

An aerial photograph of a large-scale solar farm. The solar panels are arranged in neat, parallel rows across a vast field. In the background, there are some trees, a utility pole, and a small building. The overall scene is bright and clear, suggesting a sunny day.

MSD Wayne Township Energy Management Plan Update



Current Project Construction Progress

Project entirety is 79% complete

- Project went under contract 03/07/2022
- Total of 13 different ECMs

Status on:

▪ **Batteries**

- 80% Complete
- 9 Locations
 - 3 Locations w/ 250KW batteries
 - 6 Locations w/ 125KW batteries

▪ **Boilers**

- 99%
- 5 plants demo and operational in 4 months

▪ **Chillers**

- 75% complete
- 6 Location
 - 3 Cooling Tower Rebuilds
 - 3 New Chiller Plants

▪ **Occupancy Sensor**

- Complete
- Total of Occupancy sensors installed: 1353

▪ **Solar**

- 3 Completed
- 2 sites currently under construction

▪ **VFD Installation**

- 90% Complete
- Replaced 127 VFD
- Installed 48 new

▪ **Sport Lighting**

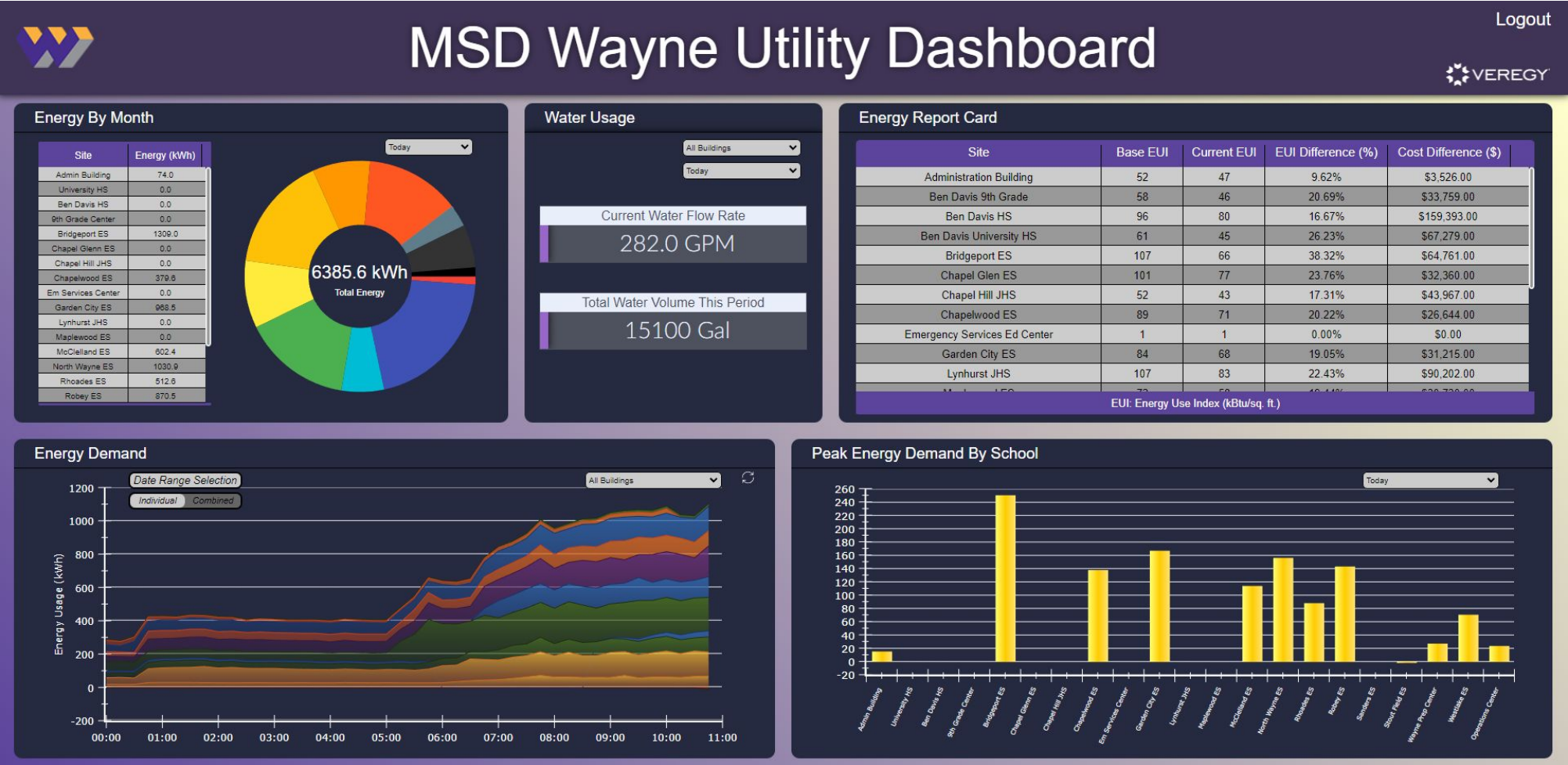
- All new Sports lighting at the BDHS Football Stadium
- 10 day install
- Completed

▪ **Monitoring**

- Installed monitoring on all electrical, gas and water services that report to a new dashboard specific to Wayne
- Installation completed
- Dashboard is constantly evolving.



MSD Wayne Energy Dashboard





Building Consumption & Greenhouse Gas Equivalencies

Energy Savings
To-Date:

\$1,007,808

2019

Greenhouse Gas Emissions
Equal to:

- 5,014 Cars Driven
- Over 2,700 Homes Energy Use
- 127 Railcars of Coal Burned

2022

Greenhouse Gas Emissions
Equal to:

- 3,454 Cars Driven
- 1,915 Homes Energy Use
- 87 Railcars of Coal Burned

Building Energy
Consumption:

20.8%
Reduction

These Greenhouse Gas Equivalencies will be added to the
MSD Wayne Utility Dashboard in the future.

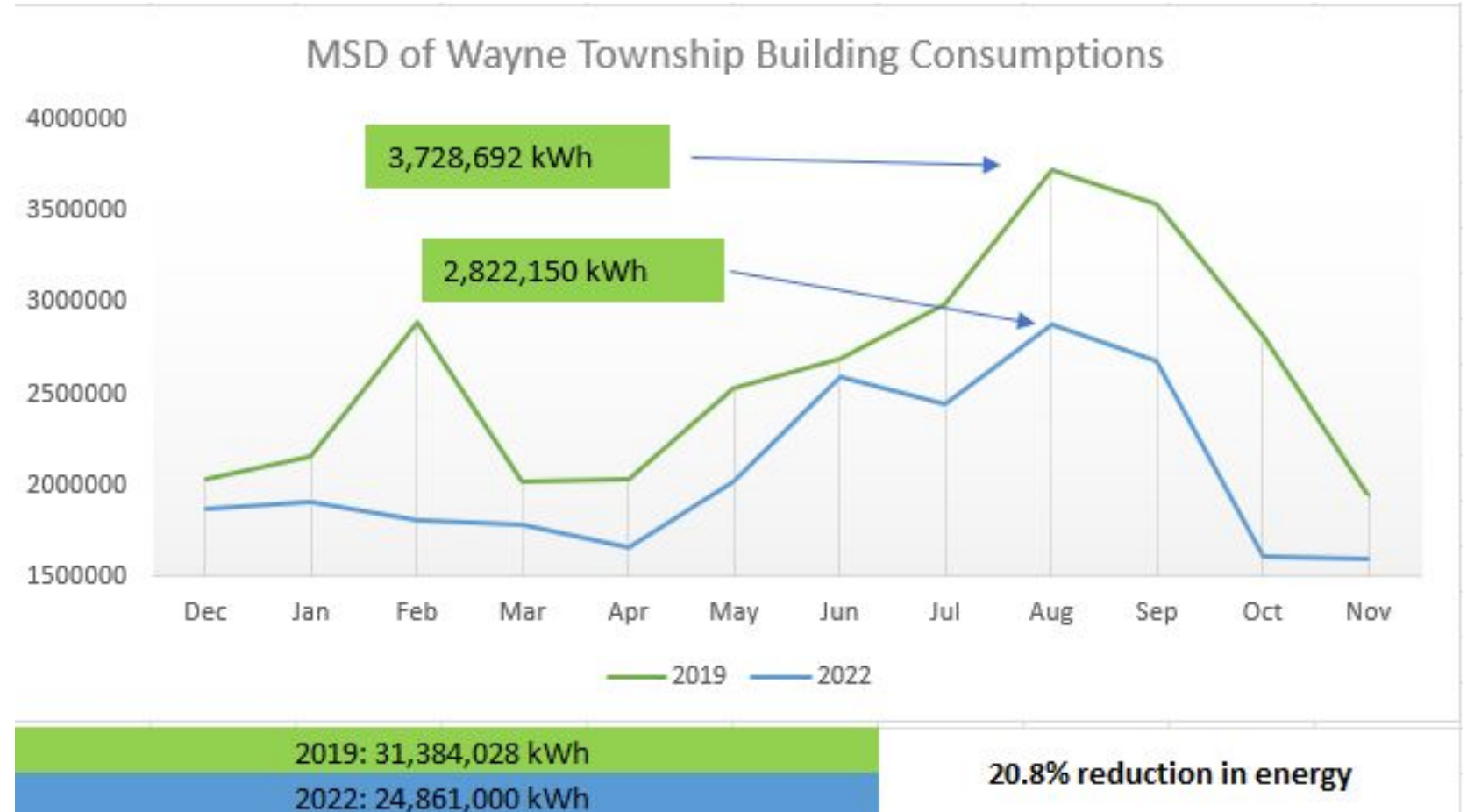


Building Consumption & Greenhouse Gas Equivalencies

Energy Savings:

\$1,007,808

6,523,028 kWh

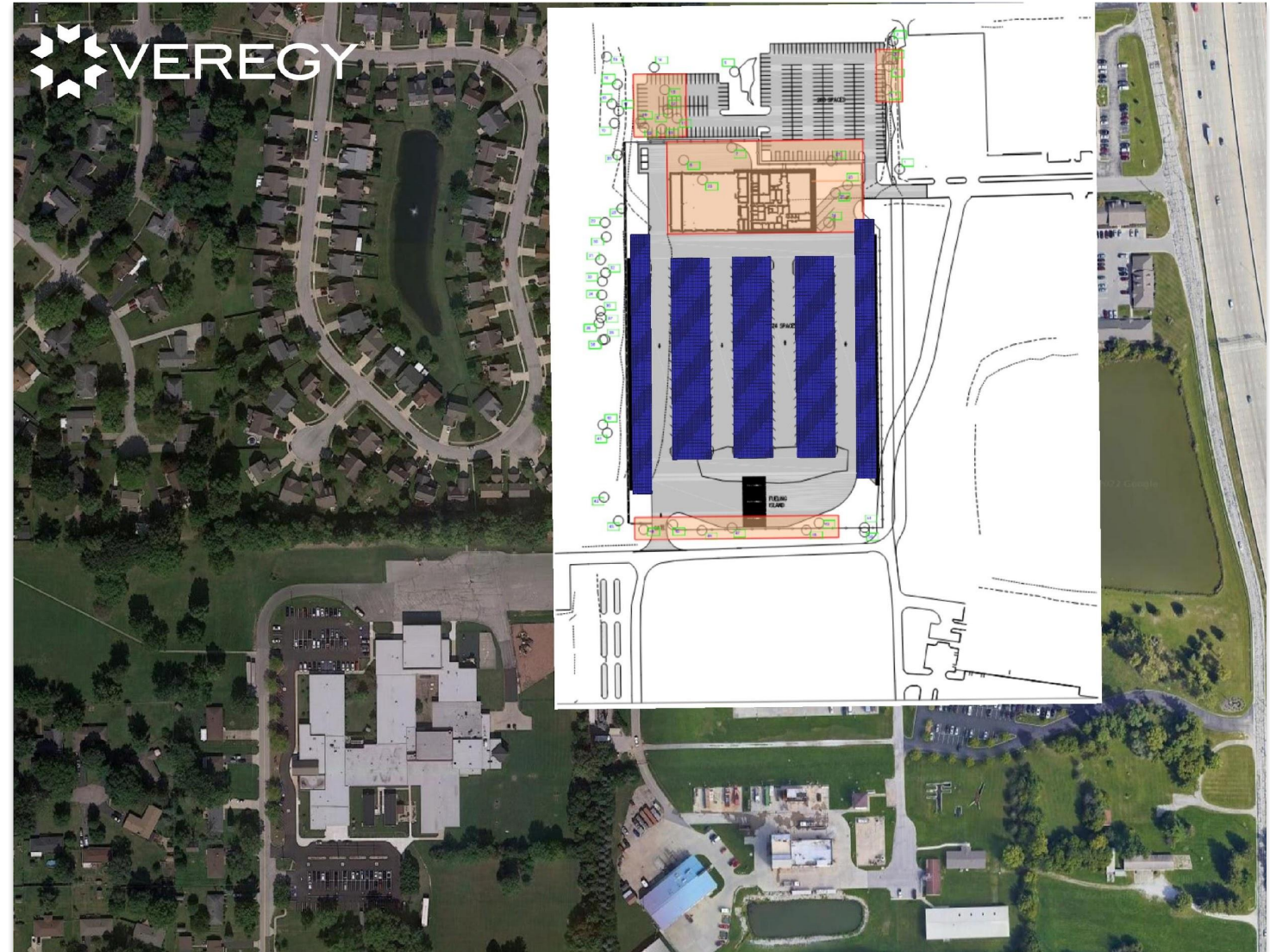


AES Utility Escalations □ above the normal 5.7% average

- **AES Indiana customers could see nearly 19% rate increase this fall**
- INDIANAPOLIS – At a time when budgets are already tight, things could get worse for AES Indiana customers to the tune of a nearly **19%** rate increase this fall.
- The utility company [has asked the Indiana Utility Regulatory Commission](#) (IURC) to approve its request for a rate hike. The request came to light Friday when AES filed its Fuel Adjustment Clause tracker. The clause allows utilities to adjust customer prices based on fluctuations in fuel costs.

Complete Campus-Wide Energy Master Plan:

**Westlake ES/Convention
Center/FS HQ/ Transportation
Center/future Elec Buses – First
phase is 3 middle canopies.**



Existing Electric Footprint



Westlake Elementary School 519,600 kWh



Westlake Elementary – Chillers 211,680 kWh



Bus Garage 569,520 kWh



Electric Bus Chargers** 100,000 Kwh



Fire Main Office 425,000 kWh



Grand Hall 201,800 kWh



Total kWh Usage 2,027,600 kWh

- MSD Wayne's Transportation Solar Array would provide a net zero carbon offset program for all 4 existing campus buildings. We will then add additional Solar power for the new Transportation Center and first stage Bus chargers.
- School buses would be fueled by the sun and reducing emissions.
- Will generate 7.5 million dollars of Energy kwh reduction over 20 years.



What's Next?





Environmental Attributes

The iron and steel industry will buy up to \$250 Billion in Carbon Credits for Net Zero.

SREC

- Limited market (currently Ohio market only for Indiana customers).
- Average sell price for last 4 years: \$6.50 (per 1,000 kWh) – averaging about \$13,760 a year.

Carbon Credits

- Future market will be open to all of US & Europe.
- Current sell price for Carbon Credits: range from \$10 - \$35 per credit.

Both environmental credits fluctuate like stocks.





2023 Project Request for Proposals (RFP)

Water Heater Replacements

Air Handlers

MEP Upgrades

Hot Water Pumps/Re-piping

**Field Lighting-Baseball Field, Band Practice
Field, Softball Field**

Expected Cost: \$5,000,000





2023 Project Request for Proposals (RFP)

Timeline

January 20th & 27th – Advertisement

February 24th – Proposals Due

March 6th – Recommendation to School Board

