

Climate Ready Oak Park: Final Draft Overview

Village Board Meeting
June 27, 2022





Climate change impacts us all.

It poses serious barriers to our community's future. In the Midwest, we are already feeling the effects of climate change. We are seeing more flooding, extreme heat, and extreme weather events. The air we breathe and the food we eat is in jeopardy. The experts have made it clear: We need to get to net zero emissions by 2050 or things will only get worse. For this reason, Oak Park has made commitments to combat climate change.

Coming Soon

The Critical Package: **What Forms the Climate Plan?**

- 1. StoryMaps** Public Facing List of Actions and Vulnerability Assessment ([Existing Conditions & Vulnerability Assessment \(arccgis.com\)](#))
- 2. Public-Facing Engagement & Tracking Website** (coming soon, will replace current Social Pinpoint platform)
- 3. Implementation Plan**
- 4. Staff Tracking Matrices** (Excel)
 - Implementation Matrix
 - GHG Inventory
 - GHG Forecast



Climate Plan Organization: StoryMaps



- Introduction and Background
- Climate Ready Oak Park Commitments
- Community Engagement Recap
- Impact Areas
- Plan Goals
- Specific Action Items
 - Priority Level *based on emissions reduction potential and equity considerations*
 - Timeline
 - Cost Range
 - Lead Implementor
- Glossary of Terms & Acronyms
- Link to Vulnerability Assessment

Climate Plan Organization: **Implementation Plan**

- Overarching Plan Goals
- Specific Action Items
- Key First Steps
- Lead Implementor Responsibility
 - Associated Village Dept. Lead
- Priority Level
 - *Based on emissions reduction potential and equity considerations*
- Potential Village Investment
- Emissions Reduction Potential



Climate Plan Organization: **Staff Tracking Matrix**



- Overarching Plan Goals
- Specific Action Items
- Impact Areas Benefitted by each action
- **Cost Opinions with Assumptions to Village & Community**
- **Financing Options** for each action (including taxes, fees, loans, financing, grants, state/federal, etc.)
- Lead & **Supporting Implementors**
- Timeline
- Priority Level
- Emissions Reduction Estimates
- **Tracking Metrics**

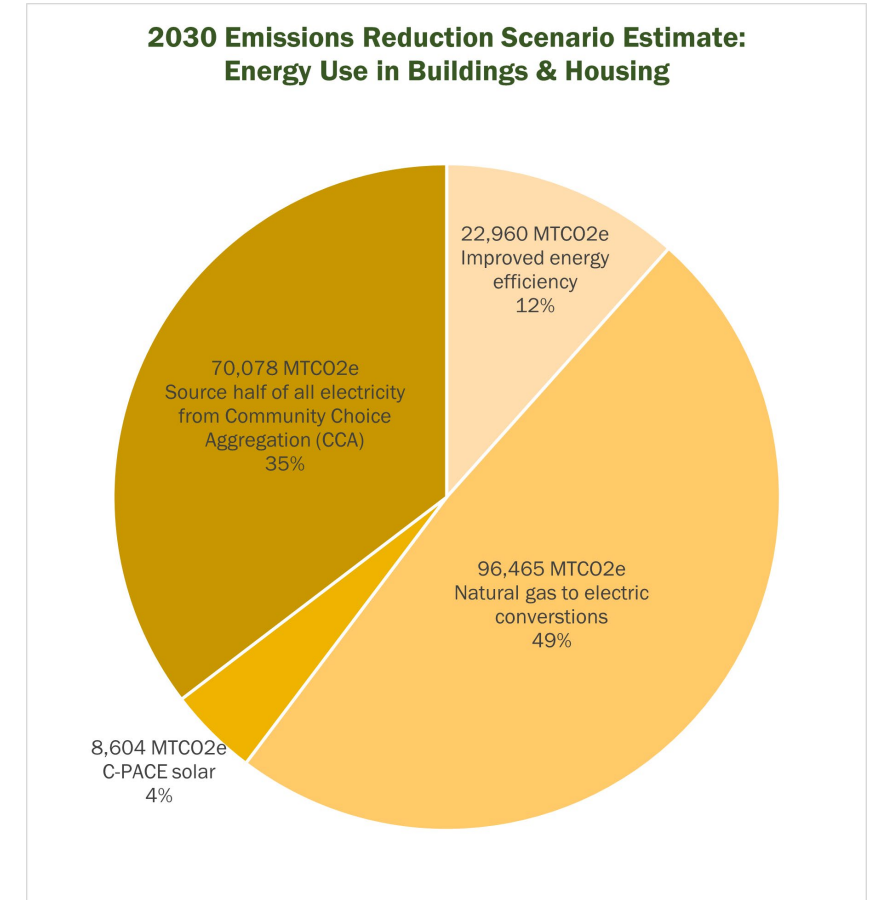


Final Draft: Climate Ready Oak Park

(<https://storymaps.arcgis.com/stories/b4f6e9bdfd864b31b28072156d6d6bcf>)

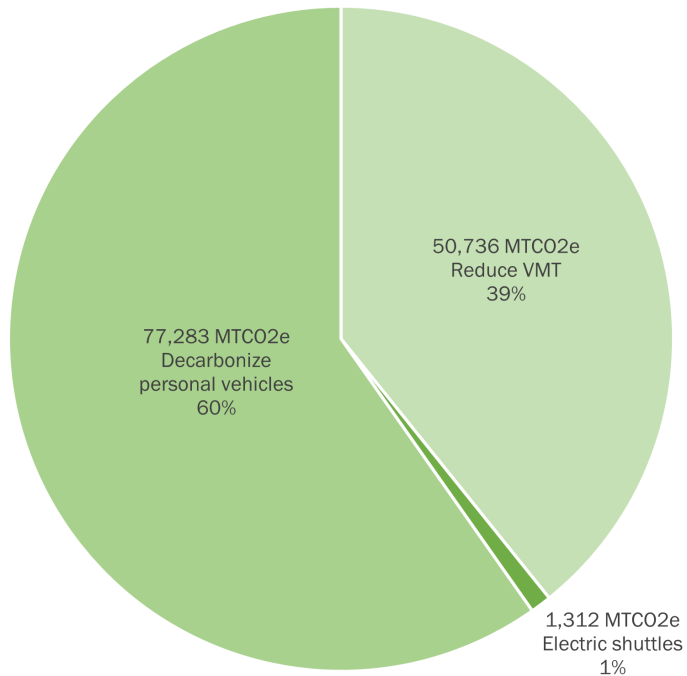
Meeting the Emissions Reduction Goals

- Residential and Commercial Energy consumption generates **more than 2/3** of the Village's GHG emissions
 - This represents a key category for emissions reduction potential
- The scenario described showcases **one possible way** to achieve the 2030 emissions reduction goal
 - As time continues, some “slices of the pie” may grow/shrink
- Overarching topics for reducing emissions from energy use in buildings and housing include:
 - **Electrification**
 - **Ensuring energy from the CCA program is clean/renewable**
 - **Upgrading buildings and housing to be more energy efficient**
 - **Installing onsite (and eventually offsite) solar energy**



Meeting the Emissions Reduction Goals

2030 Emissions Reduction Scenario Estimate:
Transportation Actions



- Internal combustion engine (ICE) vehicles cause more than $\frac{1}{4}$ of the Village's GHG emissions
 - This represents a key category for emissions reduction potential
- The scenario described showcases **one possible way** to achieve the 2030 emissions reduction goal
 - As time continues, some “slices of the pie” may grow/shrink
- Overarching topics for reducing emissions from energy use in buildings and housing include:
 - **Reducing vehicle miles traveled (VMT)**
 - **Shifting to walking, bicycling, transit**
 - **Transitioning to electric vehicles**

Highlighting Community Priorities

- Public & Environmental Health
 - Phase out noisy, polluting lawn equipment
 - Conserve clean drinking water
- Sustainable Economic Development
 - Expand opportunities for green jobs
 - Support a sustainable business community
- Healthy & Sustainable Food Systems
 - Complete a Food Justice Plan
 - Support Urban Agriculture
 - Expand access to the Farmer's Market
- Waste & Recycling
 - Strengthen the CompostAble program
- Plan Administration
 - Track and report progress frequently
 - Ensure transparency



Cost Opinions: What's Included?

- Costs include consultant fees, studies, technical analyses, plan updates, and other outside services
- Salary estimates for individual department staff and cross-departmental staff based on an anticipated level of effort spent per year on a specific action (percentage of overall time spent) based on overall costs over a 5-year period except where otherwise noted
 - This includes call-outs for updating ordinances, redesigning inspection processes, training, public meetings, presentations, etc.
 - This also includes time and effort creating, launching, and managing new or existing programs
- Education, outreach, and communication items, based on time spent by Village staff and community organizations including coordination time, meetings, creation of materials, engagement, etc.
- Cost estimates for special events to promote or engage the community
- Material costs including flyers, giveaways, etc. (reusable bags, efficient power strips, sharable gardening equipment, etc.)
- IT costs including database creation, system upgrades
- Capital costs including for infrastructure upgrades, purchases of new equipment, ongoing or expanded maintenance
- Sample amounts of new grant programs to help residents and businesses offset the cost of new or retrofitted equipment

Cost Opinions **Allocations**

\$79,247,100

(Village; thru 2030)

*Some costs allocated to 2050

\$695,902,060

(Community; thru 2030 & beyond)

- Bonds
- Bag Fees
- Community Choice Aggregation
- Motor Fuel Tax
- Loan-Loss Reserve Funds
- Public Benefit Funds
- Fees
- Taxes
- Financing
- Loans
- Grants
- Power-Purchase Agreements
- Pay-for-Performance Agreements
- Group Purchasing
- State/Federal
- Energy Performance Saving Contracts

*The planning team recognizes the cost estimates for implementation of the Climate Plan **do not** include specific references to savings and benefits that are difficult to quantify but no doubt exist and would provide a significant reduction in the total estimated cost if the recommended actions are successful. Additionally, the high number of unknowns related to the impacts of climate change on communities' economic, social, and environmental wellbeing, made it difficult to estimate the cost of doing business as usual.*

Investment Scenario: Creating Utility-Scale Solar

- “Utility scale” refers to the size of a solar production facility
- Any utility scale solar energy purchased by the Village would be off-site due to space restrictions
- Powering the Village solely using solar energy would require a large facility
- Cost opinion is approximately \$155 million for the total project infrastructure
 - *Working with a developer may allow the Village to reduce upfront costs*
 - *This cost could be spread out over 25+ years*
 - *Long-term, stable, low-cost electric rates saves money for all residents in the community*
 - *Funding can include: private investments, grants, state/federal resources, bonds, fees, etc.*
- Takeaway: Utility-scale solar can take a long planning horizon to come “online”

Investment Scenario: Reducing VMT

- Reducing VMT can be accomplished through a variety of strategies, each of which may be eligible for different funding mechanisms:
 - Creating protected bike lanes
 - Addressing pedestrian safety at dangerous intersections
 - Coordinating improved public transit
 - Establishing shared-mobility programs
 - Adopting a telecommuting work policy
 - *Funding mechanisms could include: taxes, fees, financing, state/federal resources, grants, or group purchasing*
- Funding for these strategies can be stretched over a longer time horizon (i.e. 2050)

“Financial innovation often originates from combining multiple mechanisms, or actions, into a single project. By combining multiple funding pathways into a blended mechanism for a single project, and by creating or utilizing project structures that align the interests of private and public actors, cities can often overcome split-incentive problems and leverage external funding. Additionally, grouping several different climate action projects together under the same funding mechanism can create a multiplier effect for both project benefits and available funding.”



High Impact, High Priority Example

Establish and implement a percent goal for energy efficiency to update existing housing stock and commercial buildings and to build to higher than required by current code. Include language in all projects with Village involvement or funds addressing energy efficiency criteria.

- Recommendation: **Improve energy efficiency of buildings and housing by 10%**
- Emissions reduction potential by 2030: **22,960 MTCO_{2e}**
 - Cost to the Village: minimal; likely covered by existing staff time
 - *Better Homes, Better Planet platform already exists!*
 - *Utility-funded energy efficiency programs already exist!*
 - Cost to the community can be offset through financing, loans, grants, pay-for-performance contracts, group purchasing/bulk discounts, state/federal resources

Co-benefits:

- Lower energy burden on low-income residents & families
- Improved health and comfort
- Increased resilience

Questions?

Meeting the Commitment for Biodiversity

- Increase plant & tree cover
- Prioritize native species over non-native species
- Increase greenspace
- Protect & enhance biodiversity



Your Team



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