



Sustainable Leadership Collaborative: *Progress to Date & Progress Ahead*

February 24, 2021



*August 2019
Launch event*





Today's Agenda



- **Welcome**
 - Dane County Executive Joe Parisi
 - Madison Mayor Satya Rhodes-Conway
- **Celebration of Successes**
- **Opportunities on the Horizon**

Like the August 2019 event, today is a beginning

50+ solar installations at schools, local governments

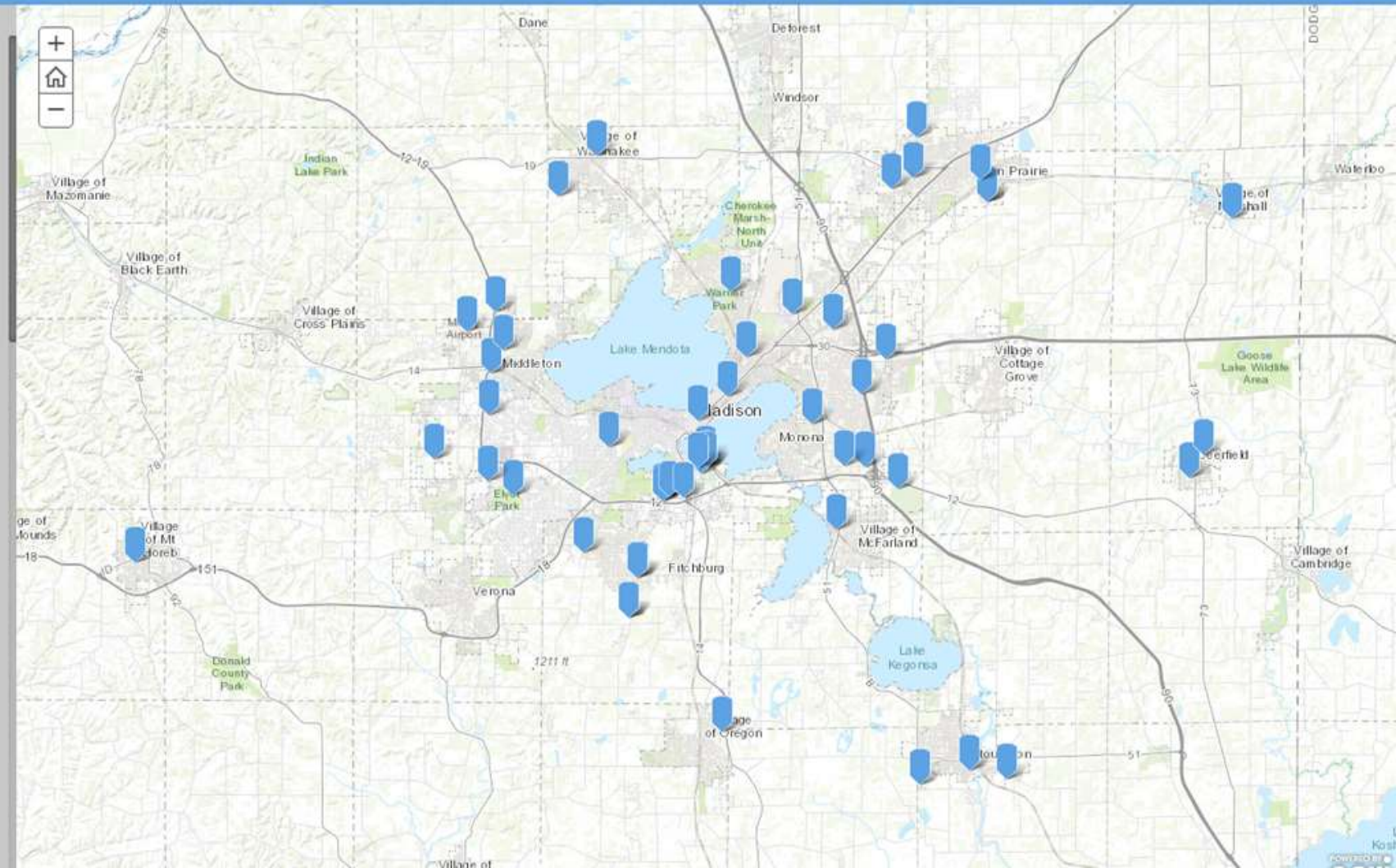
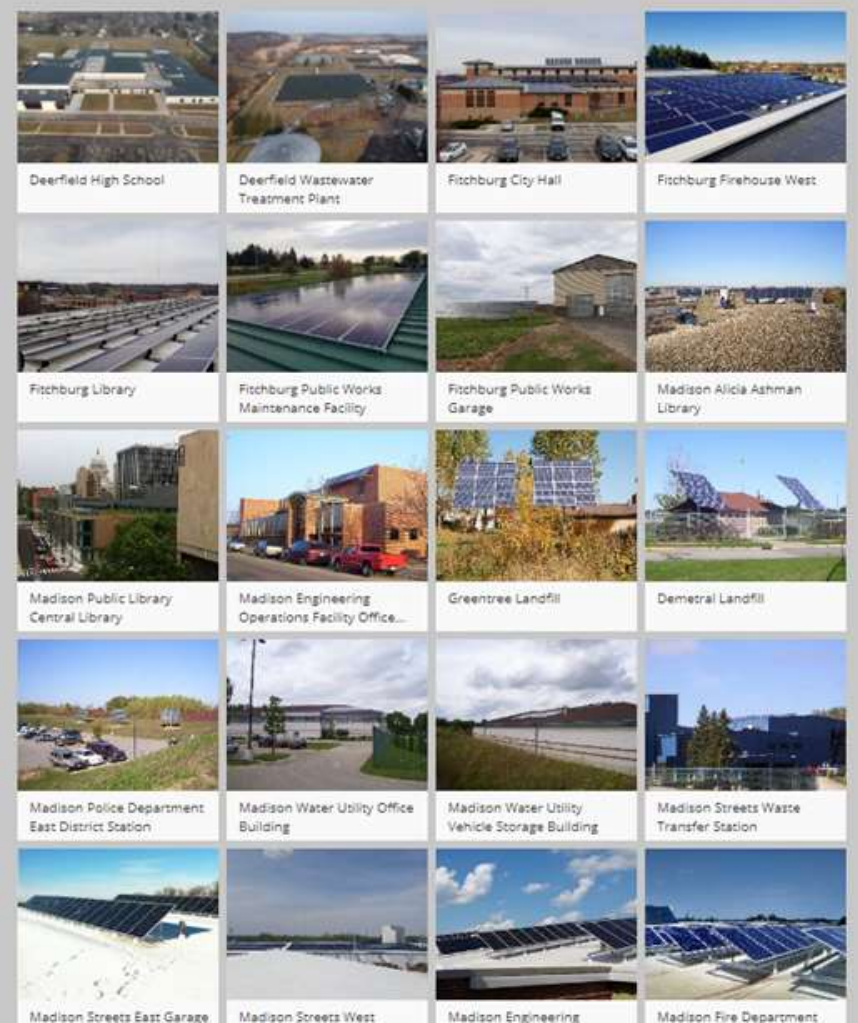
Dane County Clean Energy Map

Edit A Story Map

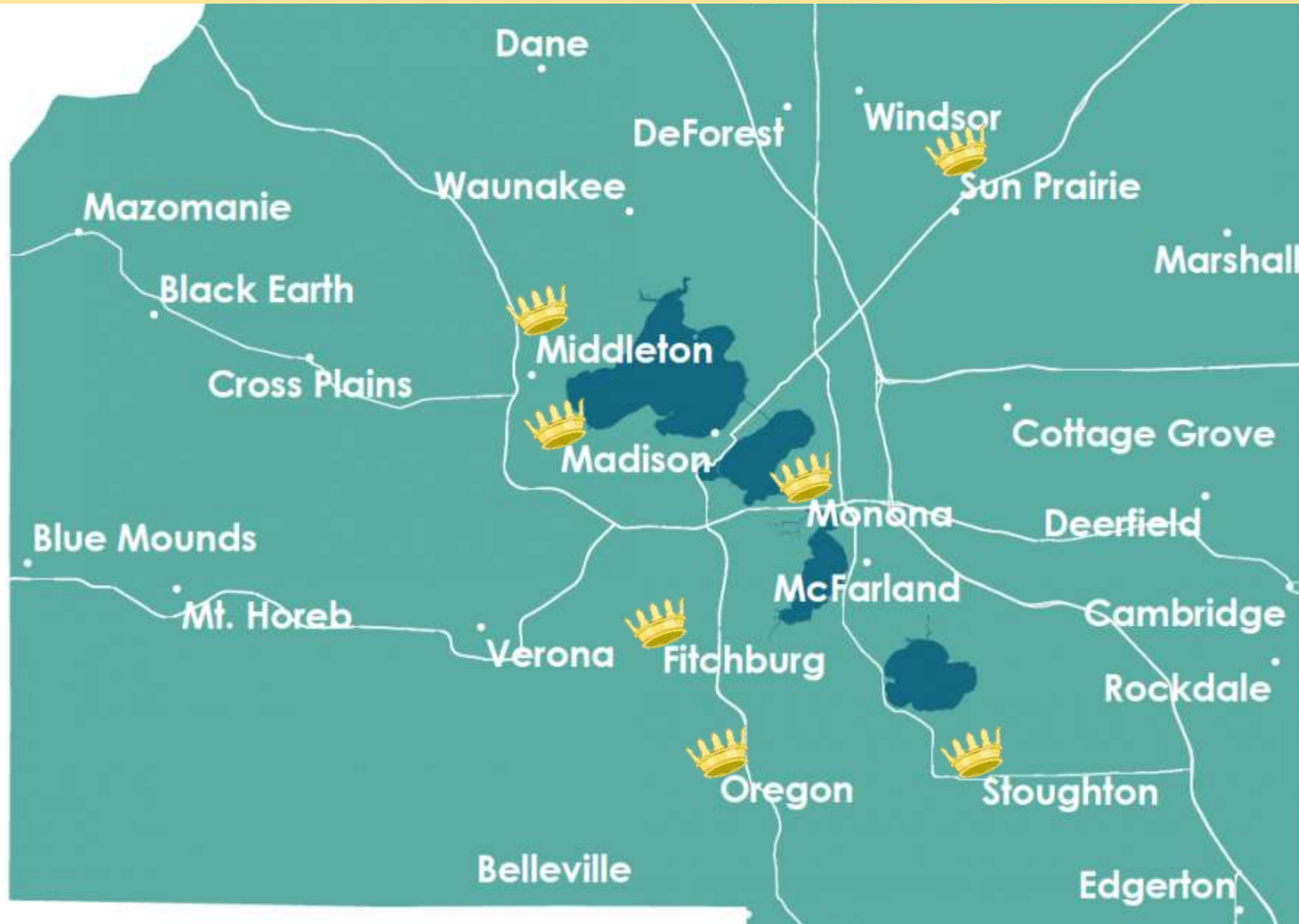


This map showcases clean energy and conservation projects in Dane County. The map features biogas, solar, wind and land conservation efforts around the county.

- Biogas
- Conservation Projects
- Solar at County
- Solar at Local Govts**
- Solar at Businesses
- Wind



2020 Climate Champions!



Communities with Active Sustainability Committees



Community-Specific Successes

A quick tour of sustainability successes across the county...

City of Fitchburg



- 485 kW of solar PV installed on municipal buildings since 2009
- Projected to pass 40% renewable electricity for City operations in 2021
- Named a “Climate Champion” by Dane County Office of Energy and Climate Change, with 4 awards in water and energy.
- Healthy Neighborhoods Initiative in high-risk and under-served areas aimed at pursuing greater equity in services, health outcomes, employment, and opportunities.



Oregon School District

- Forest Edge Elementary is the first net-zero energy school in Wisconsin
- The school is a 2020 Dane County Climate Champion





CITY OF MIDDLETON

- Solar (PV) on three municipal buildings
- RER Agreement with MGE for solar energy at Morey Airport – Energized!
- LEED for Cities Certification 2020-21
- Comprehensive Energy Plan and City Comprehensive Plan adoption
- Operations staff reduced salt use by 50% per storm



Solar energized at Morey Field. City purchased 0.5 MW of 5 MW “shared solar” system.

Climate Champion



—TOWN OF— MIDDLETON *Wisconsin*

- In May of 2020, new solar panels were installed at the Town Hall, through, in part, a generous donation by Town residents Carol and Andy Phelps (pictured).



City of Monona



- 100% Clean Energy and Resiliency Resolution
- 3 Star Dane County Climate Champion for Water Conservation
- Office of Energy Innovation Planning Grant Recipient – Energy Action Planning
- Participant in the Community Impact Grant to promote Health in all Policies (HIAP) through the Legacy Communities Alliance for Health

2019 SUSTAINABILITY PROJECT DASHBOARD

RENEWABLE ENERGY GENERATION AND USE

20.6% Percentage of municipal electricity is derived from renewable sources

5.5% of this energy is generated by solar panels on top of the Library, City Hall, Well #3, and the Public Works Garage

15.1% of this energy is generated by MGE via renewable sources

URBAN FORESTRY AND TREE DONATIONS

To address the Emerald Ash Borer (EAB) infestation in Monona, the City has must remove hundreds of infected Ash trees. To replenish the community's tree canopy, the City started a Forestry Fund. This program allows residents to donate money to help the City replant native trees to replace the dead ash trees. Additionally, the Wisconsin DNR granted the City a \$14,000 Urban Forestry grant to assist the City in removing, replanting, and developing an ash tree abatement plan.



OUTREACH INITIATIVES



39 storm drains were adopted by 18 residents / families in 2019

Eco Action Tuesday events were held at the Monona Library and attracted 20-30 attendees each



In 2019, the City officially approved the final Pedestrian and Bicycle Improvements Plan

The Sustainable Monona Facebook page gained 37 followers in 2019



100% CLEAN ENERGY AND RESILIENCY RESOLUTION

Monona passed a resolution to achieve clean energy goals for the City, including meeting 100% of electric needs for City operations through renewable sources by 2030.

GRAND CROSSING PARK

In 2019, Monona opened a new City park, called Grand Crossing Park, located at the Riverfront development. The park allows more public access to the Yahara river.



POLICE HYBRID VEHICLES



The Monona Police Department purchased two hybrid vehicles. Hybrid police vehicles have a pay-back period of 1-1.2 years and have up to 55% fewer carbon emissions in their lifetime.

ROADMAP FOR THE FUTURE

Monona was awarded an Office of Energy Innovation Grant, along with 7 other municipalities, to create a Comprehensive Energy Plan that will act as a roadmap for future energy policy decisions. The data analysis and recommendations were provided by Slipstream, a local consulting firm.



CITY OF SUN PRAIRIE *Wisconsin*

- 120kW solar PV system at Westside Community Services Building
- Creation of Sun Prairie Task Force on Sustainability
- Broke ground on WPCF Expansion to increase capacity and decrease levels of phosphorous entering the watershed
- 7 hybrid police squads purchased
- Sustainability Coordinator approved in 2021 Budget



- Increase of approximately 4,000,000 gallon/day capacity
- \$84,000/year of energy savings
- Reduction of 5,000 lb of phosphorus being discharged from the facility



Sun Prairie Area School District

Futures depend on us...every child, every day.

- Two new elementary schools use about 75% less energy than a typical primary school
- Feature geothermal heating and cooling systems
- Received incentives through Focus on Energy and WPPI Energy to reduce first costs
- Climate Champion 3-Star Status for Energy Use



City of Verona



- Hybrid Police Cars
- Anti-idling Ambulances
- Overhaul of Zoning Ordinance to add charging stations, compost, solar, native plantings, etc.
- Newly Created Sustainability Task Force



City of Stoughton

- LED Street Light Conversion Downtown
- Public Works Facility Solar Array and Energy Efficient Lighting
 - Facility received **2020 Dane Co Climate Champion** award
- Completed Building Energy Audit with Slipstream utilizing OEI Grant



Village of Cottage Grove 2020 Highlights

- Creation of a 5-member Ad-Hoc Sustainability Committee
- Passing of Resolution 2020-11 “To Transition Current And Future Energy Demand To Renewable Energy Sources”.
- Letter of support for MG School Districts High School Solar Project grant application

Village of Cottage Grove commits to transition to electric vehicles by 2030

f t e b k

The Village of Cottage Grove passed a resolution in late September with several sustainability-focused goals, including some long-term ideas.

Ad Hoc Sustainability Committee Resolution 2020-11 states that the village will transition all village-owned vehicles to fully electric vehicles by 2030 and all heavy machinery by 2050.

In addition, the village has set a goal to not exceed 100% of kWh consumption from 2019, which was 1,200,00 kWh. If the village exceeds that limit, the resolution states that it will purchase the excess energy from renewable energy programs.

By 2030, the resolution states that the village will reduce its net annual electrical consumption for village operations by 50% by 2030 and 100% by 2040 “through the investment in renewable energy installations on village-owned properties.”

Article in the Herald-Independent on Oct, 6th, 2020



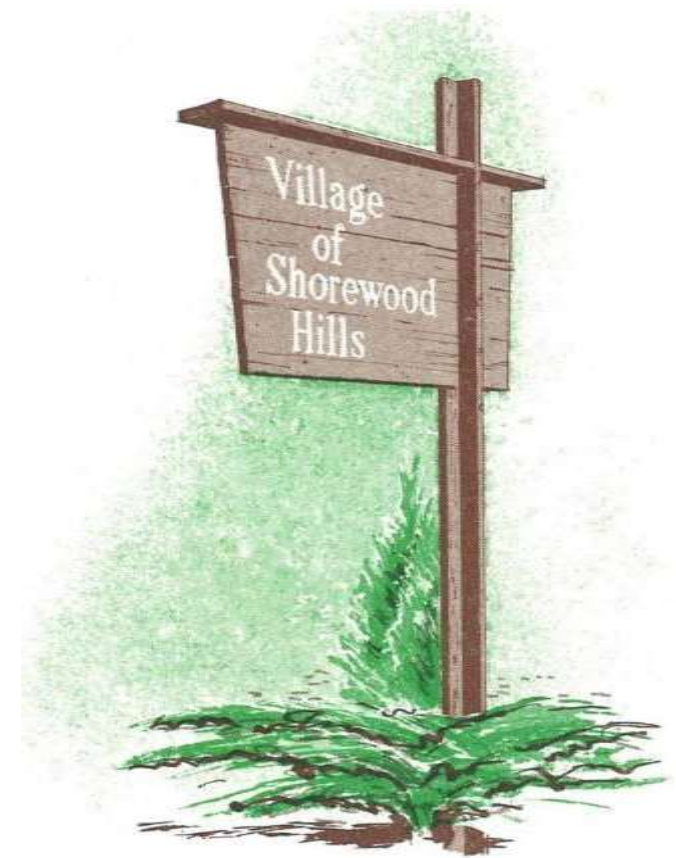
Village of McFarland

- Added a 31.5 kW solar energy system to the Public Works building
- Created an Ad-Hoc Sustainability Committee
- Joined WDNR Green Tier Legacy Community Program
- Started a Salt Saver Pilot Project to improve water softener efficiency and reduce chloride in the sewer system



Village of Shorewood Hills

- First Village and the second municipality in Wisconsin to achieve 100% renewable electricity through purchase of solar shares and wind energy through MGE
- Village Sustainability Plan adopted and will be incorporated into 2021 Comprehensive Plan
- Citizen based “Green Team” formed to work with the Village government and residents to implement Plan initiatives





Town of Vermont Climate Action Workshops

- Feb-Mar-Apr 2020 ... in person >> webinars
- Broadened to neighboring communities
- *What Can We Do??* >> ***What We Can Do!***
- Dane County Climate Action ... Energy Efficiency ... Western Dane County Solar Group Buy
- 18 installations, 120 kW, \$300,000





City of Madison

Climate Champion



- 13 LEED Certified Facilities
 - 4 Platinum
- 74% Renewable Energy Electricity
 - 1 MW City Owned, Behind the Meter
 - 14 MW Renewable Energy Credits
 - 5 MW MGE Renewable Energy Rider (with MMSD)
- Fleet Sustainability
 - 59 EVs Including Metro's 3 busses
 - Over 60 hybrids
 - 600 trucks on biodiesel
- Stormwater Development Standards



Madison's Environmental Sustainability Vision Takes Hold



MMSD Board of Education 2019 Resolution

Meet 50% of all operations energy needs with renewable energy by 2030, 75% by 2035, 100% by 2040

Examples of Current Practices:

- West Geothermal Sites
- West 100Kw Roof Solar Array
- Electric vehicle fleet replacement
- Outdoor learning spaces at over 20 school sites
- School nutrition incorporates local farmer sourcing foods and garden bars
- Hands-on learning in urban agriculture at multiple schools
- Madison Gas & Electric\City\MMSD to build an 8-megawatt (MW) solar array (MMSD 3MW): approx 20% reduction

MMSD Future Ready Referendum 2020: \$317M (\$2M+ solely for environment)

- In response to community feedback, \$2M was added to the facilities referendum beyond the base scope for sustainability projects
- Focus on innovation and more efficient mechanical systems; solar; rainwater mgmt; student-led initiatives; prototype learning spaces

What's next?

- Referendum-funded facilities projects with clean and renewable energy components design, bid, and build process
- \$100K Public Service Corporation Energy Innovation Grant pending to develop a district-wide Comprehensive Energy Plan to guide the future course of work through the planning of the referendum facilities work and beyond

Dane County



- Climate Action Plan released
- RNG facility enabling manure digesters to sell their RNG into pipeline
- 1/2 county snowplows use RNG
- MGE airport solar complete
- Alliant solar project in process
- *100% clean electricity for all county operations by 2024*
- 30+ countywide Climate Champions in 2020



Community-Specific Successes

A deeper dive into two stories – from Sun Prairie and Vermont.



CITY OF SUN PRAIRIE *Wisconsin*

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Town of Vermont Climate Action

- Feb-Mar-Apr 2020 ... in person >> webinars...
- Broadened to neighboring communities...
- 1 Dane County Climate Action ...
2 Energy Efficiency ... 3 Western Dane County Solar Group Buy...
- *What Can We Do??* >> ***What We Can Do!***
- 18 installations, 120 kW, \$300,000 ... county-wide 2021





Looking Ahead



- Two Group Solar Buys!
 - MadiSUN
 - Legacy Solar Coop

Dane County Office of Energy & Climate Change

Making Solar Energy Easy: Two Group Buy Opportunities

Research shows that some households are overwhelmed by the process of getting solar—verifying that their home is a good solar site, finding solar contractors, getting bids for the installation and understanding the financial case for action.

Households can overcome those barriers through a **Solar Group Buy**.

The Group Buy process makes solar easy—helping homeowners through every step of the process and even providing bargain solar rates, negotiated in advance with local solar contractors. Participating in a Solar Group Buy is like having a free project manager for the whole process—it makes everything much easier!

The awesome news for 2021 is that Dane County residents have access to TWO solar group buy efforts:

- **Legacy Solar Coop** is building on their [successful 2020 group buy in Western Dane County](#). Legacy's 2021 Group Buy is available across Dane County.
- **MadiSUN**, the program that has served city of Madison residents since 2016 is expanding its services countywide, with an emphasis on reaching underserved populations.

Dane County residents can contact either entity to participate in a Solar Group Buy program.



Looking Ahead



- **Strategizing about Federal Stimulus**
 - Shovel-Ready Projects?
 - Opportunities for Collaboration on Cross-Community Challenges?



Looking Ahead



- More School – Local Government Collaboration
- Other hot topics
 - Food Waste & Recycling
 - New Electric Vehicle Options
 - Energy & Resilience Planning
 - And?



Thank you!

This collaboration works because you participate!