



# Sustainable La Crosse

Guaranteed Efficiencies

## Climate Action Plan Implementation

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# La Crosse Sustainability Project

## Agenda:

- Sustainability Partnership in Review
- La Crosse Climate Action Plan
- Implementation Opportunities – Phase IV



# La Crosse Sustainability Project

## Energy Demand Reduction

- Mechanical equipment replacement
- Retrofit lighting to LED
- Efficiency monitoring and reporting
- Investment at **City Hall, Libraries, Municipal Service Center, Fire Stations, Parks, Street lighting and the La Crosse Center**

## Renewable Energy Supply

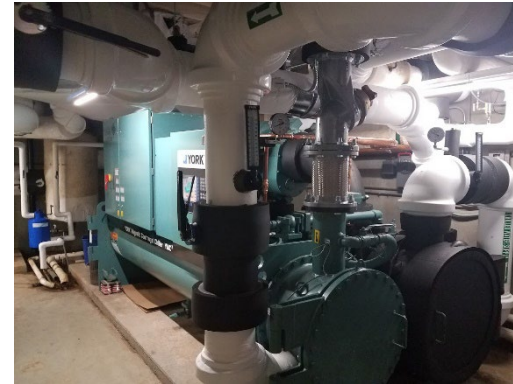
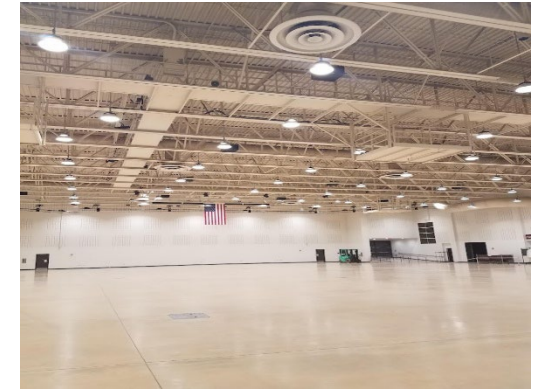
- City-owned Solar Arrays: Seven (7) locations totaling over 0.5 MW

Status: Implemented/Generating Savings

Total Investment in facilities: **>\$9 million**

Total Project Benefits (over 20 years): **> \$11 million**

Annual savings equivalent to **2,339 Metric Tons of CO2**





# City-owned Solar PV Arrays



Municipal Service Center: 100 kW



Main Library: 100 kW



City Hall: 100 kW



Fire Station #1: 36 kW



Fire Station #3: 30 kW



Copeland Park: 60 kW



La Crosse Center: 100 kW



# La Crosse Sustainability Project

2,339 Metric Tons of Carbon Dioxide (CO<sub>2</sub>) equivalent

This is equivalent to greenhouse gas emissions from:

504 gasoline-powered passenger vehicles driven for one year



5,806,827 miles driven by an average gasoline-powered passenger vehicle



This is equivalent to CO<sub>2</sub> emissions from:

263,236 gallons of gasoline consumed



229,802 gallons of diesel consumed



2,588,314 pounds of coal burned



31 tanker trucks' worth of gasoline



295 homes' energy use for one year



455 homes' electricity use for one year



<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

# La Crosse Climate Action Plan

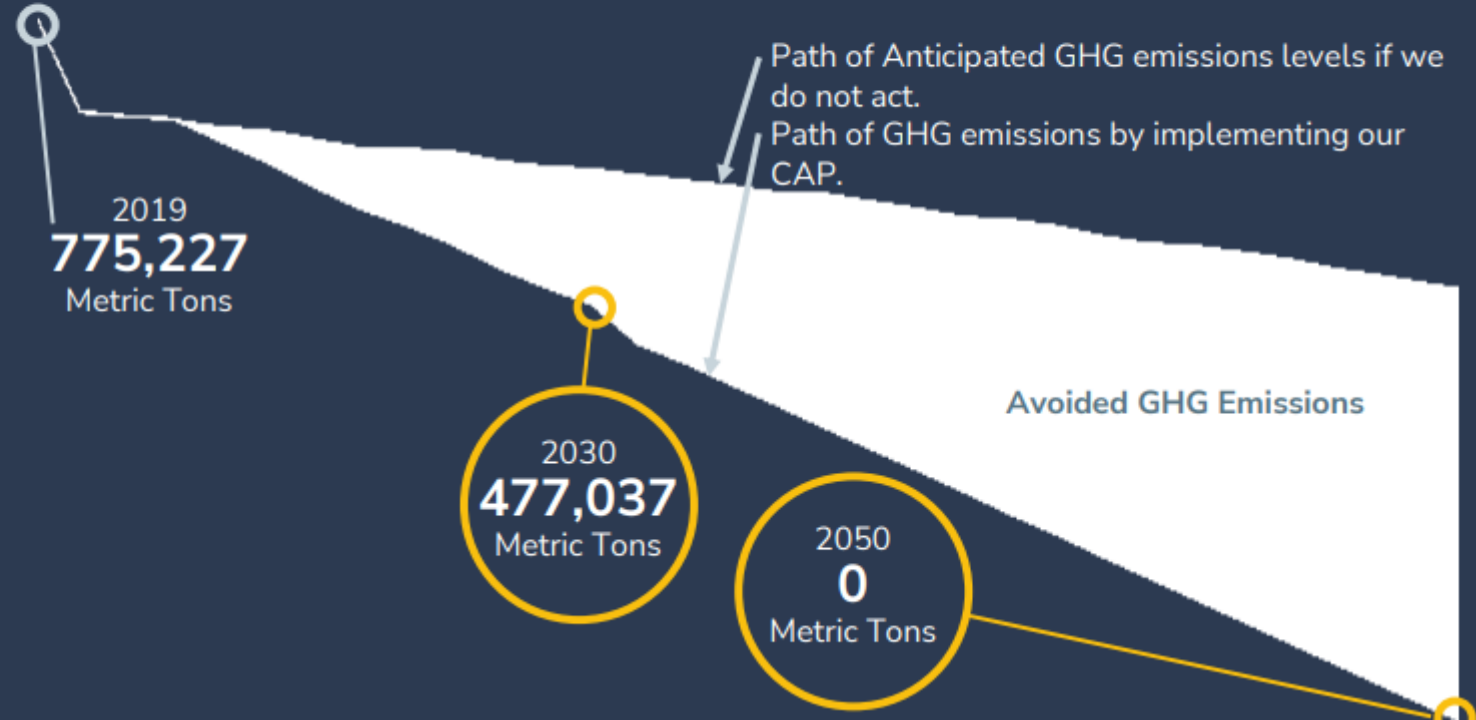
## 2019 GHG by Sector

City-wide Emissions



## La Crosse's Carbon Reduction Pathway

Projected City-wide GHG reductions from CAP implementation



City of La Crosse Climate Action Plan December 2022

# La Crosse Climate Action Plan

## 2030 Strategies for Municipal Buildings and Energy Use

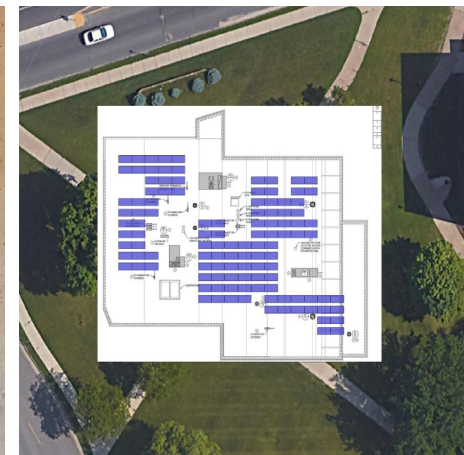
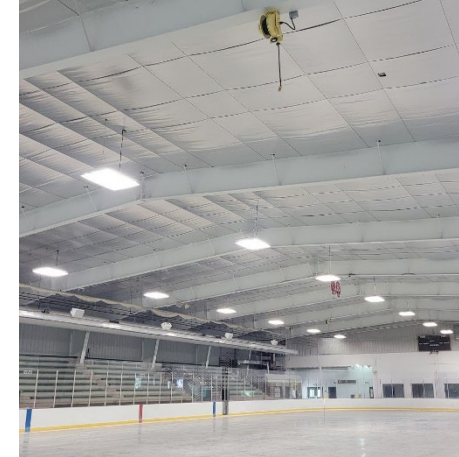
- **Improve overall energy efficiency by 15%.**
  - Benchmark energy consumption.
  - Conduct an energy audit.
  - Develop a recommissioning schedule.
  - Exceed energy efficiency standards for new buildings.
- **Achieve 10% thermal “fuel switching “ from on-site fossil fuel combustion to electrification.**
  - Identify facilities to electrify.
  - Electrify all new buildings.
- **Increase on-site renewable energy from 0.57% to 7.5%**
  - Power buildings with 100% renewable energy.
  - Conduct a solar feasibility study.
  - Explore microgrid and solar+storage options.

City of La Crosse Climate Action Plan December 2022

# Climate Action Plan Implementation

## Energy efficiency, Renewables, and Resiliency

- Renewable Energy
  - Fire Stations #2 and #4 – Solar Arrays
  - La Crosse Center Expansion – Solar Array
- Building Efficiency
  - Green Island Ice Arena upgrade
  - Neighborhood pools upgrades
- Transportation - Electric Vehicle Charging Station feasibility
- Major Deferred Maintenance
  - City Hall Air Handling Units, piping, building envelope
  - Fire Station #3 building envelope, HVAC systems
  - Housing Authority modernization feasibility
  - Implementation of Grant Funding Initiatives







Thank You

