



Green Schools Presentation: Sustainability & Energy Efficiency Programs

April 13, 2023

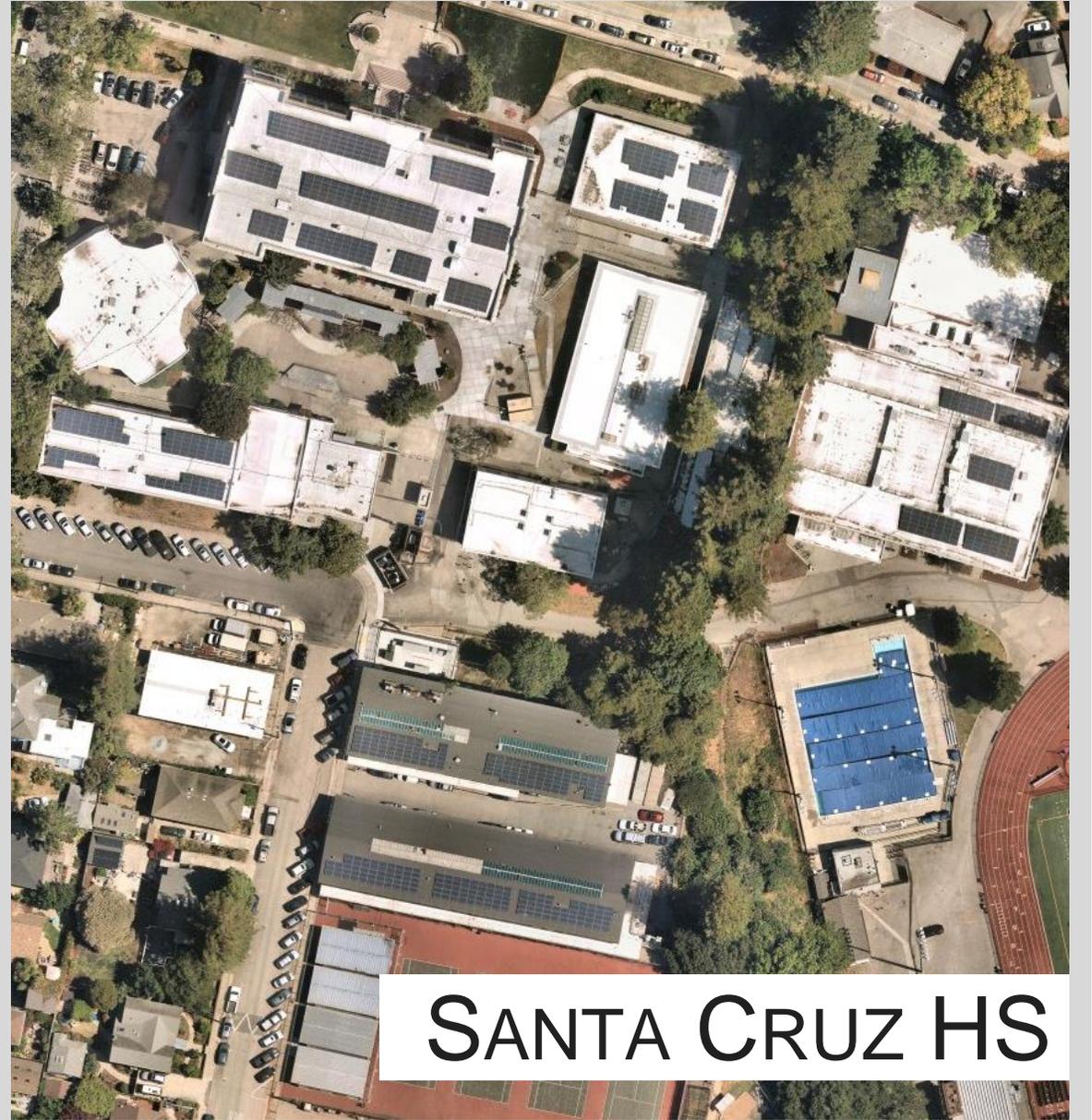


Solar PV (2014)

SOQUEL HS



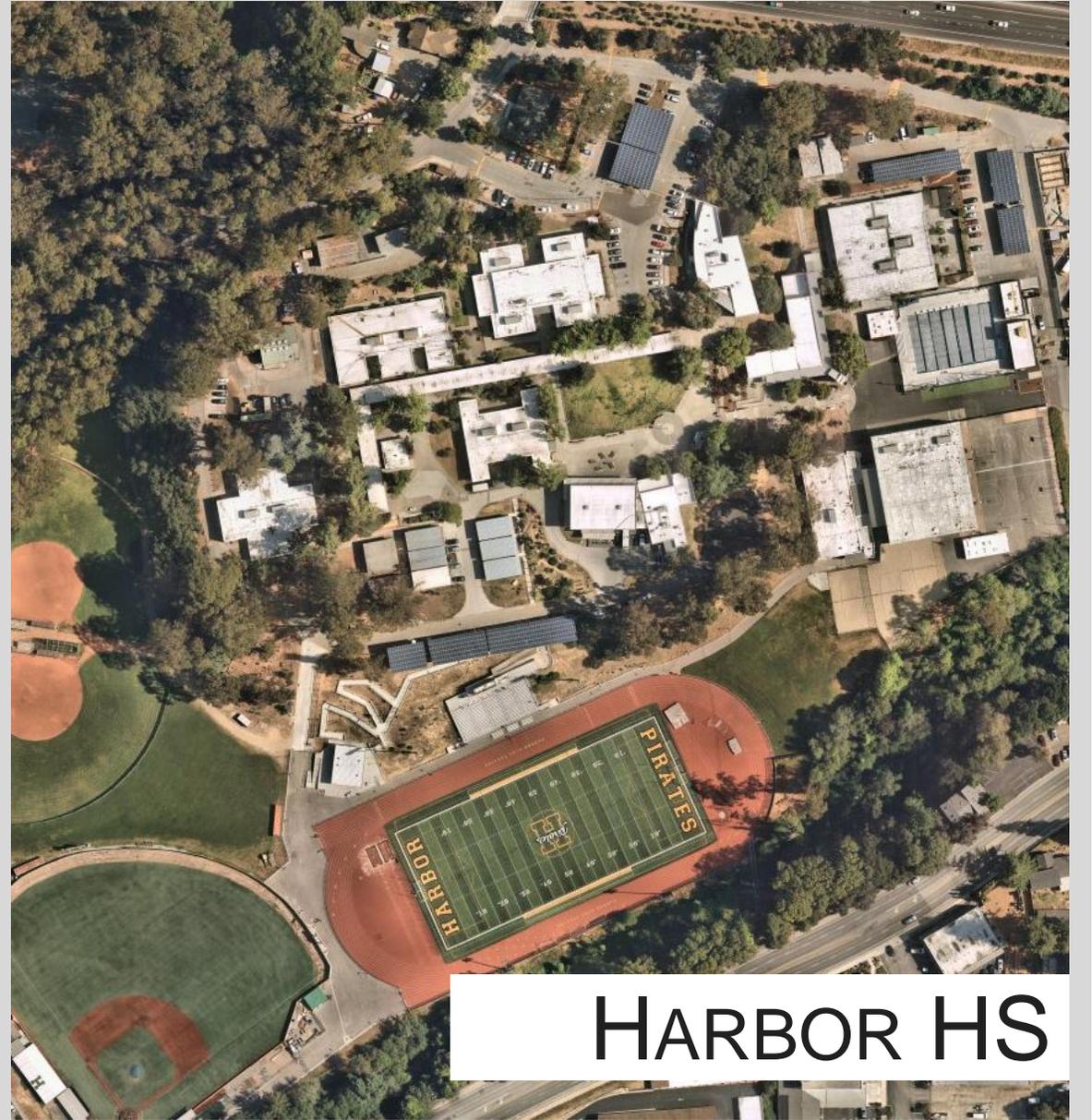
SANTA CRUZ HS



GAULT ES



HARBOR HS



WESTLAKE ES





Energy Efficiency & Additional Renewables (Starting 2015)

Energy Efficiency & Sustainability Improvements Summary (To Date & Ongoing)

In collaboration with Climatec, SCCS has developed and has implemented or is currently implementing the following measures:

Completed:

- New high efficiency HVAC units
- New building automation systems
- Partial LED lighting modernization

Currently underway

- New high efficiency HVAC units
- Add high efficiency HVAC units to unconditioned spaces
 - Offset by new solar PV
- Integrate building automation systems
- New solar PV shade structures



High Efficiency HVAC Modernizations

High efficiency HVAC Modernizations

Replaced aging HVAC units with high efficiency HVAC Units at to sites:

- Bay View ES
- DeLaveaga ES





Add High Efficiency HVAC Units to Unconditioned Spaces

Adding High Efficiency HVAC Units

Adding new high efficiency HVAC units to unconditioned spaces at two campuses:

- Bay View ES – Buildings D & E, and Cafe
- DeLaveaga ES – Building 1 & 2

These installations are currently underway.





New Building Automation Systems (BAS)

New Building Automation Systems

BAS modernization:

- Admin/ Soquel HS
- Bay View ES
- DeLaveaga ES
- Facilities
- District Office



Integrate Building Automation Systems

Integrate new HVAC unit's BAS into existing District BAS:

- Bay View ES
- DeLaveaga ES

These installations
are currently underway.





Partial LED Lighting Modernization

Partial LED Lighting Modernization

Completed partial interior & exterior LED lighting modernizations at :

- Admin/ Soquel HS
- Bay View ES
- DeLaveaga ES
- Gault ES
- Harbor HS
- Westlake ES





Additional Solar PV

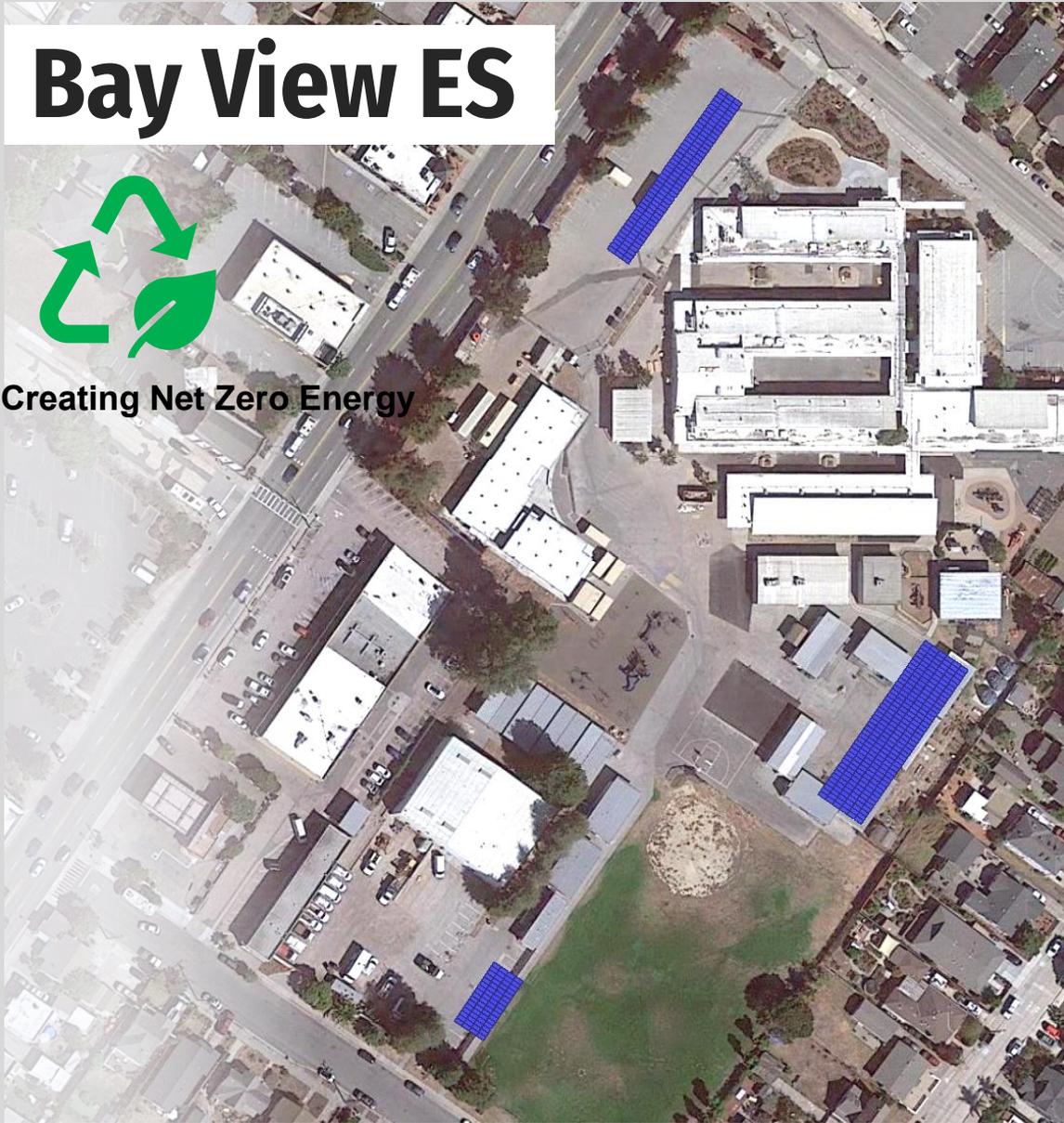
Sample Future Solar PV Structures



Bay View ES



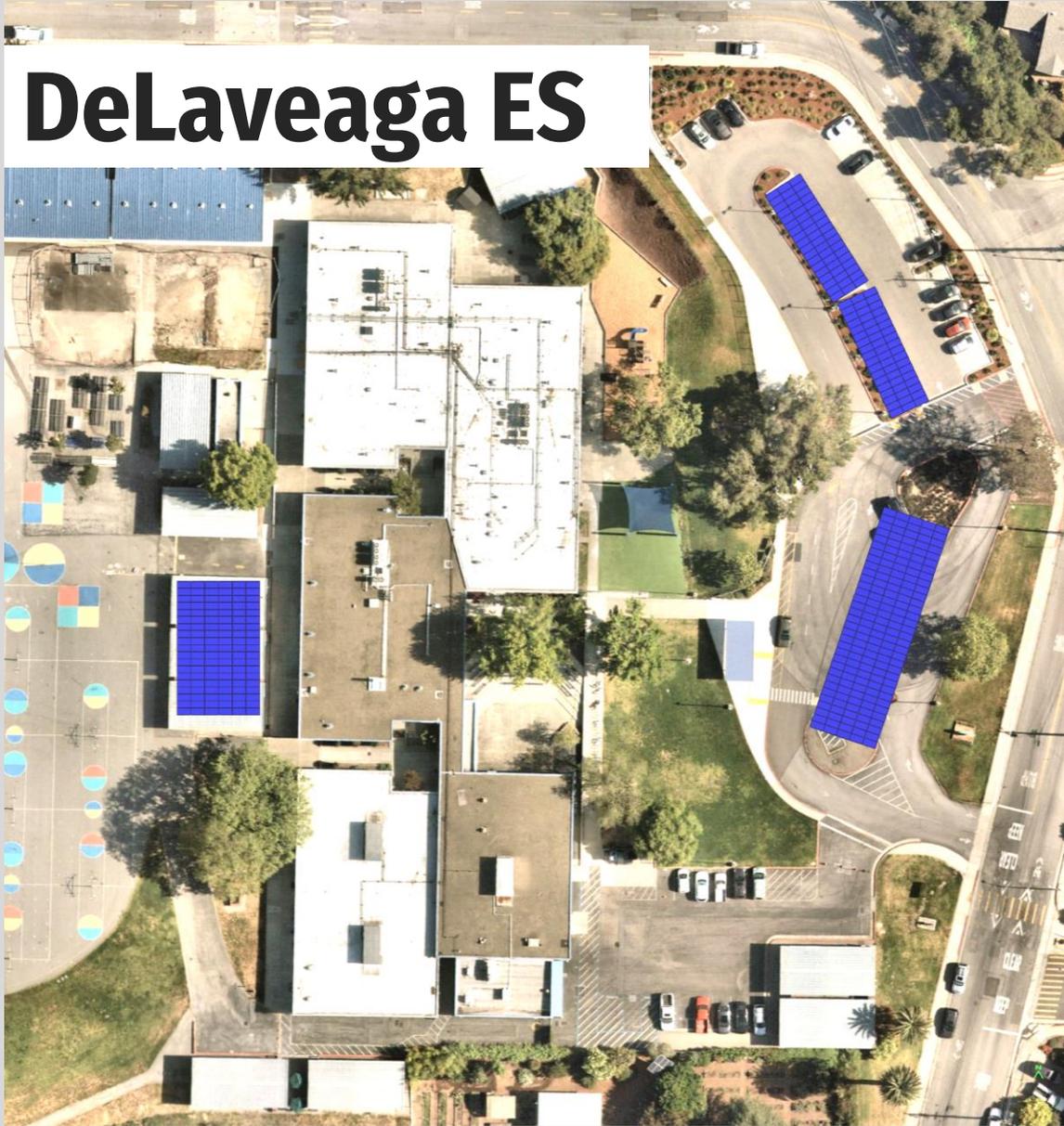
Creating Net Zero Energy



Branciforte MS



DeLaveaga ES



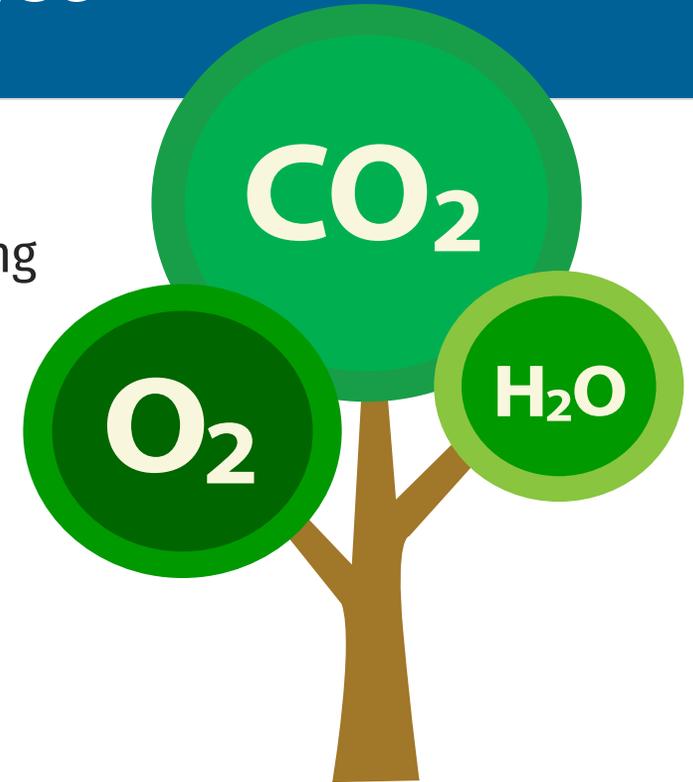
Gault ES

Environmental & GHG Emissions Impact



8,828 TONS CO₂ REDUCED SINCE 2014*

District set to avoid an additional 1,851 tons CO₂ annually following current program (Climatec Phase IV) implementation



Cumulative environmental impact equivalencies since 2014*:



1,782

Cars removed from the roadway



901,162

Gallons of gasoline saved



1,558

Santa Cruz homes powered



160,189

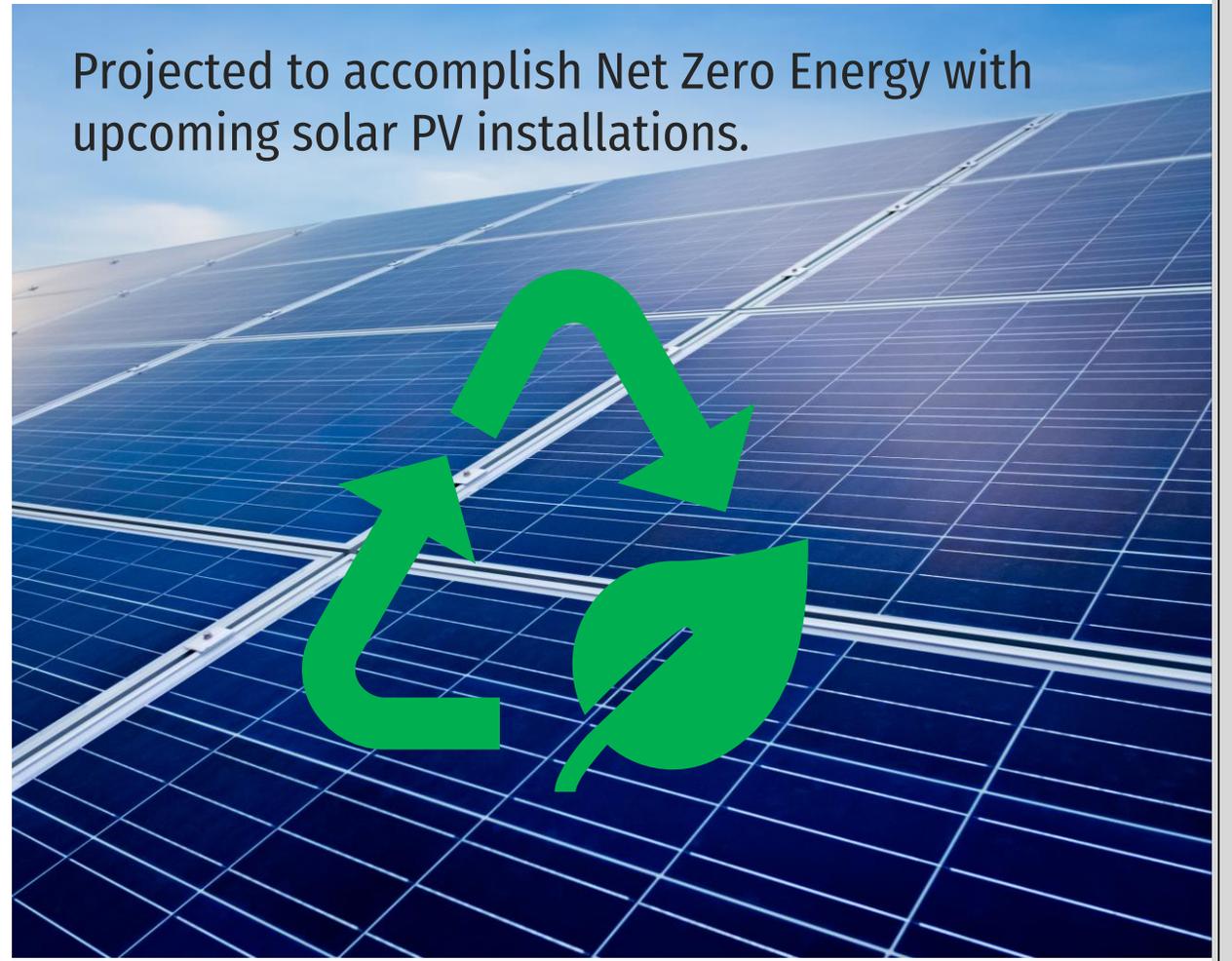
Trees preserved from deforestation

*Includes all sustainability efforts thru December 2022

Bay View ES | Net Zero Energy Site



Projected to accomplish Net Zero Energy with upcoming solar PV installations.



Future Initiatives/Opportunities

- Additional Solar PV Shade Structures
- Remaining Interior/Exterior LED Lighting
- Remaining LED Sports Field Lighting
- Renewable Energy/ Fuel Cells
- Battery Energy Storage
- Electric Vehicle (EV) Charging Stations
- Trash Compactors
- Comprehensive GHG Emissions Study
- Educational Integrations (i.e. classrooms, STEM, etc)



Community Engagement | Fall 2023-2024

Inform

- Press Releases
- Ribbon Cutting
- Dedications
- Ground-Breaking
- Sustainability Website



Involve

- District Events
- Local Fairs
- Career Days
- Walking tours with local leaders & community members



Inspire

Promote student citizenship while inspiring the community to think critically and creatively about energy efficiency.



Questions?

