



# ROADMAP TO DECARBONIZATION



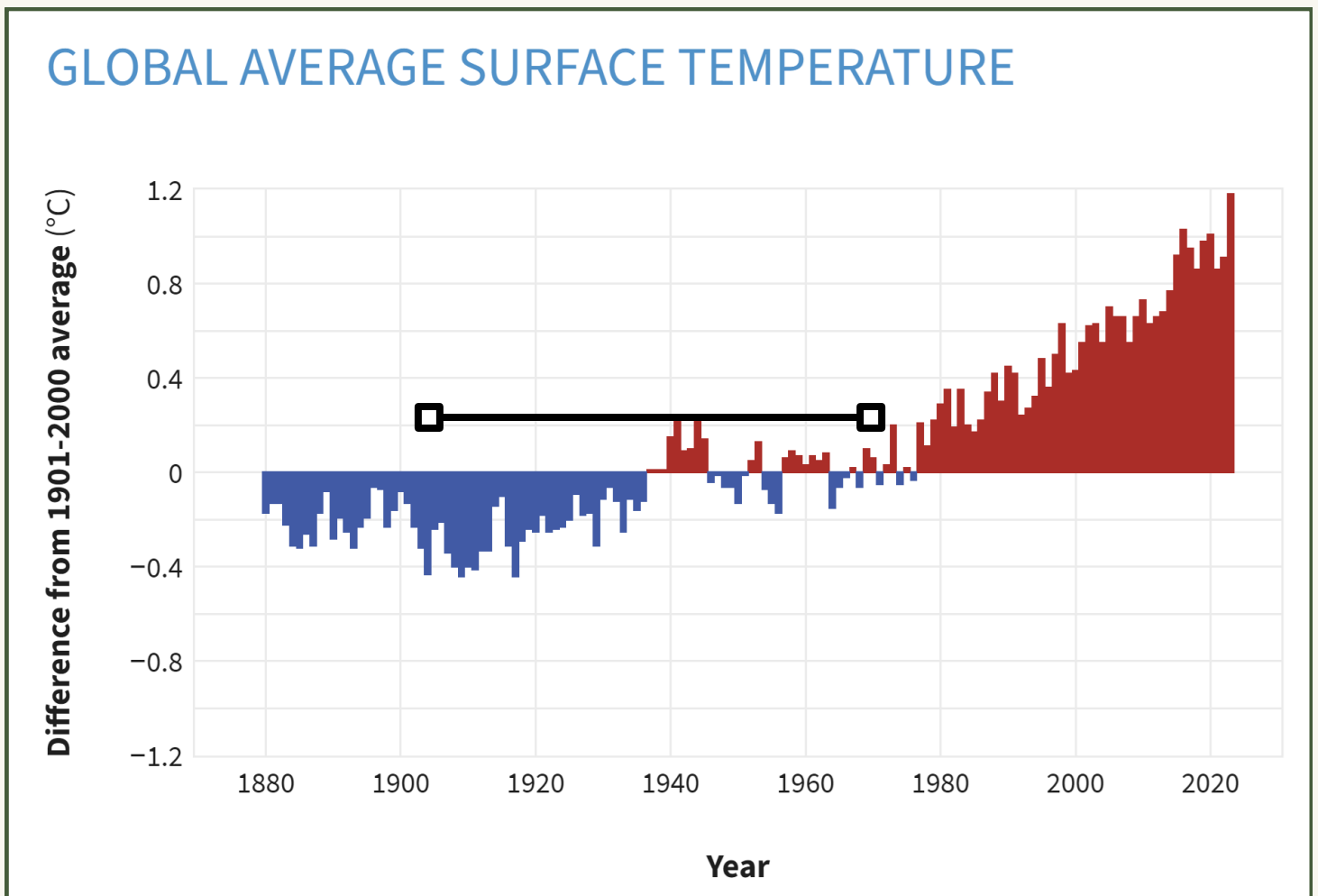
## Executive Summary

Sustainability is a top priority listed in the 2023 Lake County Strategic Plan to demonstrate the County Board's commitment to leading the effort to prevent further increases in global temperature, mitigate climate change effects and protect and enhance our natural environment.

# Purpose

Human activity is accelerating the rate at which the earth warms. Greenhouse gas (GHG) emissions from transportation and other sources will raise the earth's temperature by an estimated 1.5°C between 2030 and 2050. This level of GHG emissions is poised to affect every community around the world. Lake County has an opportunity to minimize the impacts from its business and operations.

Lake County has created a Roadmap to Decarbonization to serve as a supporting document to an overarching strategic plan. It is a flexible planning schedule to support long-range planning by matching up short-term and long-term goals with specific strategies.



Source: Climate.gov

Temperatures are continuing to rise. 2023 was the warmest year since global records began in 1850 by a wide margin. The 10 warmest years in the historical record have all occurred in the past decade (2014-2023).

The extra heat is driving regional and seasonal temperature extremes, reducing snow cover and sea ice, intensifying heavy rainfall, and changing habitat ranges for plants and animals expanding some and shrinking others.

# Lake County 2040 Net-Zero Policy

The Roadmap to Decarbonization documents the methods for capturing and communicating the plans and goals for meeting the Lake County 2040 Net-Zero Policy:

**1** Lake County, Illinois commits to achieving net zero emissions in its operations in two phases:

Phase 1: Reducing the direct and indirect greenhouse gas emissions of its operations from its 2014-2017 baseline by 50% by 2030.

Phase 2: Procuring 100% renewable energy and reducing emissions from its 2014-2017 baseline by 90% or more by 2040.

**2** All new County facilities constructed after 2020 will be evaluated for their potential for net-zero certification from a third-party rating system.

**3** The County will achieve at least a 60% diversion rate of recyclables and organics from its own waste stream by 2030 and 90% by 2040.

**4** All new County facilities constructed after 2020 will be evaluated for their potential for net zero certification from a third-party rating system.

**5** Municipalities and townships throughout Lake County are invited and encouraged to join the County in this effort to reduce the environmental impact of the operations required to provide public service to the residents and businesses of Lake County.

## What is a Roadmap?

The policy itself sets the targets. The Roadmap to Decarbonization sets the goals and strategies for reaching the targets. Annual reporting on progress through the goals and strategies indicates a reduction of GHGs and associated co-benefits such as social equity, climate adaptations, revenue generation, or garnering community support.

Collaboration and buy-in across all Lake County departments and offices is vital for successfully reaching the Net-Zero Policy goals. A roadmap is a sharable tool which can allow all project stakeholders to remain on the same page. It communicates responsibilities, timescales, and impacts of actions.



**ROC Power!**  
The Regional  
Operations and  
Communications Facility  
is designed to be a  
**Net Zero Facility**

# Scope

This Roadmap to Decarbonization focuses on eliminating the 36,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) that primarily come from natural gas, electricity, gasoline, coal, and diesel used in operations annually. As the science and policy around carbon neutrality grows, Lake County will continue to look for and contribute to methodologies to calculate community-wide upstream and embedded emissions in future inventories.

The Roadmap to Decarbonization was built using the knowledge and expertise of dozens of other public organizations across the country. Addressing climate change necessitates collaboration and the sharing of ideas and solutions so that reasonable expectations are set and carried out as soon as possible.

It is the intent to share this Roadmap to Decarbonization with other entities who may benefit from it, just as Lake County benefited from our neighboring and partnering communities. The roadmap contains information not only on goals and the strategies for completing them, but implementation tools and metrics by which to measure progress too. It will be used as a model for other communities to set actionable targets which have a clear implementation plan and metrics to measure progress by.

## How decarbonization will be tracked

Metric	Frequency of Report
Progress report by departments for goals and strategies	Annual
Greenhouse gas inventory of emissions from operations	Annual
Reporting on the co-benefits of the implementation of each strategy	Continuous

## Development Methodology

This roadmap is the result of two years of work across all offices and departments of the County. The Lake County Green Team (a team of representatives from each department) conducted hours of review and content creation for the tool over its development. Lake County is a signatory of the Greenest Region Compact, which formed a strong foundation for goals and a concept for the unique layout structure designed to make the tool more usable by employees.

Recommendations were also included based on expertise from the International Council for Local Environmental Initiatives – Local Governments for Sustainability USA. The process has involved five separate review stages for partners, staff, and elected officials.

# Fast Facts: Lake County Operations



Lake County has more than 1.1 million square feet of building space



532 vehicles in the Lake County fleet

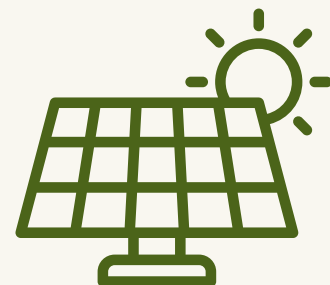
Greatest sources of CO<sub>2</sub>e emissions

# CO<sub>2</sub>

1. Electricity usage and the emissions needed to generate it
2. Natural gas usage to heat and cool buildings
3. Gasoline usage of vehicles by employees



Lake County tracks the real-time travel and fuel use efficiency of fleet vehicles through a fleet management software



New ground-mounted solar array under construction to power the Central Permit Facility

# Vision

Based on the iterations of the Lake County Strategic Plan that have been adopted over the past 15 years, sustainability fits with Lake County's vision to be known for "its safe and livable communities, thriving local economy, healthy natural environment, high quality educational opportunities, and public services."

It also fits Lake County's values of fiscal responsibility, exceptional customer service, and leadership. That commitment is what makes it possible to create a detailed layout of tasks assigned to all teams across County operations to reduce emissions collectively through 2030 and 2040.



If you would like to learn more about Lake County's ongoing sustainability programs and initiatives, please visit [lakecountyil.gov/sustainability](https://lakecountyil.gov/sustainability).