Roadmap to Decarbonization Development

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What is a Roadmap?

- **A roadmap is a sharable tool which can allow all internal stakeholders to remain on the same page**
  - **Assigns responsibilities**
  - **Communicates timelines**
  - **Measures expected impacts of actions**
- **Implementation checklist**
- **Metrics for completion**
- **Wholistic approach**

Types of Climate Plans

Less Detail

More Detail

- **Regional**
  - **Greenest Region Compact**
  - **CMAP Climate Action Plan**
  - **CRTI Master Plan**
- **County-wide**
  - **Kane County Climate Action Implementation Plan**
- **Operational**
  - **Roadmap to Decarbonization**

Net Zero Policy Goals

- At its Sept. 8th, 2020, meeting, the Lake County Board approved a resolution committing Lake County government operations to the goal of attaining net zero greenhouse gas emissions from its 2014-2017 baseline.

- The resolution commits Lake County to the following:
  - By the year 2030, reducing greenhouse gas emissions from its operations by 50%, and achieving at least a 60% diversion rate of recyclables and organics from its own waste stream
  - By the year 2040, procuring 100% renewable energy, reducing greenhouse gas emissions by 90% or more, and achieving at least a 90% diversion rate of recyclables and organics
  - Ensuring that all new County facilities constructed after 2020 be evaluated for their potential for net zero certification
  - Publicly reporting progress toward these goals on an annual basis
  - Inviting and encouraging municipalities and townships throughout the county to join in the effort to reduce the environmental impact of the operations required to provide public service to the residents and businesses of Lake County

Identifying Strategies

- **Utilized regional planning efforts**
  - **Chicago Metropolitan Agency for Planning, Chicago Region Tree Initiative, Metropolitan Mayor's Caucus, etc.**
  - **Used existing commitment to Greenest Region Compact as a baseline through which to build strategic priorities and implementation methods**
- **Learned from published plans from counties, municipalities, park districts, university campuses, museums, businesses, forest preserve districts, stormwater management districts**
- **Took advantage of the technical assistance and connections through ICLEI**
  - **Milwaukee County, Johnson County, Flagstaff AZ, San Diego County, etc.**
- **Relied on internal team that's separate from the main decision makers (Lake County Green Team)**
- **Planned out review time to take just as long as initial development**
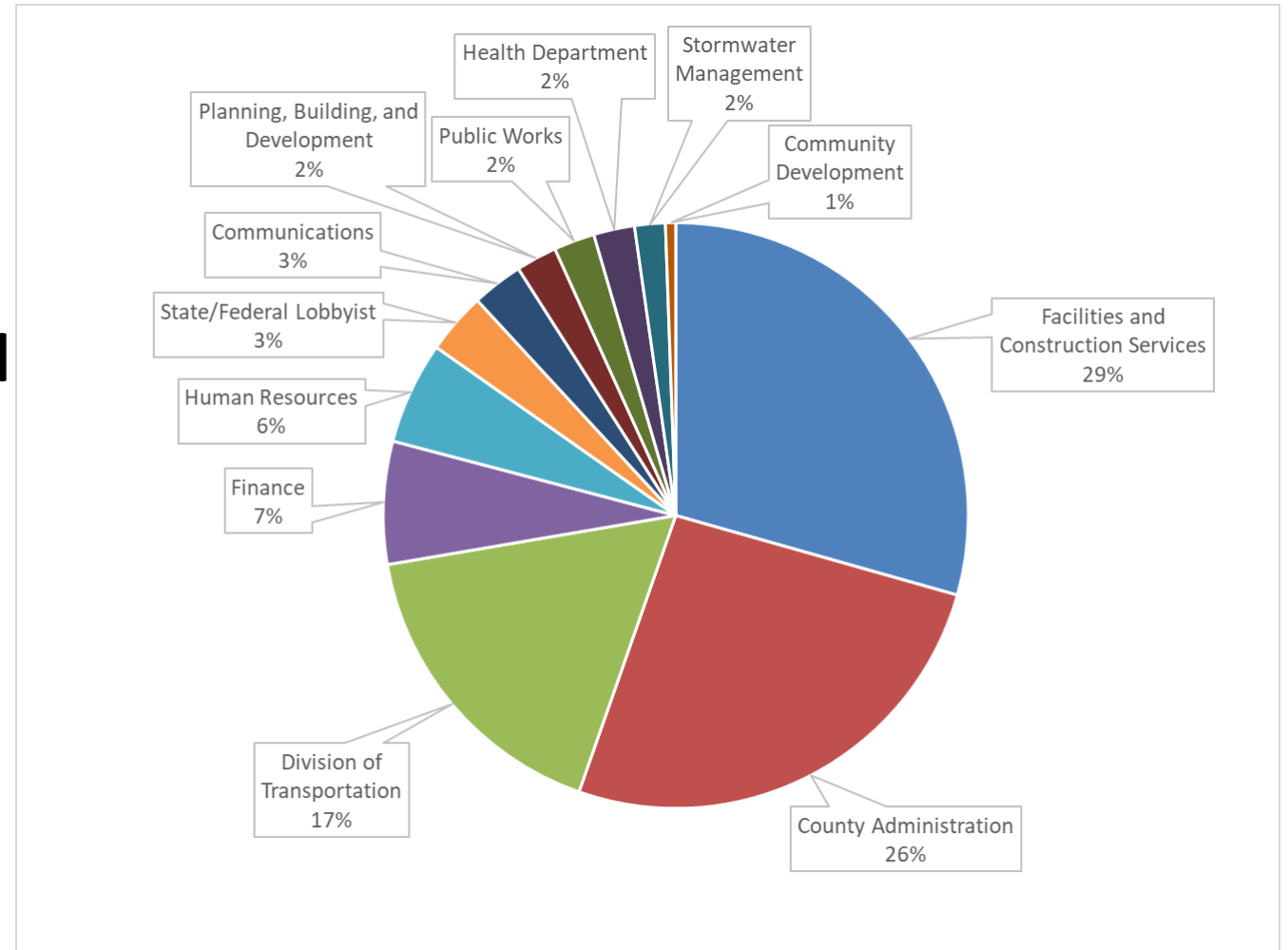
Roadmap to Decarbonization Layout

- **Goal**
- **Strategy code**
- **Strategy**
- **Implementation progress checklist**
- **Emissions reduction potential**
- **Timeframe**
- **Cost**
- **Whether there's revenue potential**
- **Whether there's ongoing costs**
- **Head responsible party for annual reporting and implementation**

Collaborate with local stakeholders to advance goals	PL45	Observe advancements by and partner with other local governments to achieve efficiency and sustainability		◆	<>	$	-	-	County Administrator's Office
	PL46	Partner with non-governmental organization to advance sustainability in the community and regionally		◆	<>	-$	✓	✓	County Administrator's Office
	PL47	Dedicate staff time to engagement with local sustainability groups		◆	<>	$	-	-	County Administrator's Office
	PL48	Coordinate resiliency efforts with federal, state and regional planning agencies		◆	<>	-$$	✓	✓	County Administrator's Office

Content Summary

- **22 Goals**

- **175 Strategies**

- **69% of strategies have payback or revenue potential**

- **55% of strategies have ongoing costs**

- **38% of strategies have a specific timeframe for implementation**

Pie chart of departments:
- Facilities and Construction Services 29%
- County Administration 26%
- Division of Transportation 17%
- Finance 7%
- Human Resources 6%
- State/Federal Lobbyist 3%
- Communications 3%
- Planning, Building, and Development 2%
- Public Works 2%
- Health Department 2%
- Stormwater Management 2%
- Community Development 1%

Content Summary

Policy and Leadership

Buildings and Facilities

Vehicle Fleet

Employee Commute

Streetlights

Wastewater Treatment

Content Summary

LakeCounty

22 Roadmap to Decarbonization Goals

Support effective decarbonization management	Support regional improvements of public transportation
Support effective decarbonization financing	Decrease dependency on single vehicle commuting
Divert waste from landfills	Increase EV adoption and utilization at facilities
Engage the community in education and outreach on decarbonization initiatives	Increase efficiency of vehicle transportation patterns
Pursue 100% renewable energy by 2040	Maintain an effective and efficient wastewater treatment system
Minimize on-site fuel combustion in buildings	Advocate for and use green infrastructure for water quality and stormwater management
Increase energy efficiency wherever feasible***	Assure local policies and codes support water quality and conservation
Cultivate values and practices based on power saving	Engage the community in promoting green transportation development
Electrify fleet of light-duty vehicles	Increase fleet efficiency to reduce fuel use wherever feasible
Use Fossil Free Fuels	

Examples

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1. Analyze feasibility for PACE vanpool program by 2027
   i. Reduces annual emissions by 500-1000 MTCO2e
   ii. 3-5 years
   iii. $10,000-$100,000
   iv. Yes, additional ongoing costs, No payback revenue

2. Conduct building energy use assessments for all County facilities by 2026 – Buildings and Facilities
   i. Less than 100 MTCO2e reduction
   ii. 0-2 years
   iii. $10,000-$100,000
   iv. No ongoing costs, will have payback potential

3. Include electrification suitability information in annual DOT department recommendations for department vehicle replacements and associated charger port needs – Vehicle Fleet
   i. Less than 100 MTCO2e reduction
   ii. Ongoing
   iii. Less than $10k
   iv. Yes, additional ongoing costs/payback revenue

Roadmap to Decarbonization Prioritization

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- **Priority scoring for strategies**
  - **Greenhouse gas reduction**
  - **Environmental quality**
  - **Community health**
  - **Activity impetus**
  - **Reduction of energy consumption**
  - **Net cost**

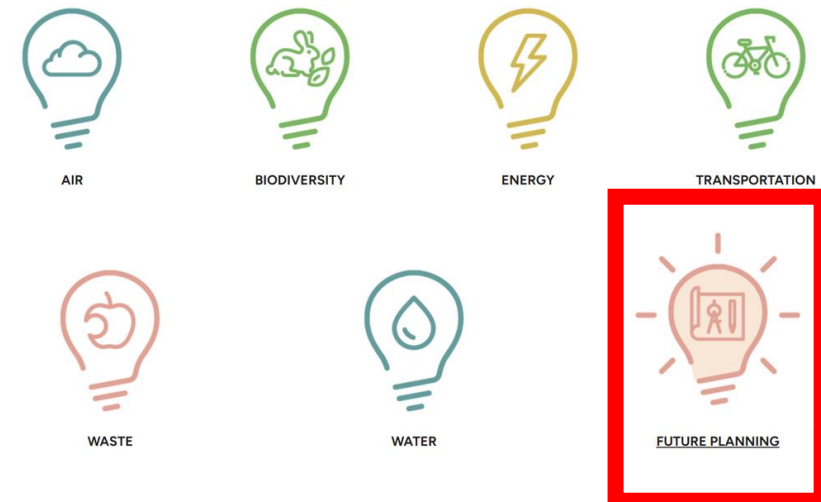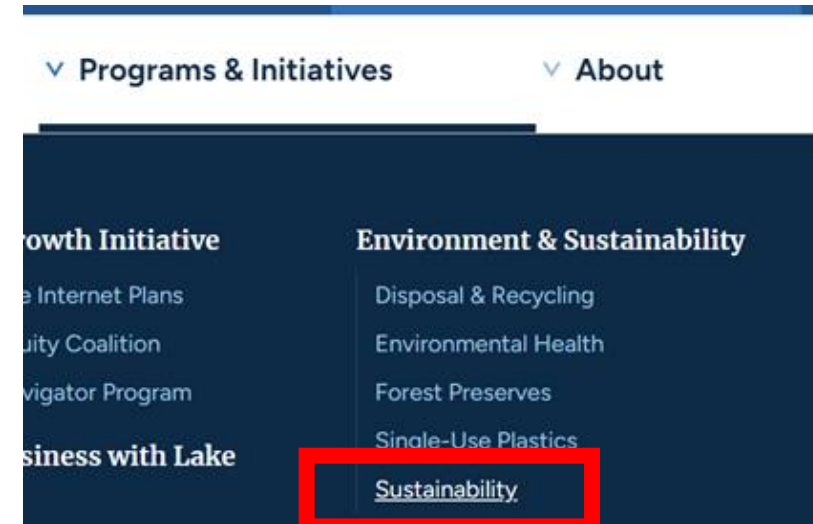| Priority Score	Greenhouse Gas Reduction	Environmental Quality	Community Health	Activity Impetus	Reduction of Energy Consumption	Net Cost
42	1	0	0	5	1	5

How To Use – Internal Stakeholders

- **Hosted on Employee Service Portal**

- **Begin annual training and kick off in early spring to allow time for feedback before annual department budget submissions**

- **Head Responsibility Party fills out their checkboxes**
  - **Has each strategy been implemented or are there plans to?**
    - **If yes, please provide documentation for verification**
    - **If no, explain why not**

- **Annual Implementation Reports will include:**
  - **GHG Inventory for previous year**
  - **Strategy implementation progress**
  - **Co-benefits achieved through implementation**
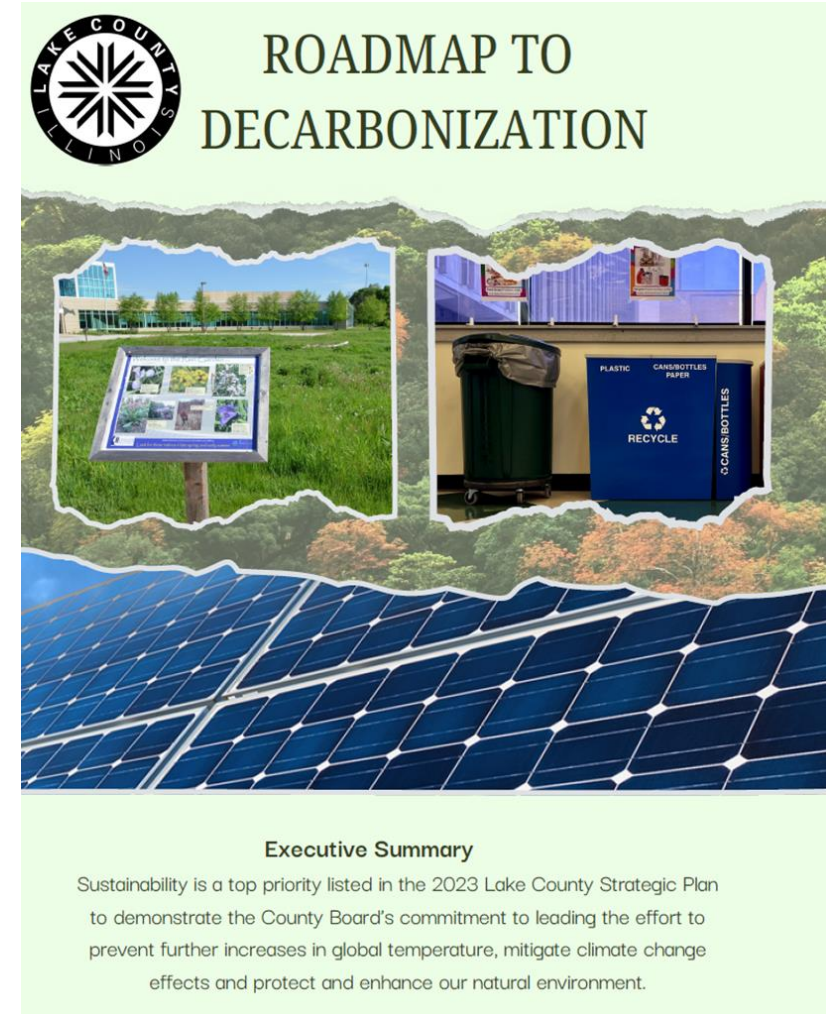 - **Highlighting progress of priority strategies**

8-7-24

Communicating Our Success

- **Sustainability webpage Future Planning section**

- **Executive Summary**
  - **Purpose and Scope**
  - **Methodology**
  - **Fast Facts**
  - **Vision**

- **Annual Implementation Reports for each year**
  - **Graphics**
  - **Statistics**
  - **Co-benefits**

Next Steps

- **Develop annual training**
- **Design and test runs for annual reporting platform with Green Team**
- **Presentation to Executive Team**
- **Approval as official strategy by County Administrator**

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.

Questions