership options to yield strong returns for our community and the region.*

Michelle Harris  
 Mayor

## Innovations

- City of Clayton received a Bronze level designation from the national SolSmart program for encouraging growth of clean, affordable solar energy at the local level. Clayton has adopted nationally recognized best practices to advance solar market growth.
- Clayton Board of Aldermen adopted a resolution in support of the Lights Out Heartland campaign to raise awareness about migratory birds and impacts that lighting has on annual May and September migrations. Clayton City Hall is a Lights Out Heartland Building Partner facility.
- Sediment remaining from the Oak Knoll Pond renovation project was repurposed for a new landscaping project in Anderson Park, which recharged nutrients and organic matter for existing soil. All invasive bush honeysuckle removed from the park entrance area and streetscape was replaced with a majority of native shrub and tree species.



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**2023 ST. LOUIS**  
 Green Business Challenge



*The City of Collinsville is dedicated to being a leader in sustainability in the St. Louis Metro-East area. The Green Cities Challenge helps Collinsville staff to focus and unite our efforts, coordinate with other municipalities and partners, and drives communities on both sides of the river to push sustainable innovations even farther.*

Derek Jackson  
 City Manager



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**Accomplishments**

- Established a City Hall Garden Club.
- Established Parks and Recreation “Sustainability Series” programming branding campaign and expanded program offerings.
- Completed a two-year Sustainability Plan Progress Report Card.
- Planted over 137 trees throughout Willoughby Farm and other city park property with volunteers, teachers, and students.
- Expanded compost collection, processing methods, and expanded the use of compost in our parks and city properties.



**Innovations**

- Developed numerous areas in the parks with rain gardens, native restoration zones, and experimental urban forestry labs.
- Teamed up with Madison County Agriculture to teach 400 3rd grade students about food waste, composting, and soil nutrients.
- Teamed up with Table to Garden and local businesses to collect and compost over 300 pounds of food and paper waste.





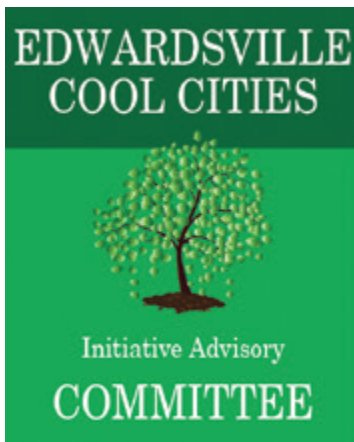
## Accomplishments

- Water refill station installed downtown.
- New city events promote Bike to Breakfast and composting.
- Composting available at Goshen Farmer's Market.
- Subscription composting drop-off locations at Meyer YMCA, Edwardsville High School, and Main Street Community Center.



## Innovations

- Edwardsville is first Pollinator Pathway Community in Illinois.
- Passed sales tax to purchase greenspace and support pensions.
- Heartlands Conservancy purchased 70 acres of Poag Sand Prairie to protect the chorus frogs.



## 2023 ST. LOUIS Green Business Challenge



*The City of Edwardsville Cool Cities Committee stays informed on events and activities around our community to motivate and ensure support for eco-friendly practices.*

Kristen Pauli  
 Secretary, Cool Cities Committee



is a program of:





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 Population: 13,842  
 www.glencarbonil.gov



*The Green Cities Challenge has provided our community with a continued focus on enhancing the environment and quality of life for residents of Glen Carbon. We are grateful to the organizers and co-participants in the Challenge for providing resources to help Glen Carbon maintain an emphasis on benefiting the overall environment of our community—and our world.*

Jamie Bowden  
 Village Administrator



## Accomplishments

- Mayor Marcus's Tree Giveaway—2nd annual.
- Annual Arbor Day ceremony.
- Prairie restoration at Green Space East.
- First phase of Village's Master Trail and Park Plan.
- Submitting an application for Tree City USA designation.



## Innovations

- Re-drafting and approving Landscape Ordinance specifying green space requirements and allowable tree species.
- Pursuing an Energy Master Plan to assess Village buildings and operations.
- Finishing final phase converting the Village campus to energy efficient lighting.



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## Accomplishments

- Shred-It event provided secure document destruction and recycling for Godfrey residents.
- Regional Electronic Recycling event co-hosted by Village of Godfrey and Lewis and Clark Community College.
- Sustainability Commission coordinates Adopt-A-Highway litter clean-up initiatives.
- Godfrey Parks Arbor Day Festival included native plant giveaway and education.



## Innovations

- Invasive species education program kicked off by Green Jean Ponzi talk *Invasive? Native? Exotic? an Eco-Logical View of Plants*.
- Illinois Forestry Development Grant awarded to educate residents and municipal workers about invasive plant identification and management.
- Widman Trail Extension is a native plant project template for Village staff to reference in planning new trail construction.



*Our commitment to the Green Cities Challenge is a reminder that sustainable solutions not only improve the economic bottom-line, but also help create a healthier more inclusive community.*

Chris Logan  
 Director, Parks and Recreation



is a program of:





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 Population: 27,481  
 www.granitecity.illinois.gov

## 2023 ST. LOUIS Green Business Challenge



*It's great to see that the changes we're making in Granite City are helping to build back a better community and a better environment for future generations. We are moving Granite City forward towards a more sustainable future while implementing our city's Sustainability Plan. We feel very proud and fortunate that Granite City is part of the Green Cities Challenge.*

Mike Parkinson  
Mayor



is a program of:



## Accomplishments

- Granite City completed a Bicycle and Pedestrian Master Plan with the objectives to connect the Madison County Transit (MCT) Nature Trail with the MCT Confluence Trail and to continue to improve walkability in the city. Trail connections will help Granite City and surrounding communities.
- Added a new sidewalk at Grigsby School using funds from the Illinois Safe Routes to School grant, making it easier for students to walk and bike to school.
- Continued to participate in Carbon+ Credits Program operated by Trees Forever. The goal is to plant 500 trees; to date approximately 380 trees have been planted.
- Tree City USA application is in progress. Tree Ordinance is being updated and composition of the Tree Board is being determined. Granite City required a business to plant trees as part of their parking lot upgrade.



## Innovations

- Two information sessions were held to educate people about the Illinois Solar For All program.
- A community solar farm is being built in Granite City as part of the Illinois Solar For All program. The community solar farm will benefit income eligible residents.





## Accomplishments

- Replacing all street lights with LED fixtures.
- Utilized multiple tons of wood chips from tree trimmings for trail and various landscaped areas in Silver Lake Park.
- Kicked off a Farmer's Market for organic vegetables and local, natural products.
- Named as a Tree City for 32 consecutive years.
- Upgrading city software to reduce paper and staff time entering information. Streamlining processes for citizens.



## Innovations

- Utilized grants to upgrade LED lighting in city buildings.
- Partnered with school students and scout troops to perform park clean-up projects.
- Partnered with volunteers to redirect the Silver Lake Nature Trail and install water-bars to reduce sediment entering Silver Lake.
- Installed permeable pavers in a new public parking lot.
- Released approximately 1,700 largemouth bass into Silver Lake from a fish brooding pond that doubles as a retention basin.



## 2023 ST. LOUIS Green Business Challenge



*The City of Highland continues to pursue methods to incorporate Green initiatives, utilizing natural resources and technology to do so.*

Mark Rosen  
Director of Parks & Recreation



is a program of:





Charlie Moody | Housing Inspector, Sustainability Commission Liaison  
 c-moody@cityofmaplewood.com | 314-646-3615  
 7601 Manchester Road, Maplewood MO 63143  
 1.59 mi<sup>2</sup>  
 www.cityofmaplewood.com



*I am honored to bring greetings as the Chairman of the Maplewood Sustainability Commission. For the Commission, as I hope for each of you, sustainability is not merely an aspiration but a way of life that we are collectively embracing and encouraging. In Maplewood, we are committed to weaving sustainability into the very fabric of our community.*

Stefan Denson  
 Chair, Maplewood  
 Sustainability Commission



is a program of:



## Accomplishments

- Installed three new bottle refilling water fountains in city parks.
- Educated residents about recycling on social media, the city's website, and through resident newsletters. Distributed "Recycle Responsibly – Stick with the 6" stickers at City Hall for residents.
- Received a grant to replace lights at City Hall with new LED lights.
- Replaced several streetlights with LEDs.



## Innovations

- Hosted document shredding and electronics recycling drive, in partnership with St. Louis County and City of Richmond Heights.
- Maplewood Public Works planted over 76 trees.
- The Sustainability Commission completed a feasibility study on installing residential solar street lighting.
- Amended composting ordinance to ensure standard composting procedures are up-to-date and that the ordinance addresses all aspects of composting.





Shawn Finnegan | Sustainability Coordinator  
 finnegans@webstergrovesmo.gov | 314-963-5327  
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 Population: 22,995  
 www.webstergrovesmo.gov

## Accomplishments

- Hired a Sustainability Coordinator, through grant from St. Louis-Jefferson Solid Waste District.
- Procured two EVs for the Police Department.
- Installed two EV charging stations, available for public use.
- Installed new LED lights in the Ice Rink.
- Planted 525 trees in city parks and 40 trees in public right of way areas in 2023 alone.
- Began process of benchmarking greenhouse gas emissions utilizing the ClearPath platform.
- In Old Webster Business District, installed hanging baskets with built-in water reservoirs, reducing water usage.



## Innovations

- “No Mow April” residential initiative to protect pollinators exceeded expectations.
- Created an eco-education lecture series, featuring nine local expert talks throughout 2023.
- “Leave the Leaves” residential initiative launched in autumn to support soil health and protect pollinators.
- Amended code to allow solar panels on the front, street side of homes in each of our residential historic districts.
- Passed resolution to disburse rebates to residents who install solar panels on homes for 2024 fiscal year (July 2023–June 2024).
- Joined first cadre of St. Louis area sites in Ripple Glass recycling drop-off program, supporting local end-use as well as collection of recycled glass.



## 2023 ST. LOUIS Green Business Challenge



*The City of Webster Groves is actively pursuing practices and programs that support our community’s environmental health and has even adopted “sustainability” as an important tenet of our city’s Strategic Plan. I’m delighted to have the Green Cities Challenge as a space to discuss, learn and share insights with our region’s neighbors. The resources and support provided by the organizers and co-participants in the Challenge are invaluable to helping Webster Groves be a sustainable and thriving community for years to come.*

Laura Arnold  
Mayor



is a program of:





*The City of Wentzville builds on its commitment to responsible stewardship of natural resources with initiatives like the expansion of the Wentzville Sustainability Partners Program, low-waste employee luncheons and a new Fall Litter Cleanup. By uniting staff, residents, business stakeholders, and government partners, we collectively demonstrate innovations in sustainability, support sharing valuable insights, and drive change. These types of engagement strategies make Wentzville a true sustainability catalyst for the region.*

Jamie Paige  
 Stormwater Manager



is a program of:



## Accomplishments

- Expanded Wentzville Sustainability Partners to include homeowner associations in addition to local businesses. This program promotes green practices and encourages a communitywide approach to sustainability.
- Expanding from one low-waste luncheon a year, the Wentzville employee committee is committed to working with the City Green Team to bring this practice to other lunches in 2024.
- An interdepartmental litter strategy has fostered a community approach to litter control. City staff, volunteers and local businesses are building a network to target this pollutant.
- Partnered with Missouri Stream Team to bring stormwater employees from local municipalities and counties together for training on stream water quality data collection. This model will be used across the state!



## Innovations

- Planning and Zoning Division introduced to Board of Aldermen an update to existing code that would require all new non-residential buildings within the city's primary commercial corridor to provide pedestrian sidewalk connectivity and a bike rack.
- Stormwater Division restarted a program that brings students to Peruque Creek to collect water quality data. This year, 450 students participated. We're producing an educational video series depicting how water is treated at the Wentzville's Water Reclamation Center, while highlighting these careers and their environmental impact.



- Introduced a landscaping amendment draft to Planning and Zoning Commission for review. This amendment includes a biodiversity standard and a preferred tree list, emphasizing native trees.





## Accomplishments

- Formed a Green Team.
- No-Smoking Policy for indoor working areas; designated outdoor area.
- Recycling cardboard, cans, paper, bottles in working areas.
- Energy efficiency updates include 95% LED lighting in all buildings, informed by lighting audit and supported by Ameren rebate.
- HVAC updates have 7 of 14 units at 17 SEER or higher.
- Working with local service providers to recover special waste streams: metals, Wallach Metals; pallets, Pallet Sales and Recycling; used oil, Crystal Clean.



## Innovations

- Participated in Pollution Prevention Training, awaiting professional assessment of manufacturing facility efficiencies and associated possible cost savings.
- Installed a water bottle filling station.
- Integrating recycling tips and context from learning at Challenge events.

## 2023 ST. LOUIS

Green Business Challenge



*The CK Power Family of Companies provides products and services to a wide variety of industries. We take seriously the responsibility to help protect the environment for our current and future generations. As a family-owned company, everything we do centers around our people. We take pride in our family culture and support our employees to protect the environment through education and our recycling programs.*

Dewey Barsaloux  
Facilities Manager



is a program of:





Contemporary Art  
Museum St. Louis

Sarah Palermo | Director of Development  
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3750 Washington Boulevard, St. Louis, MO 63118  
Owner – 25,200 ft<sup>2</sup>  
www.camstl.org



*Our CAM Green Team has brought together representatives from multiple departments to achieve one goal: to make our establishment more sustainable, eco-friendly and localized in any way that we can. Our hope is that our efforts, joining with other institutions in the Green Business Challenge, will inspire more entities to do the same. Change is needed on a large scale, but it has to start somewhere. We hope that CAM's small spark can aid in igniting a mass effort to make things better for generations to come.*

Brandon Barr  
Teen and Adult Programs  
Manager

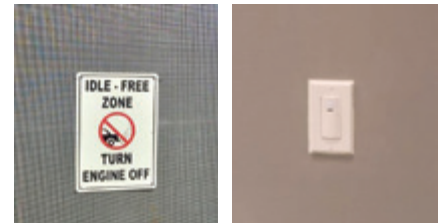


is a program of:



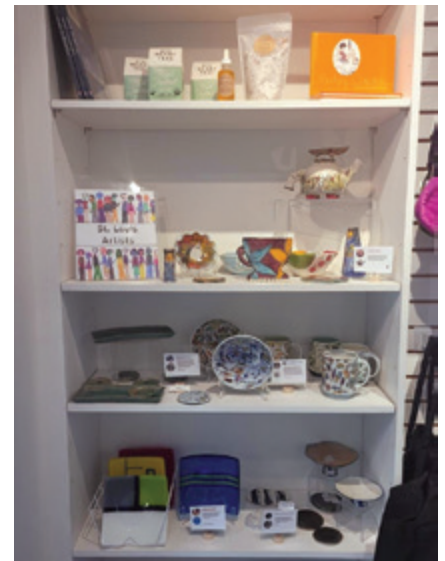
## Accomplishments

- Re-joined the Green Business Challenge with a re-formed Green Team, including three senior and three junior staff.
- Installed signs and distributed materials regarding sustainability education for the workplace and at home.
- Established a no-idling plan at our loading dock Including updated signs.
- Updated motion sensor light switches in public restrooms eliminate excess energy use.



## Innovations

- Working with a local vendor to take over Café operations in late 2023. The vendor brings to CAM their green purchasing and compostable single serving policy. CAM looks to implement a composting program in 2024 with this Café vendor.
- Frankenthaler Initiative partially funds necessary upgrades to CAM's HVAC system and window shades in the main galleries, to protect artwork on view from light and moisture, and reduce the museum's emissions.
- CAM completed a Green Purchasing Policy directing purchase of janitorial, cleaning and maintenance supplies from local green vendors.
- Updated signage around existing recycling receptacles throughout the building.
- Eliminated use of Styrofoam and single use plastic in the Café and for meetings and events; replaced disposables with glass, aluminum cans and refillable serving options.



## Accomplishments

- Developed sustainability website to support our Sustainability Action Plan and showcase various dashboards.
- Hosted a Tech Recycling Day that collected 1,200 pounds of material from 36 dropoffs.
- Working with Citizens of Modern Transit on a Try and Ride program.
- Subsidized cost and facilitated a centralized pick-up point for District members to easily and sustainably source local produce through Find Your Farmer.
- Completed ASHRAE LEVEL II assessment.
- Retro-commissioning Cortex-owned property for efficiency and Building Energy Performance Standard compliance.
- Cortex continues to streamline and outline District Sustainability Standards for development and construction.



## Innovations

- Completed a Landscape Architecture Foundation Study on the Cortex Commons with SWT Design and the University of Minnesota. Our native landscapes scored excellent on species diversity and pollinator diversity, with 52 native plant species and 24 insect species observed.
- Working with local sustainability consultants on projects for developers that correlate to reduced energy and emissions and take advantage of the IRA funding currently available.
- Cortex Clean-Up Day engaged people from neighboring businesses and District tenants, who cleared over 100 bags of trash from the neighborhood.
- Partnered with three restaurants and the St. Louis Green Dining Alliance toward facilitating a Cortex Green Dining District.
- Continued partnership with PocketParks, programming our undeveloped parcels into nature-rich community spaces.



## 2023 ST. LOUIS Green Business Challenge



*Launching the Cortex Sustainability Website has allowed the Cortex District to be more transparent in our findings within our Living Laboratory and, importantly, centralizes resources and information needed by our multiple community partners.*

Colleen Autry  
Vice President of District  
Operations



is a program of:





*The Challenge is helping the Curium community improve sustainability communication and values. The Curium Green Team seeks to give fellow employees a platform to exchange better practices and charity connections to support our sustainability program. As our team grows, we aim to reduce our carbon footprint and maintain a positive impact on our environment, community, and people. We are dedicated to seeking out new opportunities for our future.*

Tiffany Carr  
Environmental, Health, and  
Safety Specialist

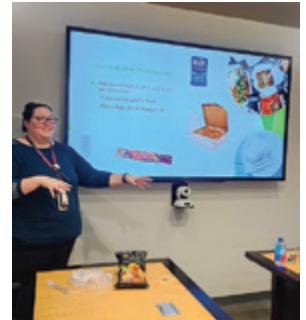


is a program of:



## Accomplishments

- Reinvigorated the Curium Green Team with members from multiple departments.
- A Recycling Class proposed ways to reduce our usage of non-recyclable materials.
- Providing Curium employees with reusable tumblers, in combination with water bottle filling stations, promotes reduction in single-use plastic water bottles and coffee cups.
- Increased visibility of site recycling locations while unifying our recycling signage.
- Installed LED lighting in R&D Lab.
- Building a philanthropic and waste reducing relationship with Lion's Club International to donate prescription glass, sunglasses, and safety glasses, along with used cell phones.



## Innovations

- Earth Week events included a Trash Bash of facility grounds, Spring Clean and planting in flower beds near employee break areas, and collaborating with our eWaste vendor.
- Hosted a lunch and learn on Biophilia by Missouri Botanical Garden's Jean Ponzi. This education inspired employees to pursue "living green" in our environment, including plants viable for our workspaces.
- Curium HR finalized a hybrid Work from Home policy, in collaboration with our Global ESG program, to reduce vehicle miles and energy consumption at our facility.





Justin Prien | Director of Environmental, Health & Safety  
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 Tenant – 21,500 ft<sup>2</sup>  
 www.escotechnologies.com

## Accomplishments

- Reduced carbon intensity from 20.0 to 18.3 MtCO<sub>2</sub>e per million dollars of revenues from 2021 to 2022.
- Participated in 2023 Operation Clean Stream at Castlewood State Park.
- Published our 2022 ESG report and began reporting Hazardous Waste Generation as part of our Environmental Footprint Metrics.
- Saved 7,649 bottles of water by using our water bottle filling stations.



## Innovations

- Implemented a K-Cup recycling program and recycled 79 pounds of used K-Cups.
- Created an internal SharePoint site for employees with information about ESCO's sustainability efforts, and information to help employees become more sustainable at work and at home.
- During this year's Earth Day we gave our employees native wildflowers, LED light bulbs and reusable cutlery sets, and shared the benefits of planting native plants, conserving energy with LED light bulbs and the benefits of moving away from disposable cutlery.



## 2023 ST. LOUIS Green Business Challenge



*Participating in the Challenge for the second year helped us find additional ways we can make ESCO and our employees more sustainable. We look forward to next year's Challenge to help us further reduce our environmental footprint and benefit the communities where we operate.*

Justin Prien  
 Director of Environmental,  
 Health & Safety



is a program of:





FOCAL POINTE

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Owner – 27,500 ft<sup>2</sup> | Tenant – 9,000 ft<sup>2</sup>  
www.yourfocalpointe.com

## 2023 ST. LOUIS Green Business Challenge



*The Green Business Challenge reflects my philosophy on sustainable success. Green initiatives aren't one-off shiny events to highlight for a moment. Rather, any sustainable, lasting progress is the result of repetitive, incremental improvements. For that reason, I'm very proud of the Focal Pointe team for humbly staying the course, not because of the recognition; because of the Purpose we have built within Focal Pointe. Our team aspires to help the world celebrate the harmony between people and nature, and I couldn't be more proud!*

John E. Munie  
President



is a program of:



## Accomplishments

- Installed 26,901 plants this year with 52% representing native plants of 123 different native species. Of these plants, 905 were bareroot reducing plastic pot and peat use by direct planting.
- Continued working with local growers to return a majority of our plastic pots for reuse, out of the landfill.
- Closed the loop on bulb crate waste by partnering for crate reuse with local bulb grower PHS Daffodils.
- Converted 159 irrigation clocks to Weathermatic smart controllers with an estimated 20% water savings for our St. Louis business clients.
- Collaborated with Washington Park Cemetery and Rite-A-Way Tree Service to do a honeysuckle hack and cleanup of cemetery grounds.
- Partnered with Forest Park Forever to assist in their annual invasive species removal day.



## Innovations

- Spearheaded a panel talk "Green Thinking for the Green Industry" at the 2023 statewide DIG Conference, hosted by Missouri Green Industry Alliance, including resources from the Challenge.
- Harvested first crop of in-house locally grown willow cuttings from our winter cutting garden, reducing material shipping costs and emissions.
- Purchased 10 stand-on fully electric Toro mowers to reduce emissions and noise pollution.

## CHAMPION INNOVATION PROJECT

*Forward Focus: Graybar & ESG*

### Measurable Elements

- Installed Leviton/Chargepoint Level 2 EV charger at St. Louis Centerpoint office, supported by Ameren rebate application.
- First fleet EV Silverado in service for St. Louis operations.
- Installed infrastructure for nine additional chargers to support employee EV commuting.
- EV fleet vehicle charger installations in progress at Los Angeles Distribution Center and Dallas Branch warehouse.
- New Cincinnati Service Center serves Ohio and Kentucky customers from 215,000 ft<sup>2</sup> warehouse, where two balers expedite recycling of cardboard, shrink wrap and other materials.
- Leading up to Graybar's 2023 National Training Conference, employees and suppliers nationwide raised more than \$138,000 to benefit Graybar Family Foundation through events and fundraisers.



### Qualitative Elements

- As an employee-owned company, we support colleagues in times of need. The Graybar Family Foundation is an independently run nonprofit providing confidential, immediate support to Graybar employees who face unexpected hardships for reasons beyond their control, such as natural disaster damage or a medical emergency.
- Launched marketing campaigns focused on commercial energy solutions, including a comprehensive website at <https://www.graybar.com/renewables> featuring renewables solutions.
- Our team of energy experts nationwide are trained on the latest solutions to help customers reduce the carbon footprint of their operations.
- Worked with NewGen to power the farms of California's Central Valley and protect against rising costs through clean energy solutions.

## 2023 ST. LOUIS Green Business Challenge



*For Graybar, the principles of sustainability mirror the long-term view we take of our business. Participating in the St. Louis Green Business Challenge has expanded our horizons and helped us apply that vision to our operations nationwide.*

Tom Twitty  
Senior Vice President –  
Supply Chain Management



is a program of:





While continuing to identify internal initiatives to improve our sustainability practices, 2023 represented a year where we also focused on highlighting the sustainability features of our manufactured products and the impact these have for our customers. We established a dedicated landing page on our website and included our comprehensive Sustainability Report available for download.

Chip Hiemenz  
 Vice President

## Accomplishments

- Established formal Sustainability Website featuring Hunter's Sustainability Report.
- Expanded sustainability impact to include products manufactured, which are now highlighted in Hunter's Sustainability Report.
- Established an EcoAisle Data Center enabling controlled cooling of equipment.

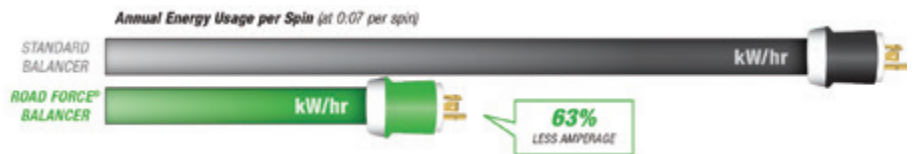


## Innovations

- Enrolled in Printleaf program resulting in 415 trees replanted.
- Transitioned to Gateway R-Spec trash liners resulting in overall 18% source reduction and 45% cost reduction compared to previous supplier.
- Transitioned to Buckeye Eco Proportioning Program for cleaning supplies resulting in 83% less plastic waste.
- Launched Virtualization Initiative in IT Department, reducing 350+ user PCs into a single virtual host and 600+ servers down to 16 virtual hosts. Resulted in estimated savings of five million kWh annually, a power consumption equivalent of 460 homes.



is a program of:







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 Owner – 827,640 ft<sup>2</sup>  
[www.icl-ip.com/business\\_units/st-louis/](http://www.icl-ip.com/business_units/st-louis/)

## Accomplishments

- Training of Green Team on proper recycling.
- Awareness Week recycling talks from Challenge staff inspired plant and R&D facility employees with guidance for proper recycling techniques, at home and on the job.



## Innovations

- Sending our unusable phosphate powder to compost instead of the landfill.
- Added water filtration systems to replace bottled water in our administration buildings.
- Plant upgrades use significantly less water than in previous years.



## 2023 ST. LOUIS Green Business Challenge



*At ICL we are challenged to think about progressive measures we can use to reduce our impact locally and globally. We are encouraged and supported to volunteer with events like Forest ReLEAF to plant seedlings or help with community gardens.*

Shana Lawson  
 ESHST Manager



is a program of:





*Environmental responsibility and conservation are core tenets at Madison County Building & Zoning. Every year we work to improve on past successes and implement new sustainability plans and actions. The Green Business Challenge continues to support our goals by providing the much-needed resources and networks for those successes. By providing education and collaboration opportunities, Madison County continues its tradition of strong communities and prosperity.*

Brandon Banks  
 Resource Management  
 Coordinator



is a program of:

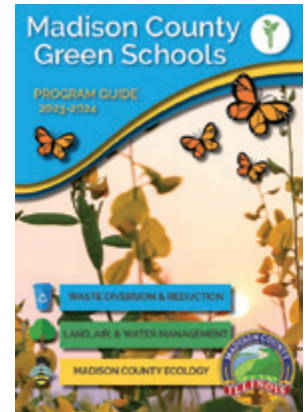


## CHAMPION INNOVATION PROJECT

### Education and Outreach Innovation

#### Measurable Elements

- Increased Green Schools participation by 26% from 41 schools to 54.
- Guidebook provides easy access to much-needed sustainability learning resources for students and teachers.
- Enhanced visibility for county collection events and opportunities to a significantly broader range of community members.
- Increased funding and stipends to educators by over 50%.



#### Qualitative Elements

- The guidebook provides excellent visual descriptions and ease of use for Green Schools Program access.



- QR codes and interactive links enhance usability for teachers and administrators.
- Builds strong communities and partnerships with schools and local government.



- Provides acknowledgment of the hard work that students and teachers do by recognizing them with both awards and appreciation.
- Guides students and teachers in their resource management and sustainability goals.
- Continued Green Cities Challenge sponsorship for seven Madison County municipalities.

## Accomplishments

- Green Teams, formed at all four sites across the St. Louis region, educated employees on topics such as ozone depletion, honeybees, recycling, and plastic pollution.
- Eliminated paper coffee cups (saving ~13,000 cups per year), replaced Keurigs with compostable pouch machines, and implemented washable utensils and plates in the cafeteria.
- Reviewed electronics recycling process, expanded toner cartridge recycling program, and ensured eco-friendly printer default settings.
- Performed a paper audit to identify opportunities for waste minimization and more sustainable options.
- Evaluated site recycling practices and toured recycling service center to inform waste reduction initiatives.
- Updated lighting settings to reflect hybrid working schedule and installed motion sensors on lights in some office areas.



## Innovations

- Decreased campus mowing by 320 hours annually, reducing emissions and promoting native habitat growth.
- Hosted an Earth Day event featuring Natalie Fee, an award-winning environmental advocate who spoke about reducing plastic consumption. Employees received tree saplings and information about native landscaping and rainscaping.
- Employee campus clean up collected more than 85 lbs. of trash.
- Volunteered with Forest Park Forever cleaning trails, and 4 A Greener Game at Busch Stadium collecting recyclables.
- Planted and harvested an employee-run vegetable garden.



## 2023 ST. LOUIS Green Business Challenge



*Participating in the St. Louis Green Business Challenge across our four St. Louis sites, we have gained invaluable insights into sustainable practices and discovered ways to reduce our environmental impact. Beyond the tangible benefits, this experience has united our St. Louis Mallinckrodt team in a shared commitment to sustainability. Learning that being green is not just about compliance; it's about continuous improvement and a genuine dedication to making a positive difference in the world. We are proud of the strides we made and look forward to sharing our learnings with other sites across the company.*

Gena Holthaus  
 Director, Sustainability and  
 Social Impact



is a program of:





*Caring for the environment, our people, and the communities we serve are essential to the way Maritz operates. We continue to invest in making sure that we live up to our reputation as responsible business leaders in the St. Louis region, on behalf of our people and our clients around the country and the globe. We continue to adjust and improve our business practices and the solutions we offer to be more environmentally friendly, working towards our goal of being Net Zero by 2050.*

Ben Goedegebuure  
 Chief Global Strategy Officer



is a program of:



## Accomplishments

- Partnered with MRC in May to host annual Electronics Recycling drive for Maritz employees and Fenton residents; diverted 19,397 pounds of electronics from landfills.
- Maritz IT Services' Cloud Next project migrated over 1,300 servers from our data center to a third party hosting provider that has a carbon-free energy factor of 97% and is certified as a Low CO<sup>2</sup> Data Center.
- After a four-year hiatus, the Maritz Green Vendor Fair and Showcase returned to campus in April, welcoming over 20 vendors and internal groups to demonstrate their sustainable products, innovations, and accomplishments.



## Innovations

- Maritz appointed Rachael Riggs as General Manager, Environmental Strategy to lead global sustainability initiatives to measure, manage and implement emissions reduction strategies across the organization.
- On June 27, Maritz committed to Science Based Target Initiative (SBTi).
- Along with our sustainability partner, Reduce 2, Maritz created and tested an Event Carbon Measurement Tool that provides clients with emissions measurement of their events. We piloted this in our own events for the past two years and recently completed two case studies with large clients including Toyota and Mastercard.



## Accomplishments

- Completed water savings projects including removing single-pass chilled water and installing cleaning sprayers and level sensors/controllers, resulting in over 13M gallons/year water savings.
- Completed HVAC, VFD, LED upgrades, resulting in over 1,100 MWh/year energy savings.
- Implemented food composting and reusable dishes in main cafeteria.
- Completed installation of EV charging stations at all locations: 38 total charging points.
- Matched 100% of our purchased electricity with renewable energy.



## Innovations

- Installed a spray-ball tank cleaning system that reduces water use by 87% each cleaning cycle, resulting in water savings of 1.9M gallons/year.
- Created a process cooling loop reusing pH pit water to replace once-through city water, resulting in water savings of more than 7M gallons of water/year.
- Diverted ALL general trash (over 850 metric tons annually) from landfill to a Waste to Energy facility.



## 2023 ST. LOUIS Green Business Challenge



*MilliporeSigma, the U.S. and Canada Life Science business of Merck KGaA, Darmstadt Germany, is highly committed to global sustainability. We focus our efforts on areas where we can have the greatest impact. In St. Louis, we continue to challenge ourselves to think greener, innovate, and upgrade processes and programs. Through this mindset, we've reduced water usage by 30% and landfill waste by over 50% over the past few years. We are incredibly proud of the progress and excited to make an even greater impact with our upcoming initiatives.*

Emily Becker, CSP  
 Head of Environmental,  
 Health, Safety & Security,  
 St. Louis Hub



is a program of:





*Our new partners in landscape maintenance not only reduced mowing costs at the wastewater facility by 50%, their work reduced site carbon emissions and helped us eliminate pesticides. Goats Gone Green are friendly environmentally—and in general!*

Dennis Mason  
Operations Manager

## CHAMPION INNOVATION PROJECT

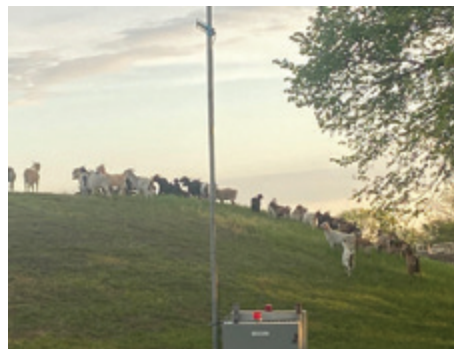
### Goats Gone Green

#### Measurable Elements

- Missouri American Water acquired the water and wastewater systems in Garden City, Missouri in 2021. The drinking water source includes two lakes totaling approximately 177 acres. The wastewater treatment is a lagoon on a 38.5-acre facility. The site occupies about 136.95 acres total.
- Goats Gone Green reduced 2023 mowing costs at the wastewater facility by 50%, yielding \$11,000 in savings.
- As landscaping partners, the goats reduced site carbon emissions and eliminated need for pesticide application.

#### Qualitative Elements

- Operations Manager Dennis Mason was investigating ways to lower the lawn maintenance cost around the wastewater lagoon when he was approached by local business owner Kyle Alvisa, whose Goats Gone Green enterprise offers an innovative, sustainable approach to lawn care.
- The goats are delivered to the area in need of mowing and kept within a moveable fence. Fencing is relocated every 1–2 weeks, enabling the goats to continue clearing sections of the property.
- Goats consume the weeds and brush due to the moisture content, but not the grass itself.



is a program of:



## CHAMPION INNOVATION PROJECT

*Expanded Sustainability Tracking and Greenhouse Gas Inventory*

### Measurable Elements

- Completed first baseline GHG inventory of the Garden’s St. Louis City main campus, covering emissions for 23 public and staff occupied buildings.
- Installed LED lighting upgrades to three buildings and three parking lots.
- As of July 2023, the 200 kWh solar array at the Jack C. Taylor Visitor Center has generated 102 MWh. This is on track with estimated annual production of 268 Megawatt Hours. This early success highlights our ongoing efforts to reduce electricity consumption and promote a greener environment through sustainable energy solutions.



- Installation of 10 electric vehicle charging stations has reduced approximately 84 tons of greenhouse gases.
- Expected annual average of 3,275 unique drivers will utilize the stations, highlighting the growing adoption of EVs and their positive environmental impact.



### Qualitative Elements

- Our first Sustainability Data Coordinator is supporting expanded use of ENERGY STAR Portfolio Manager and other reporting tools to more accurately track energy and water use and waste diversion.
- Now receiving monthly weights from Total Organics Recycling to track food and compostable service ware waste for all Garden buildings.
- Bertha Pfautch Annex now eligible for ENERGY STAR certification due to reduced energy usage.
- Introduction of commuting in Scope 3 for the forthcoming 2024 GHG inventory will empower the Garden to comprehensively address emissions at all three scope sources.
- Despite increased square footage in the Taylor Visitor Center and Bayer Event Center, we expect to decrease energy usage in 2024, supported by strategic construction and design.



*This year allowed us to focus on that great maxim, ‘you can’t manage what you don’t measure.’ While we’ve been advancing green initiatives in the community and on our campuses for years, we are now establishing several new reporting and baseline emission inventories. This allows us to track where we are at the Garden and provide direction for the best steps moving forward. We love looking at all this data and will combine it with the climate impacts our researchers are finding to eagerly identify new ways to improve quality of air, water, and soil, to protect plants and to preserve and enrich life.*

Glenda Abney  
 Vice President, Sustainability



is a program of:





## 2023 ST. LOUIS Green Business Challenge



*The Missouri Historical Society is committed to reducing the environmental impact of our facilities while preserving our shared history. As a public institution, we seek to be a leader in our region and push the needle forward to protect our future.*

Rachel Greathouse  
David Lobbig Coordinator of Sustainability

## Accomplishments

- Recycled over 8,300 pounds of electronics and over 600 fluorescent lightbulbs.
- Revamped breakrooms to include composting and Terracycle waste options.
- Implemented waste training for new employees.
- Set up office supply swap for employees to share unused supplies.
- Weekly “Feature Friday” sustainability emails highlight departmental work and share green tips.



## Innovations

- Donated over 60 mannequins to local museums around Missouri.
- Hosted Green Living Festival focused on plastics in partnership with EarthWays Center, welcoming over 800 guests.
- Marketing campaign with Trip Advisor removed 55 pounds of plastic from the ocean and planted 60 trees.
- ASHRAE Level 3 study completed at the Library and Research Center.



is a program of:



MISSOURI HISTORICAL SOCIETY





Greg Cooksey | Sr. Director of Business Development & Compliance Officer  
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 Owner – 106,000 ft<sup>2</sup> (2 facilities)  
 www.mrcrecycling.net

## CHAMPION INNOVATION PROJECT

*Lithium Battery Recycling*

### Measurable Elements

- Collected and recycled >11,000 lbs. of lithium batteries.
- Collected and recycled 3.54 million lbs. of e-Waste, YTD 2023.
- Provided >80 e-Waste collection events to support local communities.



### Qualitative Elements

- Design build ¼” steel storage boxes for lithium batteries to mitigate risk.
- Battery shredding/processing project to process lithium batteries on-site into black mass commodity; in progress but not yet completed.
- Focus on increasing collections of lithium batteries from generators, and community/municipalities to increase landfill diversion rates.
- Collaborating with University of Missouri Kansas City on public awareness educational campaign to raise awareness about battery recycling in the Kansas City metro area.



*The St. Louis Green Business Challenge remains an instrumental force in guiding, educating, and inspiring companies to advance sustainability practices. MRC is privileged to participate in this impactful initiative, particularly as we launch our Lithium Battery Recycling Initiative to further align our business growth with sustainable objectives. The Challenge serves as a roadmap, aiding us in strategically focusing our endeavors and mapping out future sustainable milestones.*

Greg Cooksey  
 Sr. Director of Business Development & Compliance Officer



is a program of:





Kelsey Helms | People and Culture HR Generalist  
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## 2023 ST. LOUIS Green Business Challenge



*Caring for our planet is not just a choice; it's our responsibility. At MTM, we've embraced this responsibility wholeheartedly. Our commitment to sustainability, the environment, and green initiatives in the transportation industry isn't just a part of our mission, it's the heart of it. We are dedicated to driving change, reducing our carbon footprint, and paving the way for a greener, more sustainable future. Together, we can make a difference, one eco-friendly mile and initiative at a time.*

Alaina Macia  
CEO



is a program of:



## Accomplishments

- 22% of our self-owned transportation fleet now consists of either hybrid or electric vehicles, helping to curb greenhouse gas emissions.
- Commuter benefits program offers incentives for employees who utilize Green options like carpooling, public transportation, or biking to work.
- Installing a newer, more energy-efficient HVAC system at our Lake St. Louis, Missouri headquarters.
- Hosted company-wide Green campaigns and volunteer opportunities throughout the year: virtual Eco-Challenges for Earth Month (April) and Plastic-Free July; Responsible Recycling; Eating Green; Litter Pick-Up/Clean August; upcycled Halloween costumes; lightly-used blanket donations for a local animal shelter; and a coat drive to support local communities.



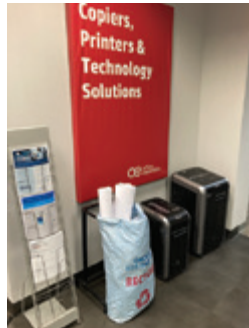
## Innovations

- Kicked off a quarterly virtual Green Magazine put together by our Green Team, emailed to the entire organization. This magazine covers MTM's own sustainability initiatives, current events/volunteer opportunities, employee stories, and tips and tricks for being eco-friendly at home.
- Revamped our equipment recovery and recycling process; this doesn't just save MTM money, but also helps keep computer hardware and headsets out of landfills.
- Released our formal ESG Charter and submitted our Large Entity Application for B-Corp certification. Shout out to Blackrock Consulting for their partnership in our efforts!
- Hosted Jean Ponzi, Challenge manager, for a virtual Lunch and Learn where she taught *Biophilia: Designing Nature into People Places*. She shared specific examples from our own Lake St. Louis headquarters, and we had a wonderful turnout!



## Accomplishments

- Updates to our main employee breakroom enhanced the work environment on a more sustainable path by replacing plastic cups and utensils with eco-friendly paper goods.
- The entire Office Essentials warehouse (17,500 ft<sup>2</sup>) has been converted from fluorescent to LED lighting fixtures, saving approximately 60 watts per unit.
- All printers are set to print double-sided, in black only, saving paper and ink.
- Continued internal recycling of paper, plastics, and cardboard.
- Delivery drivers use routing software to shorten travel times and overall stops.
- Hybrid work schedule option supports employee needs and reduces our carbon footprint.



## Innovations

- Showcased our wide variety of sustainable product offerings at Washington University Diversity and Sustainability event and 2023 Green Business Challenge Kickoff.
- We sell Highmark cleaning and breakroom products, produced by a sustainable and diverse manufacturer, including bowls made from sugar cane and plant-based plastic cups.
- Website icons denoting diverse manufacturers and sustainable products help Office Essentials customers make environmentally and socially conscious purchases.
- Office Essentials continues to incentivize customers to recycle toner cartridges with free collection. Over 10,000 cartridges collected per year are shipped back to manufacturers for reuse in producing new cartridges and drums.
- Deliveries for the Saint Louis Zoo are packed in reusable totes instead of standard cardboard boxes.

## 2023 ST. LOUIS Green Business Challenge



*Through energy-efficient warehouse lighting and a commitment to offering sustainable business products, we illuminate a path towards a greener future. As ambassadors for sustainable practices, we strive to not just connect with, but inspire St. Louis' top companies and organizations in working towards a more environmentally conscious and responsible tomorrow.*

Kate Dougherty  
President



is a program of:



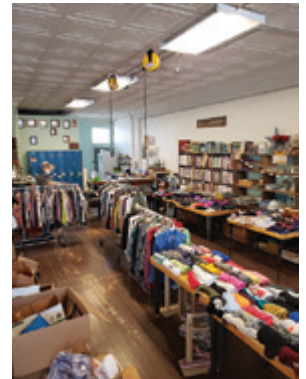


*Perennial enjoys being a leader in creative reuse education and a resource for anyone starting their sustainability journey. The Challenge helps us prioritize efforts to strengthen, document, and share while connecting us to a local network of passionate partners committed to a greener region. This year we were proud to expand capacity of our clothing swap, diverting 2,400 pounds of textiles from the landfill in one afternoon.*

Katie Carpenter  
Executive Director

## Accomplishments

- Completed a Green Purchasing policy to guide Perennial staff in choosing office supplies and class materials.
- Scheduled an energy audit for our building to identify wasted energy and inform energy efficiency updates.
- Staff toured a local landfill.
- Wrote a Sustainability Policy to inform staff and customers of Perennial's overall sustainable values and our commitment to sustainability, in the workplace and our community.



## Innovations

- Installed signage showing how to properly dispose of waste in our workshop, addressing recycling and composting to minimize landfill disposal.
- Increased capacity of our clothing swaps, diverting more useful textiles from the landfill.
- Published an online resource guide to help folks reduce, reuse, or repair items when possible.
- Presented on Circularity panel for Missouri Recycling Association conference.



is a program of:



## Accomplishments

- Formed a company-wide Green Team.
- Issued Green Purchasing Policy for office paper.
- Maintained Environmental Policy with sustainability impacts. We require all new hires to read and sign before starting employment.

## Innovations

- Installed recycling bins with posters to encourage employees to recycle correctly.
- Converted to 30% recycled content for office paper.
- Achieved ISO 14001 Certification, company-wide.



## 2023 ST. LOUIS Green Business Challenge



*PHI Health is proud to make a positive environmental difference in the communities we serve. Participation in the Challenge set off a domino effect of possibilities for us, not only in Missouri but also at other base locations around the country. We look forward to participating next year!*

Keya Litt, Ph.D.  
 Environmental Regulation &  
 Sustainability Manager



is a program of:



## 2023 ST. LOUIS Green Business Challenge



*With our work, we want to consider environmental impact, whether through exhibitions and programs or via our building operations, properties, and day-to-day habits. Joining the Green Business Challenge encourages us to improve our working methods while also making space for conversations about the ecological impact of our efforts.*

Cara Starke  
Executive Director

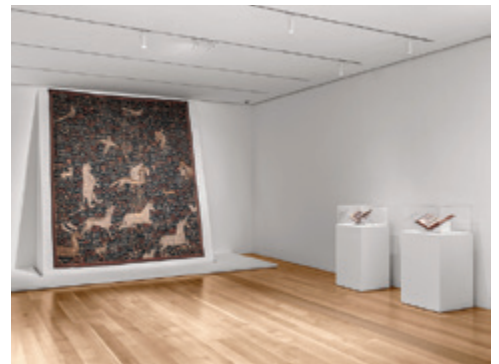


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## Accomplishments

- Instituted energy-saving and recycling initiatives, including weekly recycling of paper, paperboard, and other recyclables; electronic waste collection; direct recycling of metals; and increased donations of reusable building materials.
- Converted lighting systems to energy-efficient LEDs.
- Used rainscaping techniques to eliminate the need for irrigation.
- Implemented a system-wide HVAC evaluation to improve our environmental impact, resulting in substantial reductions in energy use and CO<sub>2</sub>.
- Reused materials from previous exhibitions.



## Innovations

- Spring exhibitions explored how artmaking impacts the natural world and how human-environment relationships shape art.
- Hosted a Biodiversity Happy Hour for Green Business Challenge members, featuring twilight experience of our living installation, Park-Like.
- Screened the documentary film *Inhabitants: An Indigenous Perspective*, which follows five Native American tribes as they restore their traditional land management practices.
- Led tours of our exhibitions and property with the Missouri Prairie Foundation and Missouri Department of Conservation to discuss the impact of prairies and native plants.



*All photography courtesy Pulitzer Arts Foundation.*

## Accomplishments

- Installed automatic light sensors throughout four sections of our office.
- Distributed reusable water bottles to staff and installed a new water bottle filling station.
- Revamped our waste management procedures. By fall of 2023, we've recycled 2,500+ yards of natural yard waste into compost and mulch and recycled or circulated for reuse over 175 pots.
- Conducted additional team training to reinforce our commitment to removing invasive plants and replacing them with native alternatives.



## Innovations

- Coordinated a group training and volunteer event where we completed edging, composting, and mulching to support the growth of 15 young saplings at Dr. H. Phillip Venable Memorial Park.
- Introduced additional native plants and provided ongoing maintenance for our Adopt-A-Highway beautification project and butterfly garden in Olivette, Missouri.
- Organized a volunteer team to lead park beautification efforts at historic St. Louis Place Park.
- Facilitated design and installation of 19 drainage solutions projects so far this year, effectively averting water damage and playing a crucial role in preserving the well-being of our local waterways for the entire community.



## 2023 ST. LOUIS Green Business Challenge



*Our passion lies in leading the way toward sustainability in green spaces. Over 2,300 native plants we installed this year will support local wildlife, thrive with minimal irrigation, and reduce use of harmful chemicals. Our drainage solutions protect local waterways, sustainably diverting thousands of gallons from overloading creeks and streams and proliferating best practice examples. And our commitment extends beyond our work. We engage in community projects to beautify public spaces and connect people and nature. At Quiet Village Landscaping, we believe that together, we can make a positive environmental impact.*

Dennis Evans  
Owner



is a program of:



## 2023 ST. LOUIS Green Business Challenge



*RES is proud that our mission to provide resiliency through restoration is benefiting the City of St. Louis. RES green infrastructure projects for MSD prevent flooding and improve water quality, furthering our mission. Joining the Green Business Challenge has helped us better align with other community members who want to share our mission to increase resiliency in the metro area.*

Tim Moritz  
 Regional Client Solutions  
 Manager



is a program of:



## Accomplishments

- Constructed 23 green infrastructure bioretention areas for schools, non-profits, and subsidized housing, installations that manage 180,000 gallons of stormwater runoff during the average storm event.
- St. Louis operations planted over 23,500 diverse native plants in green infrastructure bioretention areas.
- Most St. Louis employees can work from home which eliminated 34,588 driving miles and an estimated 1,350 gallons of fuel, preventing 15.5 tons of CO2 emissions from entering the atmosphere.
- Developed a mobile materials storage system that significantly increases the reuse of construction materials and reduces labor and equipment usage.
- Sourcing over 80% of local project construction materials from manufacturers within a 50-mile radius of St. Louis.



## Innovations

- Sponsored and co-hosted a Green Business Challenge happy hour promoting green infrastructure and native landscaping.
- Staff volunteered for two green infrastructure maintenance events for Central Baptist Church.
- Donated 200 native plants to St. Patrick Center to reinvigorate rain gardens along Tucker Boulevard.
- Participated in this region's new Green Community Workforce Development training and employment program.





Kristin Hegel | Vanpool Outreach Coordinator  
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## Accomplishments

- Formed a Green Team involving staff from several different departments.
- Sponsored the St. Louis Earth Day Festival, advertised our vanpool program, and passed out more than 500 vegetable plants.
- Redesigned and installed signage at all recycling bins.



## Innovations

- Upgraded to LED lighting in our facilities and parking lots.
- Staff volunteered for St. Louis Cardinals “4 Greener Game,” collecting plastic and aluminum cans and bottles for recycling.
- Do The Ride Thing campaign, informing employees about improving air quality by carpooling and vanpooling.



*RideFinders is a longtime sponsor of the St. Louis Green Business Challenge. Our small team connects commuters to help reduce single-occupancy vehicles on our roadways. This year our agency, Madison County Transit, supported us to jump on board as participants—a positive experience! Working with the Challenge staff, our Green Team learned that with a few minor practice modifications, we could significantly improve our environmental impact. Considering the Challenge? Go for it! Your enterprise will join an initiative benefiting our environment and region.*

Kym Brown  
 RideFinders Outreach  
 Manager



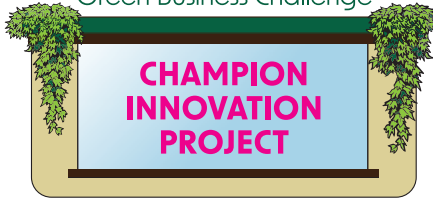
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Siu Chu | Sustainability Committee Chair & Senior Business Systems Analyst  
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## 2023 ST. LOUIS Green Business Challenge



At Safety National, sustainability strategy and efforts are evolving, guided by our Core Values and our Vision to be 'First with Community.' Our employee-led Sustainability Committee provides consistent and valuable educational and awareness-building content for employees, and opportunities to give back to the community. Corporate leadership works to reduce our environmental impacts and support employee efforts. Collaboration with our employees and community partners is essential to ensuring a healthier and safer environment for everyone.

Angela Schaefer  
Chief Human Resources  
Officer & ESG Committee  
Chair



is a program of:



## CHAMPION INNOVATION PROJECT

### Commitment to Conservation

#### Measurable Elements

- 218 pairs of new and used eyeglasses collected for Lion's Club since Sept. 2022.
- 150 commercial-size printer toners recycled annually.
- 90 lbs. of plastic bottle and jug caps collected annually since 2016 help make recycled plastic benches for local school grounds, saving schools money and keeping 200 lbs. of caps/bench out of landfills.
- Sustainability Committee annually donates \$1,000 to a non-profit. Programs of Missouri 4-H, our 2023 recipient, empower young people to lead for a lifetime, including focus on environmental science in agricultural.
- Hands-on 10-10-10 Challenge encourages employees to spend 10 minutes for 10 days outdoors, picking up trash.
- Hybrid work option supports work from home two days/week, compared to six days/quarter pre-pandemic. In Qtr. 3 2023, 97% of employees used WFH; over 13,000 WFH days reduced vehicle miles and on-campus electricity and water usage.



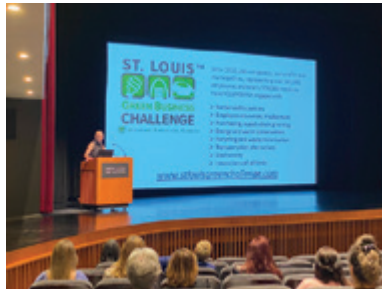
#### Qualitative Elements

- Employee education included promoting Great American Outdoors Day and hosting Homegrown National Park talk by Missouri Botanical Garden's Jean Ponzi.
- Introduced Seed & Plant Swap and Safety National Logo Item Swap.
- Participated in Pollinator Garden Spring Clean-Up at Creve Coeur Mallard Lake.
- Repaved porous parking lot to maximize rain drainage, and installed forebay system to filter rain runoff before it flows into our pond.



## Accomplishments

- Green Team organized events and activities through April to engage staff in celebrating Earth Month, including volunteering at St. Louis Earth Day Festival in Forest Park.
- Hosted a Virtual Brown Bag program, Garbology:101, given by EarthWays Center staff.
- Jaclyn Jezik presented on the St. Louis Green Business Challenge at an all-staff meeting, including answering staff recycling questions.
- Procured a Zero-Waste box to collect office supplies such as pens, staplers, binders, and more.



## Innovations

- Replaced the air handling units in the east Main building, which qualified for energy rebates and won an award from the Saint Louis Chapter ASHRAE.
- Hosted the Green Living Festival in partnership with the EarthWays Center of Missouri Botanical Garden, featuring exhibitors in Sculpture Hall, a tour of the Art Hill flower gardens with staff of Forest Park Forever, Museum docent tours of Andy Goldsworthy's Stone Sea, and a presentation on the East Building's 10 year anniversary as a LEED-Gold certified building.
- Recycled and repurposed hundreds of event wire hangers and plastic linen bags.
- Panorama Restaurant became certified with the Green Dining Alliance, earning the 5-Star rating!



*The Saint Louis Art Museum is committed to making our iconic building sustainable. The Museum recently received an award from ASHRAE in recognition of the east-side Main Building air handling unit project. This project to modernize the climate control system for the east Main Building, utilizing Ameren Missouri BizSavers rebate dollars, will reduce ongoing operating costs, energy usage and emissions while efficiently maintaining the exacting climate controls needed in an art museum.*

Kyle Muskopf  
 Assistant Engineering  
 Supervisor



is a program of:





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 Owner – 1,300,000 ft<sup>2</sup>  
 www.mlb.com/cardinals

## 2023 ST. LOUIS Green Business Challenge



*Participating every year in the St. Louis Green Business Challenge serves as a reminder that there are always new avenues to promote environmental stewardship. The St. Louis Cardinals continuously seek out innovative ways to advance sustainability and reduce impacts on the natural environment. The sharing of best practices and networking facilitated by the Challenge are resources that offer valuable insight into the green community. We greatly value the partnership and look forward to future development of sustainability initiatives.*

Mairead Scanlon  
 Coordinator, Facility  
 Operations

## Accomplishments

- During the 2023 season, the Cardinals recycled over 11 tons of aluminum, 257.62 tons of commingled materials, 55.51 tons of yard waste, and 0.2 tons of eWaste.
- Donated 600 banquet chairs to a local charity, equivalent to 3.44 tons.
- Over 160 tons of stadium food waste have been composted this year so far.

## Innovations

- New sustainability initiative at Busch Stadium for the 2023 baseball season: the addition of Ball aluminum cups to concession stands where draft beer is sold. The aluminum cups replace 20 oz. plastic cups.
- The Cardinals celebrated Green Sports Day on October 6th by lighting up the stadium green and utilizing social media to educate followers about sustainability initiatives at Busch Stadium.
- The St. Louis Cardinals Green Team sponsored a booth at the earthday365 festival in Forest Park. Green Team representatives recruited volunteers for our 4 a Greener Game initiative for the 2023 season, and promoted the program's mission to festival attendees.
- The Cardinals were a finalist for the earthday365 Circularity in Business Award.



is a program of:





Samantha Thompson | Director of Operations – CITYPARK  
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 2019 Market Street, St. Louis, MO 63103  
 Owner  
 www.stlcitysc.com

## CHAMPION INNOVATION PROJECT

*CITYPARK Championship Green*

### Measurable Elements

- St. Louis CITY SC's CITYPARK District buildings feature 100% LED energy efficient lighting and control systems, 100% recycled steel, high-efficiency HVAC, low-flow urinals and toilets, and native species landscaping.
- Policy for Zero Single Use Plastic in all front-of-house spaces.
- Partnered with AB's National Recycling League to engage with over 100 volunteers at CITY's home matches this season. These volunteers interact with fans to educate them on waste sorting while in CITYPARK.
- CITYPARK features 211 custom waste containers to help collect and aid sorting of all landfill-bound, recycling, and compostable waste.
- CITYPARK avoided the use of over 500,000 single use plastic beverage containers by using aluminum bottles, cans, and cups.



### Qualitative Elements

- CITYPARK will continue to operate sustainably, and we are committed to becoming a Zero-Waste certified facility.
- Continue to work with our food rescue partner to ensure meals not served during matches or catering events are donated to regional food banks.
- Establishing a companywide Green Committee to support and expand the sustainability goals of the STL CITY SC Headquarters, CITYPARK, Pavilion, and the Washington University Orthopedics High-Performance Center.
- "Green from the Kickoff" talk by Sustainability Director Joe Abernathy scored as highlight of the Green Business Showcase event launching Challenge 2023.
- Hosted behind-the-scenes tours of CITYPARK sustainability features for Missouri Recycling Association and the Challenge.

## 2023 ST. LOUIS Green Business Challenge



*We want CITYPARK to be an inspiration to our community, of how it is possible to embrace waste reduction and conservation practices in our work and homes. St. Louis is a region of rivers and agricultural innovation. We have a great opportunity to remind our partners, fans, and neighbors that our future is our responsibility.*

Carolyn Kindle  
CEO



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**2023 ST. LOUIS  
Green Business Challenge**



*The Saint Louis Green Business Challenge provides an operational framework for us as we continue to increase our efforts to be a more sustainable institution. We are grateful for the relationships we've built with other organizations and the ideas we've garnered from participating in the Challenge. Thanks so much for this opportunity. This program is wonderful for our region.*

Maddie Earnest  
GROW and LSL Gallery  
Manager, Sustainable  
Futures Team Lead



is a program of:



## Accomplishments

- Installed more LED lighting in the main kitchen and three different staff areas.
- Installed PaperCut software to better monitor printing usage and encourage less staff printing.
- Replaced the original roof (30 years old) and increased the amount of insulation at the same time. After a year, we will assess impacts on energy usage.
- Held a Sustainability-Chili Cook-Off for staff with 50 people in attendance. Our Sustainable Futures Team provided information about decreasing your carbon footprint through food choices and the attendees voted for the most sustainable chili as well as voting on flavor and creativity.



## Innovations

- Held a staff clean-up day to remove invasive honeysuckle around a neighboring school as well as doing a plant clean-up for areas around the Science Center. Had 22 people participate.
- Held our first reduced-waste event at the October First Fridays. With 2,500 attendees, we diverted approximately 128 gallons of food waste and compostable dishware from the landfill. We are using this event to help set guidelines to divert and reduce waste at all future large scale events.
- Began using reduced waste practices at all of our Saint Louis Science Center Member events.



## CHAMPION INNOVATION PROJECT

### Electric Train Debut

### Measurable Elements

- The electric locomotive reduces:
  - › Greenhouse gas emissions and air pollution in the city.
  - › Noise in the park—sounds are actually added for safety!
  - › Maintenance requirements and replacement parts
  - › Cost of operations (fueling).



### Qualitative Elements

- First electric locomotive named in honor of Mary Meacham, a St. Louis black woman, abolitionist, and underground railroad leader.
- Zoo staff, volunteers, and the broader community feel a sense of pride in the first electric locomotive.
- Guest experience is improved as the new locomotive doesn't emit fumes.



## 2023 ST. LOUIS Green Business Challenge



*Saint Louis Zoo is proud to participate again in the Challenge in 2023. We value the programming and educational resources curated by the St. Louis Green Business Challenge team. Webinars, in-person events, and peer information sharing is top notch, keeping the Zoo team engaged and up to speed on the great work happening in the region. We are grateful to have such an incredible peer-learning community!*

Wanda Kolo  
Director of Sustainable  
Operations & Construction  
Management



is a program of:



## 2023 ST. LOUIS Green Business Challenge



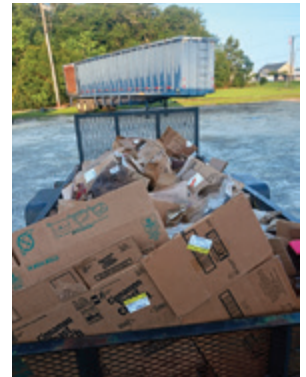
*The Challenge enabled us to reaffirm our company's purpose: 'Making the Planet Better, Together.'*

Emily Patterson  
Chief of Staff



## Accomplishments

- Initiated a Green Team among 11 plants to create awareness and excitement around recycling. The teams were able to collect nearly 15,000 lbs of paper/cardboard in just three months as part of the very first challenge that they took on. The plant collecting the most pounds per person was able to receive \$500 per person.
- Performed a Safety & Sustainability Stand Down training for all Shapiro Metals plants. This training allowed us to introduce sustainability into our plants: what it means to be sustainable as a business and at home. We reviewed basic elements of the environmental impacts of our day-to-day decisions about what we eat, what we drive, and how we dispose of our waste.



## Innovations

- Purchased a wood shredder at our Springfield, Missouri location to reduce our landfill waste. Springfield facility has seen a 40% reduction of their landfill waste by simply shredding the material of unusable pallets so it can be repurposed rather than sent to the landfill.
- Participated in a Pollution Prevention training with Ozarks Environmental and Water Resources Institute, hosted by the Green Business Challenge, including assessment of manufacturing facility efficiencies, and associated possible cost savings.



is a program of:





## Accomplishments

- Headquarters array produced 153 megawatt hours of solar energy, offsetting 66 metric tons of carbon dioxide from the atmosphere.
- Recycled 55,000 pounds of solar panels, microinverters, and other solar energy equipment.
- Green cleaning products, refillable pens, and recycled office paper are used for business operations. Organic fruit and snacks are available in lunch room.
- Continued with hybrid office model to reduce emissions from commuting.
- Switched to 100% recycled content paper content for customer thank you boxes.
- Purchased eco-friendly promotional products with tree planting offset.
- Maintained B Corp certification.



## Innovations

- Provided hands-on solar training to K–12 educators in Southern Illinois.
- Ten solar-powered Electric Vehicle charging stations are open to the public at headquarters.
- Partnered with Employment Connections for Solar 101 workforce training class.
- Sponsored earthday 365 Environmental Days of Justice, Forest ReLeaf Arbormeisters, ParkLands Foundation, and Southern Illinois University Sustainability.



**2023 ST. LOUIS**  
Green Business Challenge

**CHAMPION  
LEVEL**



*The St. Louis Green Business Challenge network, webinars and events inspire us to examine our business operations and implement new sustainable alternatives. We are honored to join like-minded companies dedicated to reducing our environmental footprint to improve our communities.*

Eric Schneider  
Director of Business  
Development

 **ST. LOUIS™**  
GREEN BUSINESS  
**CHALLENGE**

is a program of:

 MISSOURI BOTANICAL GARDEN

## 2023 ST. LOUIS Green Business Challenge



*Sustainability is a holistic approach that seeks to meet present needs without compromising the ability of future generations to meet their own needs. It considers economic, social, and environmental factors in order to create a more equitable and livable world.*

Liz Carlisle  
 Environmental Health and  
 Safety Director  
 Residential HVAC and Supply

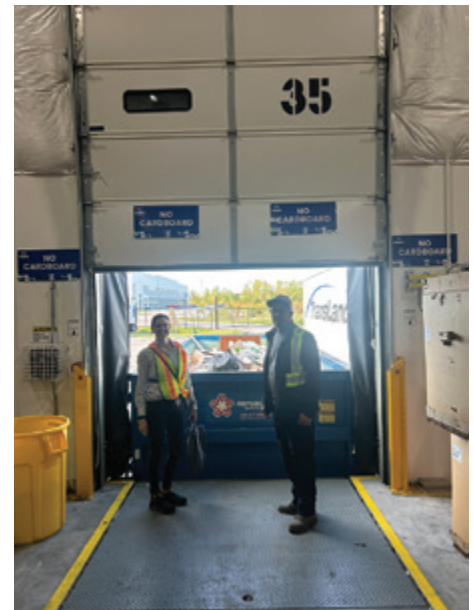
## Accomplishments

- Changing all paper products to 30% recycled content.
- Changing plastic utensils to compostable materials.
- Adding signage to containers and waste containers for appropriate disposal.



## Innovations

- Had Shapiro metals present a Lunch and Learn for all employees on proper recycling and disposal, for work and home.
- RideFinders came on site with a carpooling presentation; we signed up several employees, so they don't have to pay for Uber to get to and from work.
- Added motion sensors in all restrooms, and conference rooms in the facility.



is a program of:





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# ST. LOUISIS™



## GREEN BUSINESS CHALLENGE

The Network that Grows Green Operations and Innovation



2024 registration opens February 1

[www.stlouisgreenchallenge.com](http://www.stlouisgreenchallenge.com)

 MISSOURI BOTANICAL GARDEN

# TEST DRIVE TRANSIT FOR YOUR COMMUTE

## CMT Try and Ride Program

- Looking for a green commute option?
- Gas prices eating into your budget?
- Not sure about using transit?



Citizens for Modern Transit's (CMT) Try & Ride Program is the perfect way for commuters in the St. Louis region to test drive MetroLink and MetroBus for free. St. Louis' robust public transit system offers commuters a cost-saving and environmentally friendly commuting option.

CMT's comprehensive, award-winning program provides participants with personalized transit routes, tips and tricks for using transit, complimentary tickets for one month and more. Scan the QR code or visit [CMT-STL.ORG](http://CMT-STL.ORG) to learn more and register for CMT's Try & Ride Program.



## St. Louis Green Business Challenge

# LinkedIn



connect with the Challenge and Green biz leaders  
join the discussion - tag your company



a division of the  MISSOURI BOTANICAL GARDEN

Sus • tain • a • bil • i • ty

*Meeting the needs of the current generation without compromising the ability of future generations to meet their own needs.*

## Sustainable Solutions For You!

As the Missouri Botanical Garden's Sustainability Division, the EarthWays Center enriches lives and protects plants and our environment by educating and connecting people to practical sustainable solutions where they live, learn, work, and play.

We coordinate multiple programs to advance sustainability in the region, with services for:

- Businesses
- Local Communities
- Individuals and Families
- Homeowners and Renters
- Professionals
- Schools
- K–12 Students and Educators
- Universities and Colleges



Through the **St. Louis Green Business Challenge**, EarthWays Center helps companies of all kinds and sizes make sustainability work, in policy and practice.

We can also customize fee-for-service consulting for sustainability certification, planning or implementing company-specific green projects, boosting employee education and engagement—and more. Let EarthWays help develop the Sustainable Solution that works for your business.

The Missouri Botanical Garden's EarthWays Center

4651 Shaw Boulevard | St. Louis, MO 63110

314-577-0220 | [mobot.org/sustainability](http://mobot.org/sustainability)



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11 AM – 5 PM BOTH DAYS



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Find out where to recycle or donate other items at [RecycleResponsibly.org](https://www.RecycleResponsibly.org)

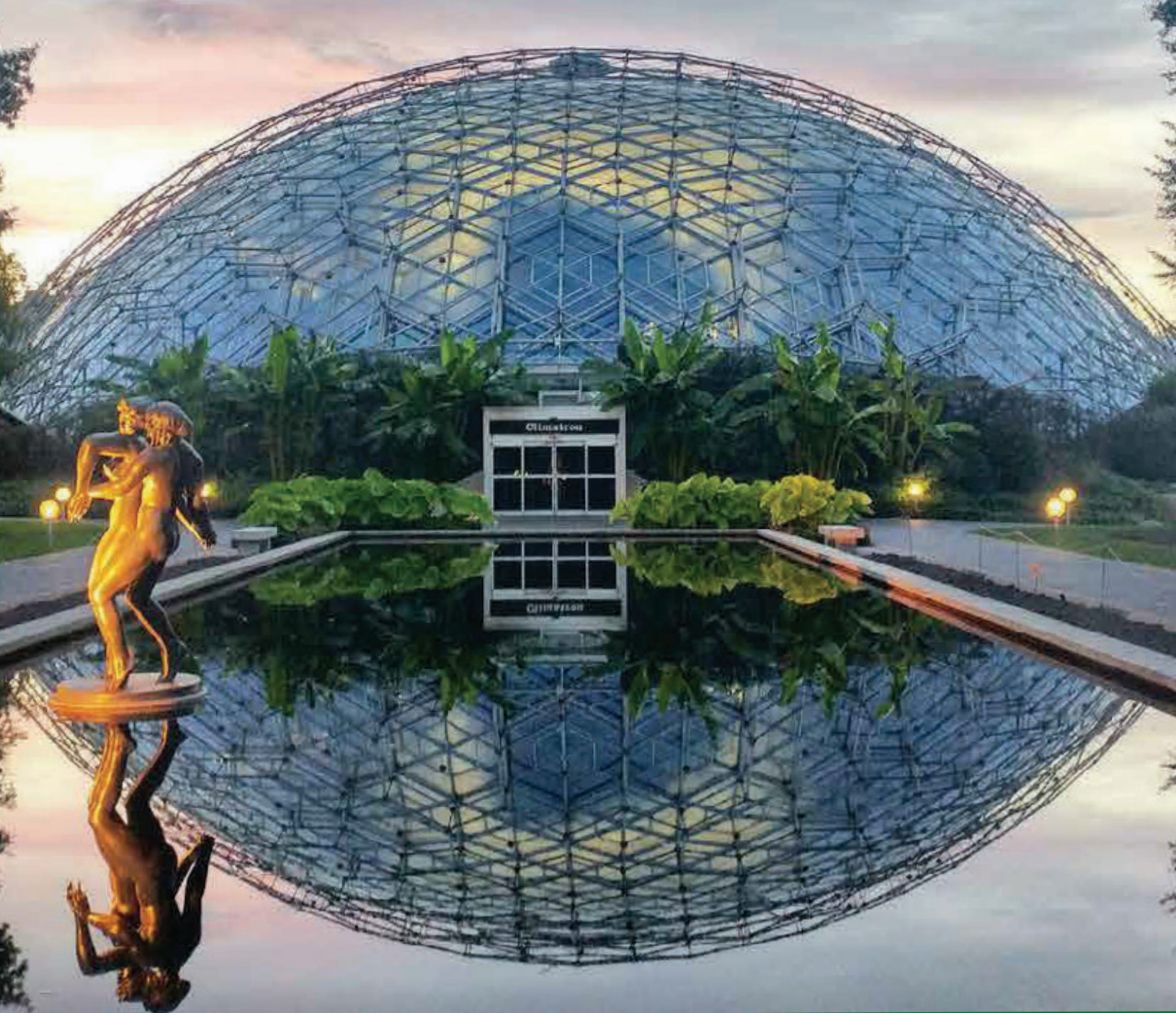


**THANK YOU FOR RECYCLING RESPONSIBLY!**

[RecycleResponsibly.org](https://www.RecycleResponsibly.org)

*Keep items loose (not in plastic bags), clean and dry.*





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### 2023 Challenge Staff

Glenda Abney – Vice President, Sustainability

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Angelina O'Donnell – Program and Event Specialist

Jean Ponzi – Green Resources Manager

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For more information on the St. Louis Green Business Challenge, contact:  
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[www.stlouisgreenchallenge.com](http://www.stlouisgreenchallenge.com)

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