



# SUS TAIN ABLE DUBUQUE

*viable • livable • equitable*

# IT'S MORE THAN JUST THE ENVIRONMENT.



SUSTAINABILITY FAIR | BEE BRANCH CREEK GREENWAY

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# KEY

2006

City Council sets Sustainability as a Top Priority

Mayor Roy Buol signs US Conference of  
Mayors' support of Kyoto Protocol

2011

City Council adopts 50% by  
2030 GHG reduction target

2016

Resilient Community Advisory  
Commission is established

2019

Climate Action Plan Community Team formed  
and community engagement efforts begin

2021

Dubuque Metropolitan Area Solid Waste Agency  
Renewable Natural Gas Project begins

Create SREC Market to support Renew DBQ –  
a low-to-moderate income solar project



# SUSTAINABILITY MILESTONES

**2009**

City hires first Sustainability Coordinator in Iowa

**2013**

City Council adopts 50% by 2030 Community Action and Resiliency Plan

**2017**

Adopted Imagine Dubuque 20-year Comprehensive Plan based on Sustainability principles

**2020**

50% by 2030 Community Action and Resiliency Plan updated to include adaptation and equity

Improved Carbon Disclosure Project Score

Teen Resiliency Corps is formed

**2022**

Hired Climate Action Coordinator

Through Climate Action Plan outreach efforts: planted 96 trees with Dubuque Trees Forever and residents, hosted Complete Streets Bike Ride, and organized Low Carbon Diet Competition and book club circles reading *All We Can Save*

## RECENT EFFORTS

**2023**

Mayor Brad Cavanagh and Sustainability Director represent the City of Dubuque at COP28 Global Climate Conference

Cities Forward Inaugural Cohort paired with Hermosillo, Mexico

**2024**

The City, in partnership with Dubuque Trees Forever, is awarded nearly \$1.5 million from the US Forest Service to plant more than 5,000 trees over the next five years in disadvantaged census tract areas

Dubuque is one of 100 global cities participating in the Bloomberg Philanthropies Youth Climate Action Fund – providing micro-grants of \$1,000 - \$5,000 to support climate action projects done by youth



# BUILDING ON PARTNERSHIPS

between residents, businesses, schools, and non-profits,  
Dubuque is achieving its sustainability vision.

> **DUBUQUE'S SUSTAINABILITY VISION** is grassroots and community-driven. Beginning in the 1980s when Dubuque led the country in unemployment and had lost its connection to the Mississippi River, residents and business owners found a way to change Dubuque, making it a new kind of national leader for the 21st century.

**DUBUQUE, IA** is one of the oldest cities on the Mississippi River and the oldest community in Iowa. The people of the Midwest are **descendents** of individuals who valued rich farmland and abundant water, and who left a legacy of sustainability for us to build upon. It is also **important** to acknowledge and honor the original peoples of this land—the Očeti Šakówinj (Sioux), Sauk and Meskwaki, Iowa, and Kiikaapoi (Kickapoo) people on whose ancestral homelands and traditional territories Dubuque resides. We strive to build our solidarity and kinship with Native peoples. We also acknowledge that this country would not exist if it wasn't for the **unpaid**, enslaved labor of Black people. We honor the legacy of the African diaspora and Black life, knowledge and skills stolen due to violence and white supremacy. While the movement for justice and liberation is building and we are witnessing the power of the people, many are still being met with violence and even being killed. Collectively, our community is saying this ends now. Black Lives Matter.



PHOTO BY DIGITAL DUBUQUE

## SUSTAINABLE DUBUQUE IS THE CITY'S BRAND

Dubuque has established itself as a regional and national leader in its ability to collaboratively partner to achieve community goals. What Dubuque is achieving collectively today through its Sustainable Dubuque model is the direct result of the knowledge and understanding that sustainability is a balanced approach to long-term life quality. It is a human-centered, equitable approach where no one in the community is excluded...everyone who wants to do so can participate and contribute. It is about providing residents and businesses with information so they can save money, save resources, and reduce their carbon footprint. That is what is unique in Dubuque's ability to continue to innovate and transform. The City of Dubuque and its partners have created a replicable model of sustainability for cities under 200,000, where over 40 percent of the US population lives. Sustainable Dubuque is who and what we are; it is our brand; and it is our future.

### DUBUQUE IS PROUD TO BE A FIVE-TIME WINNER OF THE ALL-AMERICA CITY AWARD

The All-America City Award is considered the Nobel Prize of local government. The projects and initiatives for which Dubuque was recognized, including the Campaign for Grade-Level Reading, America's River Project, Historic Millwork District revitalization, workforce development programs, and Crescent Community Health Center, are all shining examples of public and private partners collaborating to create a more Sustainable Dubuque.





# THE BEGINNING

## Engaging Residents As Partners

### IN 2005, MAYOR D. BUOL'S PLATFORM

focused on 'engaging residents as partners'. This approach fostered new ways of thinking about the present and the future generations. Residents shared their concerns, emphasizing water quality, recycling, green spaces, public transit, cultural vitality, accessibility, and downtown revitalization being at the top of their lists.

By 2006, these themes formed the foundation of what we now know as Sustainable Dubuque. The vision was developed two years later, which focuses on a balanced approach to life quality and includes 'economic prosperity, environmental integrity, and social/cultural vibrancy'. By using these three principles in planning and development efforts, we aim to continue building a resilient and sustainable community.

# TODAY

## Current Sustainability Efforts

**TODAY**, Sustainable Dubuque continues to address the community's initial sustainability concerns. The Sustainability Office collaborates with various City departments, community members, and external partners to determine the best steps to increase the city's sustainability and resiliency efforts. A key goal being to reduce the city's greenhouse gas emissions by 50% by 2030.

Sustainable Dubuque has undertaken a variety of initiatives, programs, and projects. Through these efforts, Sustainable Dubuque is actively working towards a more 'sustainable' future for our community.

### CURRENT INITIATIVES:

- **Renew Dubuque** > helps households with low-to-moderate incomes access solar technology
- **Branching Out Dubuque** > planting thousands of trees in vulnerable areas of the city.
- **Youth Climate Action Fund** > engaging young people in making our community more sustainable by developing and executing their own climate ideas.
- **Sustainable Dubuque Grants** > distributing grants to support the development of community gardens, environmental education, composting events, and more!

COMMUNITY DAYS OF CARING | CONVIVUM URBAN FARMSTEAD



PARK(ING) DAY 2023



# Growing Sustainable Communities CONFERENCE

**THE CITY OF DUBUQUE** hosts the annual Growing Sustainable Communities (GSC) Conference, the largest and longest-standing sustainability conference in the Midwest.

For over 15 years, this premier conference has been providing attendees with comprehensive, impactful and actionable sustainability ideas, plans and best practices for local governments and business professionals alike.

The GSC Conference features workshop speakers with a wide range of expertise, including representatives from federal, state and local governments, along with business and academic leaders from across the country.

Workshop topics typically include tree canopy projects and programs, watershed and stormwater management, brownfield redevelopment, solar energy, small-town sustainability, biogas conversion, equity, placemaking, livability, climate action planning, education/ community partnerships, mobility planning and design, sustainability tools and frameworks, alternative fuel vehicles, green building and sustainable development, local foods, LED streetlight conversions, affordable housing initiatives, green infrastructure, sustainability metrics, training and community engagement, among others.

In addition to learning sessions, the conference includes two keynote luncheons, mobile workshops, a breakfast plenary session, and other creative opportunities for attendees to connect and learn. For more information, visit [www.gscdubuque.org](http://www.gscdubuque.org).

GROWING SUSTAINABLE COMMUNITIES CONFERENCE



## PAST CONFERENCE ATTENDEES:

*"The conference was well-organized! I learned a lot and appreciated all of the sessions I attended and the location along the river was beautiful. I hope to be back!"*

*"This conference was fantastic, I was not sure what to expect as it was my first time but I truly had an amazing time making connections, meeting others in this field, and interacting in a variety of ways. I especially enjoyed the Whova app and loved all of the features, this was huge for me in terms of accessibility as someone with invisible disabilities."*

*"Honestly, I discovered a number of topics that I can apply in my work that I didn't even know I didn't know. This is the best conference I've attended in the past couple of years."*







# OUR VISION

FARMERS' MARKET | DOWNTOWN DUBUQUE

2022 ART ON THE RIVER SCULPTURE



## Community Design >

The built environment of the past, present, and future which contributes to its identity, heritage and sense of place.

## Smart Energy Use >

Energy conservation and expanded use of renewable energy as a means to save money and protect the environment.

## Resource Management >

The benefits of reducing, reusing, and recycling resources.

## Regional Economy >

A diversified regional economy with opportunities for new and green markets, jobs, products, and services.



## Green Buildings >

A productive and healthy built environment.

## Community Knowledge >

Education, empowerment, and engagement to achieve economic prosperity, environmental integrity, and social/cultural vibrancy.

## Healthy Local Foods >

The benefits of wholesome food from local producers, distributors, farms, gardens, and hunters.

## Community Health and Safety >

Systems, policies, and engagement to ensure that all residents have access to healthy and safe lifestyle choices.



## Reasonable Mobility >

Safe, reasonable, and equitable choices to access live, work, and play opportunities.

## Healthy Air >

Fresh, clean air, reduced greenhouse gas emissions, and minimized health risks.

## Clean Water >

Water as the source of life, seeks to preserve and manage it in all forms.

## Native Plants & Animals >

Biodiversity through the preservation, restoration, and connection of nature and people.



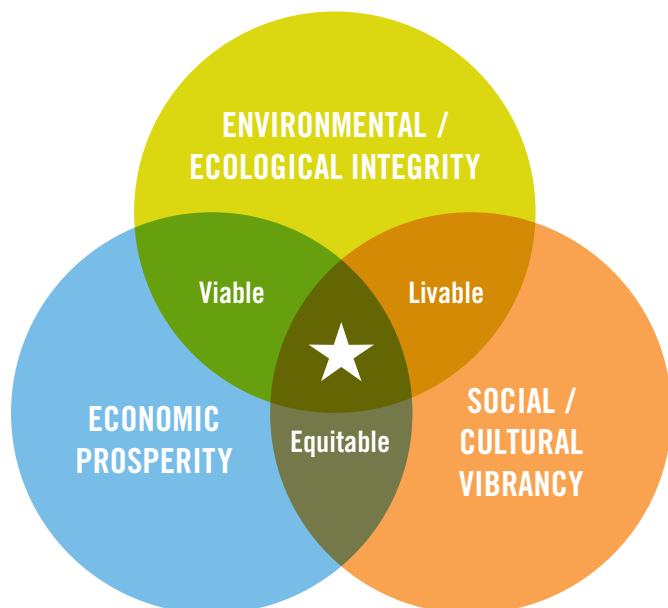


The City of Dubuque strives to find the middle – the sweet spot where the environmental impacts, the social and cultural impacts, and the economic impacts of a plan, idea or project meet. The model serves as our guide as we continue to create a place for everyone. Our model involves a three-part approach that addresses: economic prosperity, environmental integrity, and social/cultural vibrancy.

Economic growth is a critical component of sustainable development. Sustainable Dubuque has four principles that support our community's economic prosperity. These principles are Community Design, Smart Energy Use, Resource Management, and Regional Economy.

Protecting the planet and holding our city accountable for our actions is priority for Sustainable Dubuque. In order to ensure a future with a safe environment for our next generation, Sustainable Dubuque focuses on four principles of environmental integrity: Healthy Air, Clean Water, Native Plants & Animals, and Reasonable Mobility.

Social Equity is essential in democracy. Each person should have access to the resources needed to have a healthy life and the ability to influence the decisions of their government. The four principles that support our community's social/cultural vibrancy goals include: Green Building, Community Health and Safety, Healthy Local Food, and Community Knowledge. This model is our holistic approach to long-term quality of life.



**Dubuque is a viable, livable, and equitable community.** We embrace economic prosperity, environmental integrity, and social/cultural vibrancy to create a sustainable legacy for generations to come.

# A RESILIENT AND EQUITABLE

## ENGAGE

### Community Engagement

Sustainable Dubuque was built on community engagement, and it continues outreach to engage private, non-profit, and public sectors. The Sustainable Dubuque framework has become the prism through which City operations are developed and analyzed. Much of Dubuque's story can be attributed to a motto of "People, Planning, and Partnerships." When it comes to partnerships, individuals and organizations subscribe to the concept of collective impact, the idea that broad-based, cross-sector collaboration is imperative to affect community change, rather than the siloed efforts of individual organizations.

In current initiatives like linking daily struggles of residents with low-incomes to climate action, the City and partners are creating relevant engagement opportunities and connections to resources and programs in a transparent and meaningful way.

## PREPARE

### Resilient Community Advisory Commission

The Resilient Community Advisory Commission was created in 2016. Through a robust community engagement process, residents provided input to define resiliency as "the ability of individuals and systems to prevent, prepare for, and recover from adverse vulnerabilities while adapting to long-term changes." The commission's purpose is to offer input on and review strategies to address identified vulnerabilities, working in partnership with City staff, other City commissions, and community partners. The commission also reviews policy and program recommendations for the City Council to help ensure resilient outcomes for the community and provides feedback on the allocation of budgeted City funds to meet resiliency goals.

## TEACH

### Green Vision Education

The Green Vision Education program, organized by the Dubuque Metropolitan Area Solid Waste Agency, works with area schools on their sustainability efforts. Areas include Energy Efficiency, Resource Management, Pollution Prevention, Sustainable Purchasing, and Eco-Literacy in their built environment along with incorporating these areas into their curriculum. The agency works with community partners to identify opportunities for sustainability improvements. Projects have included composting the food scraps from their lunches, enforcing no-idling policies, planting school gardens during their school day, learning about the culture of their communities, and serving as educators for the larger Dubuque community.





# COMMUNITY OF CHOICE

## PARTNER

### Inclusive Dubuque

Hosted by the Community Foundation of Greater Dubuque, Inclusive Dubuque leverages relationships with non-profits, government entities, businesses, and generous community members to realize a shared vision for Dubuque: A vibrant and inclusive region with resources and opportunities for all. Since 2012, Inclusive Dubuque's diverse group of partners has worked together to drive transformational change in Dubuque by re-imagining systems, fostering a culture of inclusion, and advancing justice and social equity in all areas of community life. They are conveners and collaborators, facilitating important conversations and developing systemic solutions to equity issues, such as preparing minority and first-generation college students for careers, improving access to health and wellness resources like brain health services, bridging language and cultural barriers so immigrants can fully participate in the community, and preparing, attracting, and retaining a diverse workforce.

## PLAN

### Equitable Poverty Prevention and Reduction Plan

In the spirit of gaining a deeper understanding of poverty in our community, how people are experiencing it, and our ways of addressing it, the City's Planning Services Department engaged a year-long process to develop an Equitable Poverty Reduction & Prevention Plan. The result is a plan that describes the state of poverty in Dubuque, analyzes its causes and impact, identifies the actions we've taken as a community to address it, and presents promising practices to enhance and refine what we have been doing. It calls for employing innovative strategies to collectively reverse the impact of poverty among our neighbors.

## GROW

### Opportunity Dubuque

**Opportunity Dubuque** is a collaborative effort aimed at addressing key challenges identified by local employers and the shortage of skilled workers challenging future growth. This initiative offers individuals the chance to enroll in short-term certification programs to enhance their skills. By bridging non-credit to credit career pathways, the program meets the demand for talented professionals in high-wage, high-demand careers. Through scholarships, financial barriers are eliminated for participants including the unemployed, underemployed, high school students, those seeking hands-on learning experiences, and dislocated workers. Local employers are in charge of designing the training curriculum and providing support through the orientation, training, and interview processes.



NATIONAL NIGHT OUT

## OPPORTUNITY DUBUQUE PROGRESS

**3,851** enrollments into the program

**3,582** program certificate completions in advanced manufacturing, information technology, healthcare, construction, transportation, and others

**93%** of graduates are employed or continuing their education 6 months after completion

**30+** employers participating





RESTORED BEE BRANCH CREEK



BEE BRANCH PEDESTRIAN TUNNELS

# AN INTEGRATED MODEL

## Bee Branch Watershed Flood Mitigation Project

**THE BEE BRANCH WATERSHED**, where more than half of Dubuque's residents either live or work, is the area hit hardest during rain events. Six Presidential Disaster Declarations were issued between 1999 and 2011 because of flash flooding that caused an estimated \$70 million in damages. The Bee Branch Watershed Flood Mitigation Project is a multi-faceted approach to addressing the severe flash flooding experienced in the watershed. As the frequency and intensity of heavy rainfall is expected to increase due to climate change, the project continues to be a high priority.

### Completed Phases

The initial phases of the Bee Branch Project included **two upstream detention basins**. The purpose of the detention basins is to hold back stormwater to allow time for the downstream flood-prone area to drain. The construction of the **Carter Road Detention Basin**, in conjunction with the expansion of the **West 32nd Street Detention Basin**, detains stormwater to the extent that the existing downstream storm sewer is capable of handling the peak flood flows. Prior to expansion, floodwaters would overwhelm the downstream storm sewer, rise over top of the basin, and result in a wall of water flowing through the North End contributing to street and basement flooding.

**The Bee Branch Creek Restoration** is the key component of this multi-phased project. It involved replacing almost one-mile of storm sewer with a creek and floodplain that resembles the one that traversed the area more than 100 years ago. Now called the Bee Branch Creek Greenway, the restored creek carries large volumes of stormwater

downstream to the Mississippi without flooding adjacent properties. It also serves as a linear park with a multi-use trail, scenic overlooks, playground, amphitheater, educational areas, benches, lighting, and more than 4,000 plantings.

**The Railroad Culverts Project** was a critical phase of watershed project. The improvements, completed in 2021, increased the flood mitigation system's capacity to protect the area from a 75-year rain event to a 500-year rain event. Six, 8-foot diameter culverts were micro-tunneled under the Canadian Pacific Railway (CP) tracks along Garfield Ave. This allows stormwater to drain more efficiently from the upstream section of the creek to the downstream section.

When the City sought public input on the design of the Bee Branch Creek improvements, residents voiced a desire for pedestrian passage under the railroad tracks. The City assumed ownership of the two original Bee Branch box culverts under the CP tracks and now utilizes them for both flood control and **pedestrian tunnels** when the creek level permits. The pedestrian tunnels opened in 2022.

As it runs down the street, stormwater can form what resembles a river on **Kaufmann Ave., 22nd St., and 17th St.** To increase stormwater capacity, new concrete storm sewers, large high-capacity storm drains, and several additional single-grate storm drains were installed along the corridors. The improvements help alleviate the flash flooding frequently experienced on these streets. The City's ultimate goal is to expand the storm sewer up 17th St. to W. Locust St. toward Kirkwood St.

➤ *The \$250 million Bee Branch Watershed Flood Mitigation Project protects nearly 1,400 homes and businesses that are prone to flooding and prevent an estimated \$582 million in damages over its 100-year design life.*





FLOATING ISLANDS INSTALLATION

> In July 2017, the City installed 14 floating islands in the Bee Branch Creek as a natural way to target excess nutrients in the water and increase biodiversity. The buoyant raft structures, made from 100% recycled BPA-free PET (polyethylene terephthalate) plastic, are planted with aquatic vegetation. The raft material and suspended root systems create an ideal growing surface for bio-film and microbes to break down pollutants such as phosphorus and nitrogen.

## Future Phases

To reduce the amount of stormwater runoff, approximately 240 alleys in the watershed will be converted to **permeable green alleys**. Green alleys allow water to pass through the surface and filter into the soil below. They reduce runoff, replenish ground water, and improve water quality. To date, over 80 alleys have been converted.

In 2024, the City received \$8 million in federal funding to go toward the **Bee Branch Stormwater Pumping Station Project**. Improvements include new flood gates, replacement of two existing flood pumps with four new pumps, and the installation of a backup generator. The estimated completion date is 2027.

Additional Bee Branch phases include a flood mitigation maintenance facility, additional storm sewer capacity improvements in Dubuque's North End, and construction of a six-foot tall permanent concrete floodwall to protect the City's water treatment plant in the event of a failure of the floodwall/levee system or localized flash flooding.

## Creative Funding

The secret to many successful projects in Dubuque can be attributed to a creative approach to funding. For example, we didn't just think "culverts" for the Bee Branch Project. We thought about all the aspects and amenities a flood mitigation project could encompass and then identified specific opportunities for federal, state, local, and private funding. Our flood mitigation project became a trails project, a park project, an economic development project, a brownfields project, and a disaster recovery project. Looking at projects from all angles maximizes funding creating a multiplier effect that benefits the City and residents well beyond a ribbon-cutting.



NEW EGRESS WINDOW | BEE BRANCH HEALTHY HOMES PROGRAM

## Bee Branch Healthy Homes Resiliency Program

Many residents in the Bee Branch Watershed experienced repeated flash flooding from stormwater during heavy rain events, including six Presidential Disaster Declarations 1999 and 2011. As a result, they were living with residual structural issues, electrical hazards, and chronic mold and mildew problems.

The Bee Branch Healthy Homes Resiliency (BBHH) Program included \$8.4 million awarded to properties where low- to moderate-income residents resided in the form of forgivable loans to make repairs and implement onsite stormwater management principles to decrease environmental health and safety issues from flooding. From 2016 to 2021, approximately 280 owner-occupied homes, single-unit rentals, and multi-family units were made more resilient.

The BBHH utilized an innovative home advocacy approach to improve housing conditions. Advocates met with the families to assess their general needs then helped the family develop a personal resilience plan working one-on-one with residents to improve their ability to overcome challenges.

Examples of positive home advocacy outcomes include connecting a participant with a higher education institution to complete a massage therapy certificate, helping a participant create a payment plan with a local utility company to get caught up on energy bills, assisting a participant who frequently traveled to and from Iowa City for medical treatment successfully apply for mileage reimbursement, and providing formula and cleaning supplies to a mother of four. This multi-faceted approach creates a stronger link between the resident's health and the home environment where they reside.



DOWNTOWN DUBUQUE

DUBUQUE FARMERS' MARKET

# ECONOMIC PROSPERITY

Creating green jobs. Expanding markets. Saving money.

## FROM MULTI-GENERATIONAL BUSINESSES TO START-UPS,

Dubuque businesses continue to use innovation and technology to explore opportunities and collaborate with a focus on sustainable economic development. Dubuque's comprehensive Broadband Expansion Initiative has produced dramatic results, creating a five-fold increase in internet carriers, redundant high-speed access to all commercial corridors, and launching a four-year project to bring fiber to every home and business which will be complete in December of 2024. In 2020, the International Economic Development Council (IEDC) awarded Dubuque's Broadband Expansion initiative with the Excellence in Economic Development Gold Award. The initiative also developed a digital equity project that created affordable access to all low income households through a combination of free public WIFI and income-based subsidies for high-speed connectivity

**Dubuque Works** is a regional partnership of non-profits, workforce experts, government, and educators focused on two main goals: 1) identify and address recruitment, retention, and relocation needs; build workforce capacity by enhancing training to meet employer demand, and 2) collaborative workforce efforts with quality research to generate evidence-based practices that improve performance and outcomes for local employers. Through Dubuque Works, the region is taking a proactive approach to ensure a steady pipeline of talent to support our businesses and maximize recruitment and skill development of workforce, regardless of national fluctuations.

The downtown, open-air **Dubuque Farmers' Market** began in the 1840s and is likely one of the most sustainable assets in Dubuque. Through a USDA grant in 2015, access to healthy local foods for all residents was expanded through the introduction of a token system. The tokens enable customers with SNAP benefits to pay for eligible food items at market. Customers may also purchase non-SNAP tokens to spend with any vendor. The token-based system has increased food SNAP options for customers and sales for vendors. In the past few years, at least four vendors have expanded their businesses and opened storefronts to create sustainable businesses.

**Project HOPE** (Helping Our People Excel) is an employment initiative created in partnership by the Community Foundation of Greater Dubuque and Dubuque Works designed to dissolve barriers and help service providers, education and training providers, employers, and job seekers build bridges to establish equitable, long-term employment opportunities for all, including the unemployed and under employed.

Over one million square feet of historic warehouse space has been redeveloped in the **Historic Millwork District**. While private building owners are committed to renovating the warehouses using sustainable best practices, the public sector built complete streets that are accessible for all. The \$200 million mixed-use, livable neighborhood is home to diverse housing options, entrepreneurial businesses, a thriving arts and culture scene, open spaces, and the marriage of historic preservation and energy-efficient technologies.





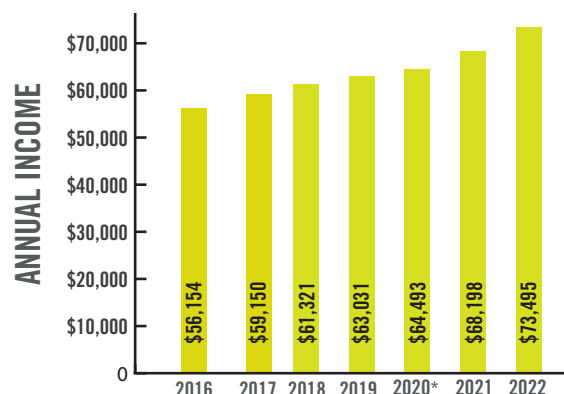
DUBUQUE FARMERS' MARKET | TOKEN SYSTEM

HISTORIC MILLWORK DISTRICT

## DOWNTOWN REVITALIZATION

IMPROVEMENT	1985 - 2023	% SINCE 2000
New Construction	\$264 million	92%
Building Rehabilitation	\$501 million	93%
Real Estate Sales	\$249 million	82%
Public Improvements	\$154 million	95%
Net New Jobs	+ 4,144	69%
<b>Total Improvements</b>	<b>\$1.1 billion</b>	<b>91%</b>

## MEDIAN HOUSEHOLD INCOME



\* 2020 ACS only released 5-yr estimates

## THE ARTS MEAN BUSINESS: Annual Impact of Local Arts and Culture Nonprofits

**\$70.4**

Million in  
Economic Activity

**\$29.8**

Million in Event-  
Related Spending

**\$41.6**

Million in  
Household Income  
to Local Residents

**\$6.7**

Million in Local &  
State Government  
Revenues

**1,527**

Full-Time  
Equivalent Jobs

Source: Arts & Economic Prosperity  
6: The Economic and Social Impact  
Study of Nonprofit Arts and Culture  
Organizations and Their Audiences  
in the City of Dubuque, 2023





# ENVIRONMENTAL INTEGRITY

Reducing emissions. Clean air and water. Healthy living.

Dubuque's **Water & Resource Recovery Center**, the City's wastewater treatment plant, underwent a nearly \$70 million facility upgrade in 2013. The facility uses anaerobic digestion to convert wastewater sludge to 12.5 tons of fertilizer per day. During the digestion process, methane gas is produced, which is captured, cleaned, and burned to power turbines that generate electricity for the facility. Through operational efficiencies and the conversion of waste to electricity and heat, the plant saved \$606,000 in operating costs in its first full year of operation.

The plant also contributes significant environmental benefits, removing 10 tons of oxygen demand per day, which previously went into the Mississippi River, and using 400 kilowatts less per year, which results in 4,715 metric tons of carbon dioxide equivalent not going into our atmosphere. It also processes high-strength waste from local businesses, saving companies like Hormel 60% on their disposal costs and generating revenue for the City. In 2016, the City Council approved a partnership with BioResource Development and Black Hills Energy to inject excess biogas into the natural gas pipeline, creating additional environmental benefits and an income source for the City.

**Dubuque County Watersheds** was created under a 28e agreement between the City of Dubuque, Dubuque County, and Dubuque Soil and Water Conservation District. The agreement provides funding aimed at erosion-control, watershed protection, and flood prevention activities, and promotes cooperation to implement and fund water quality and

quantity projects throughout Dubuque County. The agreement also provides for effective and efficient approaches to watershed activities involving coordination and implementation of Municipal Separate Storm Sewer System (MS4) duties and administration of county-wide erosion control and stormwater responsibilities.

The City of Dubuque has formed an expansive, collaborative approach with both Dubuque County and the Dubuque Soil and Water Conservation District that is working towards increasing conservation measures and profitability on farms, as well as improving ecosystem habitat by partnering with both rural and urban landowners. By forming this partnership, the City is has significantly strengthened the current MS4 program and is now including upstream watershed projects in conjunction with MS4 activities.

The City of Dubuque was also the first city in the state of Iowa to sign an MOU on Nutrient Reduction Exchange. By having this watershed agreement and team in place, watershed projects in Dubuque County can now be registered under a federal database for nutrient reduction accountability and reduction.

**The Dubuque Solar Project** is a combination of two sites, the West Dubuque Solar Garden and the Downtown Dubuque Solar Garden. This project earned the Envision Platinum rating for sustainable infrastructure – the highest Envision award level and the first solar project to receive the recognition.



DUBUQUE'S WATER AND RESOURCE RECOVERY CENTER



INTERSEEDING COVER CROPS INTO CORN

The West Dubuque Solar Garden is a 3.9-megawatt site that uses more than 15,000 panels. The annual output of this 21-acre solar garden is equal to the annual usage of about 727 average Iowa homes. The Downtown Dubuque Solar Garden is located on a former industrial site located between downtown Dubuque and the Mississippi River. This is a 901-kilowatt AC solar garden, and its annual output is equal to the annual usage of about 126 average Iowa homes. It features an educational display and information to teach visitors about advancements in clean energy technology. Both solar gardens are the result of innovative partnership with the City of Dubuque and the Greater Dubuque Development Corporation.

The City of Dubuque has committed to accelerate the adoption of electric vehicles in an effort to reduce the City's greenhouse gas emissions, combat climate change, and save money. With City Council support of integrating the cost of carbon into vehicle purchasing calculations, the City is moving forward with **electrification of its light-duty fleet and transit vehicles**. In partnership with the Iowa Department of Transportation, Greater Dubuque Development Corporation, Alliant Energy, and the Diamond Jo Casino, the area's first DC Level 3 fast charger was installed in 2024 using funding from Iowa's Volkswagen Settlement Environmental Mitigation Trust. Plans also include the installation of an additional fast charger at Dubuque's Historic Federal Building. The City continues to explore electric vehicle infrastructure options to meet our 50% by 2030 greenhouse gas reduction goal.

The City has been a long-time partner of the University of Northern Iowa's Center for Energy and Environmental Education's **Green Iowa AmeriCorps Program**. Each year, the City hosts an Energy and Community Team that performs home energy audits and weatherization to help residents feel more comfortable in their homes while saving money and reducing energy use. Additionally, the Energy and Community Team supports a variety of environmental activities throughout the city and provide support and capacity for the sustainability office.



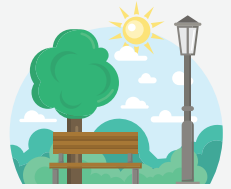
ALLIANT DOWNTOWN DUBUQUE SOLAR GARDEN

## Outcomes - How Are We Doing?

### PUBLIC SPACES + PARKS

61% of Dubuque residents live within a

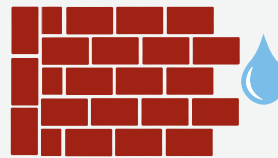
10 MINUTE WALK OF A PARK



15 PESTICIDE-FREE PARKS and counting!

### STORMWATER

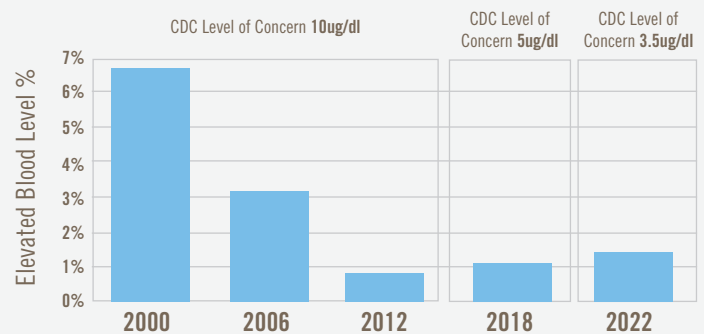
#### Bee Branch Watershed Flood Mitigation Project



Once completed, Dubuque's 240 green alleys are expected to reduce stormwater runoff from alleys within the Bee Branch Watershed by up to

80%

### LEAD POISON PREVENTION



Since 1997, Dubuque's Childhood Lead Poisoning Prevention Program has addressed lead poisoning as a result of old housing stock through lead remediation, education, and engagement of health care providers.

### GHC EMISSIONS GOAL



2003 1,122,597 mt CO<sub>2</sub>e (metric tons of CO<sub>2</sub> equivalent)

2015 10.6% reduction

2018 27% reduction

2024 34% reduction





MULTICULTURAL FAMILY CENTER | INDIA INDEPENDENCE DAY CELEBRATION



CONVIVUM URBAN FARMSTEAD

# SOCIAL/CULTURAL

## Preserving places. Livable neighborhoods.

**EQUITY IS AT THE HEART** of Dubuque's sustainability work. When we take care of our most vulnerable and climate-impacted residents, we are all better off. Instead of asking "What are our critical assets and how are they impacted by climate/natural disasters?," we now offer a human-centered approach: "Who will be impacted first and worst? What do they need? How do we prioritize our actions to support and protect our community?"

The Community Foundation of Greater Dubuque facilitated a community needs assessment specific to mental health services. Based on community feedback, five key recommendations were put forth. The **Brain Health Task Force**, a 34-member stakeholder group, was formed to address the recommendations. The task force had representation from the United Way, Hillcrest Family Services, Mercy Medical Center, SASC, Amerigroup, National Alliance on Mental Illness (NAMI), Dubuque Community YMCA/YWCA, and the City of Dubuque, including law enforcement and public health, along with several individuals personally affected by mental health.

**Community Gardens** are growing across the city of Dubuque/ The Dubuque Rescue Mission, Dr. John Viner, and Washington Neighborhood gardens provide nutritious produce to homeless and at-risk populations. Convivium Urban Farmstead features garden beds on site and in front yards throughout the North End Neighborhood, inviting all to come harvest fresh produce. In the South End, neighbors join forces to establish the Valentine Park

Community Garden. Through their initiative and hard work, with assistance from the City's Park Division, they established a 7,500 sq. ft. fenced garden equipped with on-site water in their park.

**The Multicultural Family Center (MFC)** was established in 2004 and empowers all community members to reach their potential and strives to form a solid foundation of understanding and collaboration across racial, ethnic, age, and socioeconomic groups. The center offers over 30 programs per month and partners with over 75 organizations to welcome new residents to Dubuque, support youth, and connect people of many cultures. In 2020, the Teen Resiliency Corps (TRC), comprised of teens who participated in MFC programs, canvassed their neighborhoods to gather input and begin building block-by-block resiliency. The teens connected with neighbors, many of whom were experiencing social isolation due to the COVID-19 pandemic, and responded to their needs. For example, TRC partnered with Project Rooted, a local non-profit, to provide food boxes to those experiencing food insecurity. This project not only provided job experience, most importantly, it allowed the teens to build relationships with their neighbors and learn about City services. This lived experience creates a culture of community leaders and lasting social outcomes.

In the coming years, this youth group will collaborate with the City's Environmental Justice Tree Coordinator on Branching Out Dubuque, a five-year initiative focused on enhancing Dubuque's tree canopy. The TRC will be engaged in tree selection, planting, and maintenance.



MANTI DAY CELEBRATION



DUBUQUE DREAM CENTER

# VIBRANCY

**What does it mean to be viable, livable, and equitable?** It will mean something different for everyone, but there will be some common threads. A viable community is balanced, successful, and resilient with active and engaged residents and businesses. A livable community is healthy and safe with social, cultural, and economic opportunities. An equitable community is welcoming, fair, and just with the opportunity for people to have the realistic hope of achieving their goals. A viable, livable, and equitable community is a place where residents feel they can stay and lead meaningful lives.

Many local non-profit organizations help make Dubuque a viable, livable, and equitable community. Two organizations exemplify this ethos: **The Fountain of Youth** centers their work on changing the mindsets that contribute to generational poverty through community collaboration, resource sharing, mindfulness, and education. **The Dubuque Dream Center** is a community outreach center committed to mobilizing youth and families to build on Dr. King's dream of transforming communities by embracing, empowering, and unifying those who live there. They strive to inspire vision and purpose through: impacting youth, strengthening families, and building community.

## Outcomes - How Are We Doing?

### RECREATIONAL TRAILS

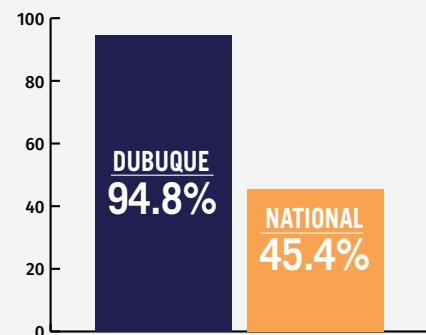
**59%** of Dubuque residents live within  
**1/2 mile** of a hike/bike trail



There are **56.2 miles** of off-street and on-street trails in Dubuque

### CRIME CLEARANCE RATES

In 2022, Dubuque Police resolved 94.8% of all Crimes Against Persons committed in the city. The national average for 2019 (the most current on record via FBI data) was 45.4%.



Additionally, Dubuque has had a **29% reduction** in overall crime from 2015-2023.





# Sustainability Action Checklist

## ACTIONS YOU CAN TAKE TO BE A PART OF OUR CLIMATE ACTION PLAN

- ✓ Eat less meat and dairy 1-2 times per week.
- ✓ Switch your lightbulbs to LED lights.
- ✓ Participate in Bike to Work Week and walk, bike, or carpool to work at least once per week.
- ✓ Make your next vehicle a hybrid or an electric vehicle.
- ✓ Minimize food waste by first eating what you already have in your fridge. Plan your meals ahead and make a grocery list.
- ✓ Start a backyard compost. Alternatively, sign up for the City's curbside yard waste and food scrap collection service.
- ✓ Bring your own reusable produce and tote bags when grocery shopping.
- ✓ Support local second-hand clothing and thrift businesses. Consider your wardrobe life cycle.
- ✓ Use rain barrels and convert lawn areas to native, drought-resistant landscaping.
- ✓ Understand the risk of extreme weather and take caution to safeguard your home.
- ✓ Put together an emergency preparedness kit for your household by visiting [ready.gov](https://ready.gov)
- ✓ Check-in on the people in your life, especially the elderly and those experiencing mental health problems – particularly when extreme weather temperatures strike.
- ✓ Support restaurants, grocery stores, and farmer's markets that use and sell locally grown food.
- ✓ Grow your own food through front or back yard gardens or join a community garden.
- ✓ Plant fruit- or nut-bearing trees that are well suited for your hardiness zone on your property. Plant trees in your yard to provide shade and cooling in the summer heat. Select climate-adapted trees that don't interfere with power lines and preserve the trees you already have.
- ✓ Share your knowledge with others.

# A commitment to CLIMATE

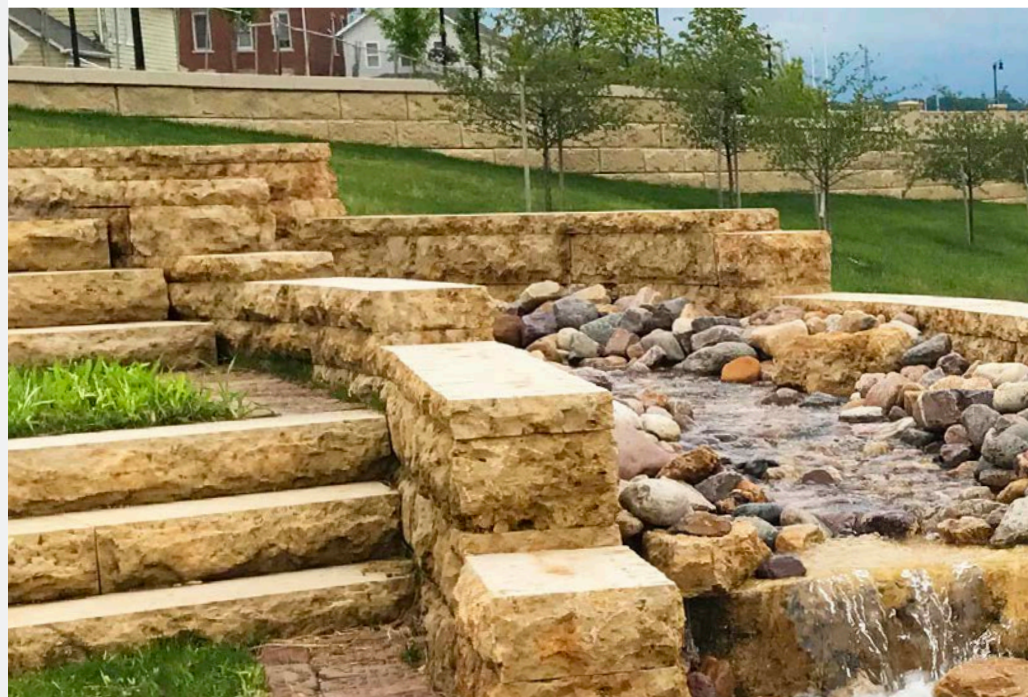
**DUBUQUE HAS MADE AN ACTIVE COMMITMENT** to ambitious climate action, solidifying its part of a historic and powerful response by the world's cities to address the climate crisis. Dubuque's commitment to the Global Covenant of Mayors connects our city with the broadest global alliance committed to city climate leadership, building on the pledges of over 10,000 cities and local governments from six continents representing more than 800 million citizens worldwide. Dubuque has committed to advance climate action in three key areas:

1. reducing greenhouse gas emissions
2. identifying – and adapting to – the risks associated with climate change, and
3. increasing access to clean and affordable energy.

Climate change is the defining issue of our time, both nationally and internationally.

**Dubuque's 50% by 2030 Community Climate Action and Resiliency Plan** was updated in 2020 after extensive community engagement and a focus on human-centered, equitable climate action. The 50% by 2030 Plan lays out the foundation for the city's efforts to reduce its greenhouse gas (GHG) emissions and improve its resilience to future impacts of climate change on its environment, infrastructure, and people. It offers a community approach with actions City Council, City staff, residents, and businesses can take to do their part to reach the 50% reduction of 2003 greenhouse gas emissions by 2030. The plan is broken into sectors – each with its own set of actions and goals, including Buildings and Energy, Transportation and Land Use, Solid Waste, Water, Wastewater and Flooding, Climate Health and

## BEE BRANCH CREEK GREENWAY



# ACTION

Safety, Food, Greenspace and Tree Canopy, Climate Economy, and Climate Action Capacity. Working toward implementation of the recommendations will lead to a more resilient community, improved health, economic prosperity, and improved quality of life.

Climate change is a global phenomenon that creates local impacts. It presents one of the most profound challenges of our time. A broad international consensus exists among atmospheric scientists that the

Earth's climate system is being destabilized in response to elevated levels of greenhouse gas emissions in the atmosphere. Two changes to Iowa's climate are occurring already: shorter winters with fewer cold extremes, and more heavy and extreme precipitation. Increases in the global surface temperature and changes in precipitation levels and patterns are expected to continue and intensify for decades. In turn, these changes in climate have impacts on the economy and health of local communities.

## How Do We Get There?

### REDUCTIONS BY 2030

#### CLIMATE ACTION PLAN BY SECTOR

BUILDINGS + ENERGY	50%
TRANSPORTATION + LAND USE	45.1%
WASTE + RECYCLING	60.4%

### CUMULATIVE POTENTIAL COST SAVINGS OF 50% BY 2030 PLAN:

**\$451,939,000**

Implementing many of the measures in this plan, such as reduction of energy consumption or single-occupancy auto use, and avoided cost of carbon, can save money for the community.

### OUR VISION

To be the first climate resilient community in Iowa, leading in the social and economic transitions necessary to prevent, prepare for, recover from, and adapt to the long-term impacts of climate change.







# PARTNERS IN SUSTAINABILITY

## REALIZING THE IMPACT OF LOCAL ACTIONS

on the global climate, Dubuque is engaged in state, regional, and national organizations and initiatives in order to create a more sustainable future. These collaborations offer Dubuque and other communities the chance to share best practices, learn from each other, and support regional and national initiatives and programs.

### **Dubuque leadership is actively engaged in the following national organizations:**

- Climate Communities ([www.climatecommunities.us](http://www.climatecommunities.us))
- ICLEI – Local Governments for Sustainability ([www.icleiusa.org](http://www.icleiusa.org))
- Urban Sustainability Directors Network ([www.usdn.org](http://www.usdn.org))
- The Funders Network for Smart Growth and Livable Communities ([www.fundersnetwork.org](http://www.fundersnetwork.org))
- International City/County Management Association Sustainability Committee ([www.icma.org](http://www.icma.org))
- Mississippi River Network – 1 Mississippi ([www.1mississippi.org](http://www.1mississippi.org))
- America's Great Watershed Initiative ([www.agwi.org](http://www.agwi.org))
- Mississippi River Cities & Towns Initiative ([www.mrcti.org](http://www.mrcti.org))





## Local & National Partners



Alliant Energy ([www.alliantenergy.com](http://www.alliantenergy.com))  
 Black Hills Energy ([www.blackhillsenergy.com](http://www.blackhillsenergy.com))  
 Catfish Creek Watershed Management Authority ([www.catfishcreekwatershed.org](http://www.catfishcreekwatershed.org))  
 Clarke University ([www.clarke.edu](http://www.clarke.edu))  
 Climate Communities ([www.climatecommunities.us](http://www.climatecommunities.us))  
 Community Foundation of Greater Dubuque ([www.dbqfoundation.org](http://www.dbqfoundation.org))  
 Creative Adventure Lab ([www.creativeadventurelab.org](http://www.creativeadventurelab.org))  
 Dubuque Area Chamber of Commerce ([www.dubuquechamber.com](http://www.dubuquechamber.com))  
 Dubuque Community School District ([www.dbqschools.org](http://www.dbqschools.org))  
 Dubuque County ([www.dubuquecounty.org](http://www.dubuquecounty.org))  
 Dubuque County Energy District ([dubuquecounty.energydistrict.org](http://dubuquecounty.energydistrict.org))  
 Dubuque Initiatives ([www.cityofdubuque.org/dubuqueinitiatives](http://www.cityofdubuque.org/dubuqueinitiatives))  
 Dubuque Main Street ([www.dubuquemainstreet.org](http://www.dubuquemainstreet.org))  
 Dubuque Metropolitan Area Solid Waste Agency ([www.dmaswa.org](http://www.dmaswa.org))  
 East Central Intergovernmental Association ([www.ecia.org](http://www.ecia.org))  
 Four Mounds, HEART Program ([www.fourmounds.org](http://www.fourmounds.org))  
 Greater Dubuque Development Corporation ([www.greaterdubuque.org](http://www.greaterdubuque.org))  
 Green Iowa AmeriCorps ([www.greeniowaamericorps.org](http://www.greeniowaamericorps.org))  
 Hawkeye Area Community Action Program (HACAP) ([www.hacap.org](http://www.hacap.org))  
 Holy Family Schools ([www.holyfamilydbq.org](http://www.holyfamilydbq.org))

ICLEI (Local Governments for Sustainability) ([www.icleiusa.org](http://www.icleiusa.org))  
 Iowa Economic Development Authority ([www.iowaeconomicdevelopment.com](http://www.iowaeconomicdevelopment.com))  
 Iowa Department of Transportation ([www.iowadot.gov](http://www.iowadot.gov))  
 Iowa Department of Natural Resources ([www.iowadnr.gov](http://www.iowadnr.gov))  
 Iowa Department of Cultural Affairs ([www.iowaculture.gov](http://www.iowaculture.gov))  
 Iowa Environmental Council ([www.iaenvironment.org](http://www.iaenvironment.org))  
 Inclusive Dubuque ([www.inclusivedbq.org](http://www.inclusivedbq.org))  
 Iowa State University Extension ([www.extension.iastate.edu](http://www.extension.iastate.edu))  
 Loras College ([www.loras.edu](http://www.loras.edu))  
 Multicultural Family Center ([www.mfcdqbq.com](http://www.mfcdqbq.com))  
 National Endowment for the Arts ([www.nea.gov](http://www.nea.gov))  
 National Trust for Historic Preservation ([www.preservationnation.org](http://www.preservationnation.org))  
 National Mississippi River Museum & Aquarium ([www.rivermuseum.com](http://www.rivermuseum.com))  
 Northeast Iowa Community College ([www.nicc.edu](http://www.nicc.edu))  
 University of Dubuque ([www.dbq.edu](http://www.dbq.edu))  
 U.S. Economic Development Administration ([www.eda.gov](http://www.eda.gov))  
 U.S. Environmental Protection Agency ([www.epa.gov](http://www.epa.gov))  
 U.S. Department of Energy ([www.energy.gov](http://www.energy.gov))  
 U.S. Department of Transportation ([www.dot.gov](http://www.dot.gov))  
 U.S. Department of Housing & Urban Development ([www.hud.gov](http://www.hud.gov))

...and the participating individuals, businesses and organizations that make up these coalitions.





### AWARDS & RECOGNITIONS:

Among other distinctions, public-private partnerships have recently earned Dubuque the following recognitions:

- > **2018** U.S. Department of Education Green Ribbon School - St. Columbkille's Elementary
- > **2018** Leading Environmentalism and Forwarding Sustainability (LEAFS) Award
- > **2018** Score of 100 on 2018 Municipal Equality Index
- > **2018** Dubuque named a LEED-Certified City
- > **2021** A- Score from the Carbon Disclosure Project in Partnership with ICLEI
- > **2022** A- Score from the Carbon Disclosure Project in Partnership with ICLEI
- > **2022** Hawkeye Decarbonization Community Project Award
- > **2024** Engineering Excellence Best of State, American Council of Engineering Companies of Wisconsin
- > **2024** Special Projects Grand Place Award, American Council of Engineering Companies of Iowa
- > **2024** Iowa Community of Character Award, Drake University Robert D. and Billie Ray Center

### MORE INFORMATION

Gina Bell, Sustainability Director

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