NWI Regional Climate Action Planning

May 5 , 2022

NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION nirpc

Where have we been?

ICLEI Climate Mitigation Milestones

Where we are now?

2017 Greenhouse Gas Emission Inventories Completed

Counties

- Lake County
- LaPorte County
- Porter County

Cities and Towns

- Cedar Lake
- Chesterton
- East Chicago
- Gary*
- Hammond
- Highland
- Hobart
- Lake Station
- City of La Porte
- Merrillville
- Michigan City*
- Munster
- Portage
- Schererville
- Valparaiso

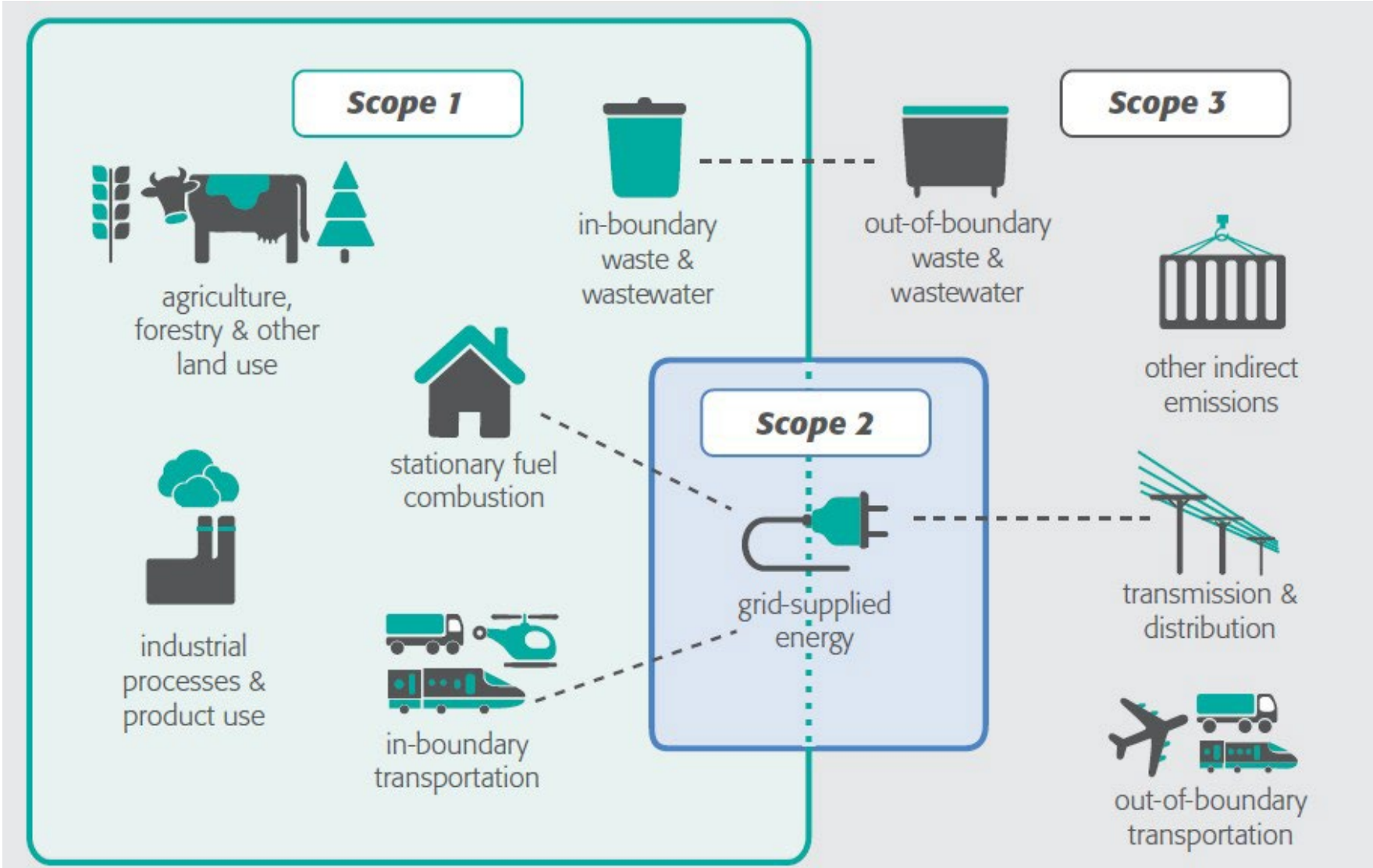
Where we are now?

Why narrow the focus?

Scope 1: GHG emissions from sources located within the community boundary.

Scope 2: GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the community boundary.

Scope 3: All other GHG emissions that occur outside the city boundary as a result of activities taking place within the community boundary.



NWI 2017 GHG Emission Baseline

2017 Total Carbon Dioxide Equivalents = 49 Million Metric Tons

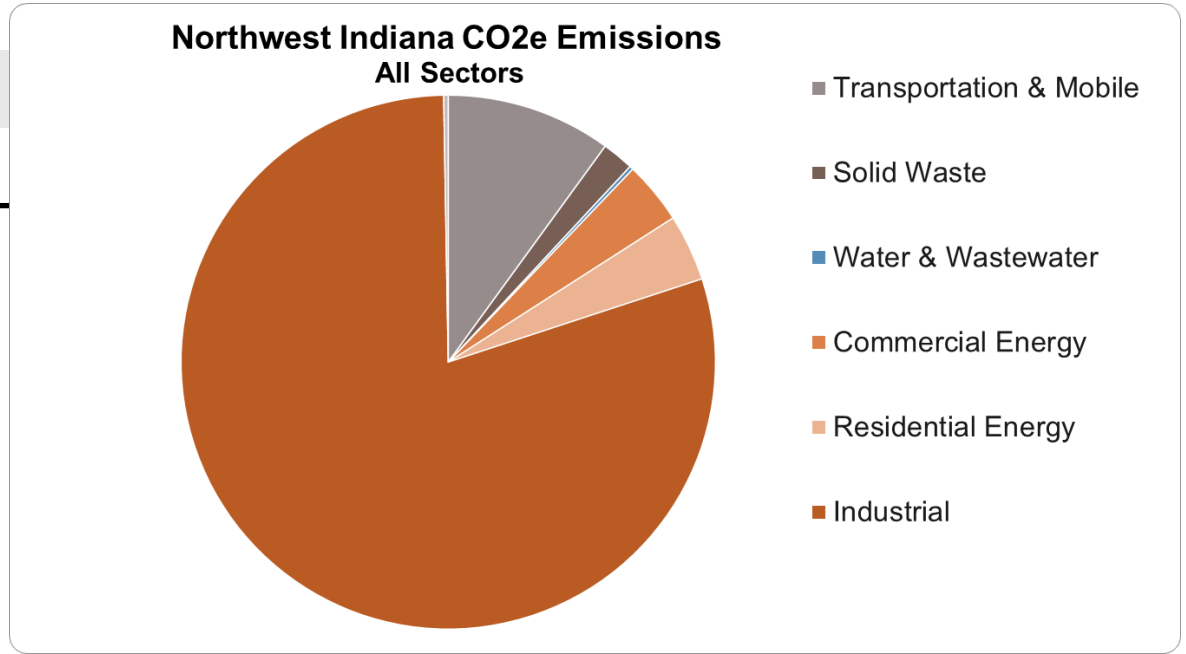
Source	Contribution
Industry (Energy and Process)	80%
Transportation and Mobile	10%
Commercial Energy	4%
Residential Energy	4%
Water and Wastewater Treatment	< 1%
Solid Waste	2%

Region Average = 45 tons per person!

LaPorte 23

Porter 69

Lake 71



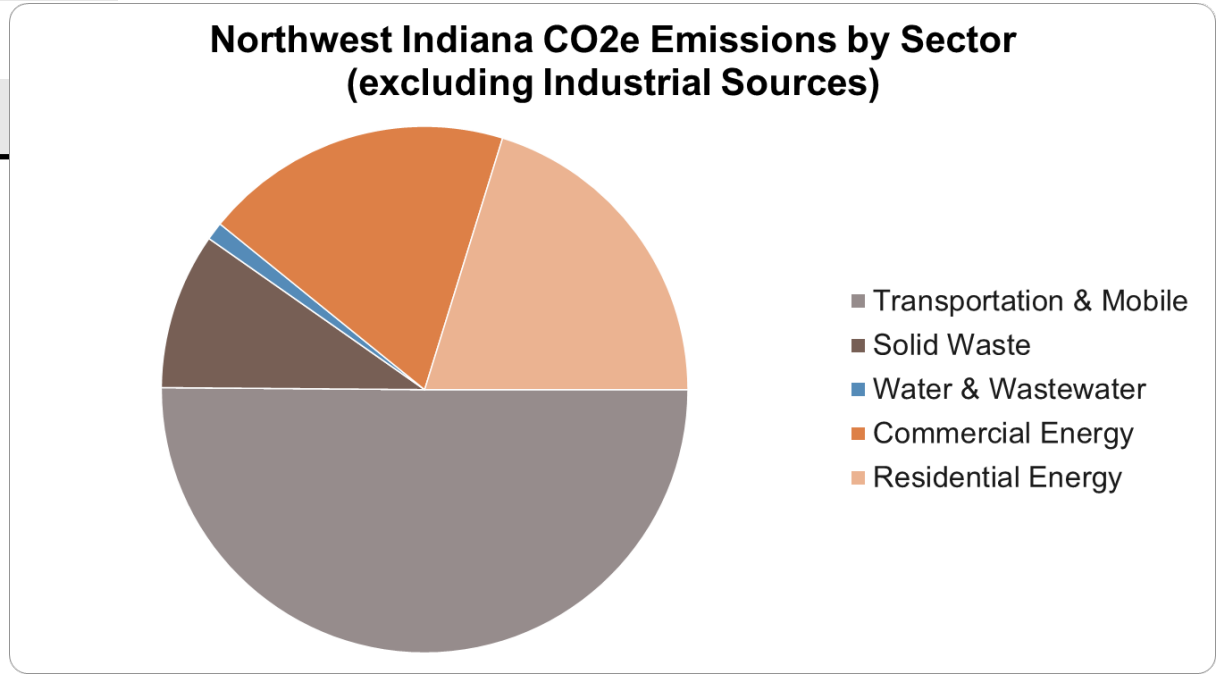
NWI 2017 GHG Baseline for Climate Action Planning

2017 Total Carbon Dioxide Equivalents = 9.8M Metric Tons

Source	Contribution
Transportation and Mobile	50%
Commercial Energy	19%
Residential Energy	20%
Water and Waterwater Treatment	1%
Solid Waste	10%

Residential Energy = 1.7 – 10.3 tons per capita
Transportation = 6.4 tons per capita
537 Metric Tons per Million VMT

Non-Industrial CO2e = 13 tons per person!
Lake County = 11
LaPorte County = 19
Porter County = 14



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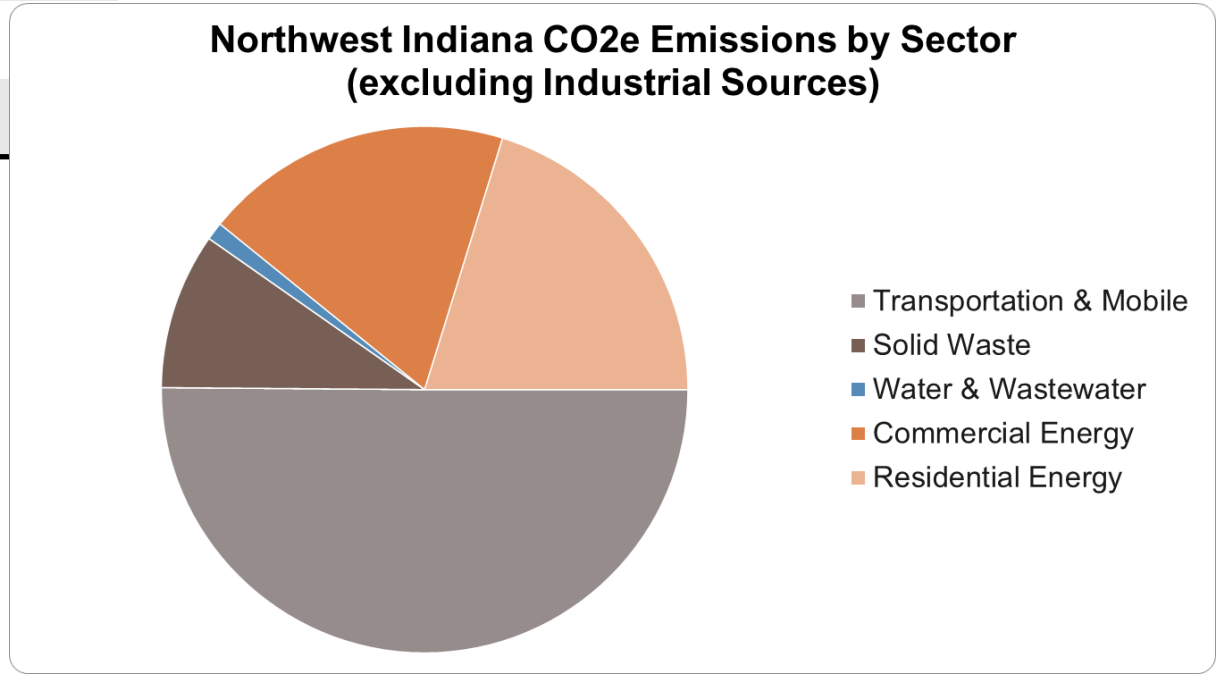

Where we are now?

Regional Climate Action Planning

Work Plan

• Form a Project Working Group	Mar - May
• Develop Outreach and Engagement Strategy	Mar - May
• Implement Outreach and Engagement	Throughout
• Forecast “Business-as-usual” emissions	May-June
• Develop Regional Climate Action Goals & Objectives	May-July
• Develop Community Typologies and Strategies	June - July
• Draft Regional Climate Action Plan Framework	August
• Develop Local CAP Support Plan and Performance Metrics	August-Sept
• Finalize and Adopt NWI Regional Climate Action Framework	Oct-Nov

Climate Planning Working Group

Aspirations

Diversity of perspectives

- Climate impacted communities and groups
- Environmental justice representatives
- Emission source stakeholders
- Decision makers
- Implementers
- Influencers
- Ambassadors for Climate Planning

Diversity of Expertise

- Across Source categories
  - Technical Issues
  - Regulatory environment
  - Economic Influences
- Potential carbon control and reduction strategies
- Local government authority
- Local government finance
- Climate impacts and preparedness
- Communications

Outreach and Engagement

Levels of Engagement

Adapted from the International Association of Public Participation (IAP2) Public Participation Spectrum

Active participation methods

Does the task require?	Inform	Consult	Involve	Collaborate
Engage NWI goal	Provide public with objective information and assist their understanding of regional challenges, options, opportunities, or solutions.	Obtain feedback on regional planning tasks, analyses, or prior to policy making.	Work directly with public and stakeholders throughout planning process to ensure concerns and ideas are consistently understood and considered.	Partner with the public and stakeholders in every aspect of the planning process from project scoping through adoption of plans or policies
Engage NWI promise	Keep general public and stakeholders informed.	Keep public informed, listen and acknowledge concerns and ideas, and provide public with report on how input shaped outcomes.	Work with public and stakeholders to ensure goals and ideas are directly reflected in planning work as much as possible and report on how input shaped outcomes.	Work with public and stakeholders to inform planning work from start at project scoping to understand issues, generate solutions, and incorporate feedback to shape outcomes.
Involvement methods / tools may include:	Website, social media, newsletters, multi-language publications, press releases, mailings, live streaming, white papers, or fact sheets.	Activities listed in "Inform" plus surveys, comment forms, webinars, or formal meetings	Activities listed in "Consult" plus focus groups, targeted outreach to meet people where they are such as "*Out and Abouts*," or "*Pop-up Events*"	Activities listed in "Involve" plus task forces, charrettes, keypad polling, and working groups
When goal will be selected:	The "Inform" level of participation will be used for technical documents, but the methods will be used frequently to communicate regularly with the public	The "Consult" level of participation will be used less frequently, but the methods will be used when needed	The "Involve" method will be used frequently and the methods as well	The "Collaborate" method will be used frequently with major planning processes

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Forecasting Future Emissions

Business as Usual

- Forecasted Population Growth
- Forecasted Vehicle Miles Traveled
- Officially documented changes in carbon intensity of energy used
- For example:
  - EPA regulatory changes in vehicle fuel efficiency standards and engines
  - NIPSCO Published and IURC approved Integrated Resource Plans
  - Documented future changes in Wastewater, Drinking Water, or Solid Waste Management processes

NIRPC's currently adopted planning forecasts

Year	Population	Households	Employment	Annual Vehicle Miles Traveled (Millions)
2017	766,924	291,750	286,970	11331
2020	773,689	294,313	292,121	12120
2025	784,974	298,567	300,688	13560
2030	796,251	302,838	309,281	15170
2040	818,813	311,378	326,436	18988
2050	841,382	319,903	343,604	23766

Develop Regional Climate Action Goals & Objectives

Science Based Reduction Targets

Are in line with International Agreements and Reduction Goals to keep warming below 1.5 degrees C.

- Based on the latest climate science
- 50% GHG Reduction by 2030
- Climate Neutral by 2050.
- NWI Targets are calculated from 2017 Baseline.

Based on One Planet City Challenge Method

Science Based GHG Emission Reduction Targets for Northwest Indiana		
	2030 Reduction Per capita	2030 Absolute Reduction (Million Metric Tons)
Per ICLEI	63.4%	60.1 - 63.9 %
NWI 2017	12.8 tons/person	6.5
2030 Target	4.7 tons/person	2.4

Other methods available:

- Deadline 2020 Method: incorporates per capita GDP
- Tyndall Centre Method: focuses on energy emissions only
- Race to Zero Method: based on getting to net zero by 2040

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Develop Regional Climate Action Goals & Objectives

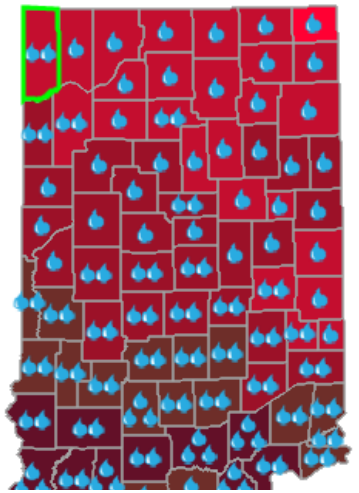
Things to Consider

- Vulnerability Assessment
- Preparedness and Resilience
- Environmental Justice

Extreme Heat Events
- ○ Current
- ○ 2050s Medium Emissions Scenario
- ◉ 2050s High Emissions Scenario

Extreme Precipitation Events
- ○ Current
- ○ 2050s Medium Emissons Scenario
- ◉ 2050s High Emissions Scenario

Land Use
- ○ Developed Area in the Floodplain, 2010



Legend

Days of Extreme Heat in a Year
- >109 - 119
- >99 - 109
- >89 - 99
- >79 - 89
- >69 - 79
- >59 - 69
- >49 - 59
- >39 - 49
- >29 - 39
- >19 - 29
- 10 - 19

Acres of Developed Land in a 100- or 500-year Floodplain
- >25,000 - 30,000
- >20,000 - 25,000
- >15,000 - 20,000
- >10,000 - 15,000
- >5,000 - 10,000
- 0 - 5,000

Days of Extreme Precip. in a Decade
- >23 - 30
- >16 - 23
- 9 - 16

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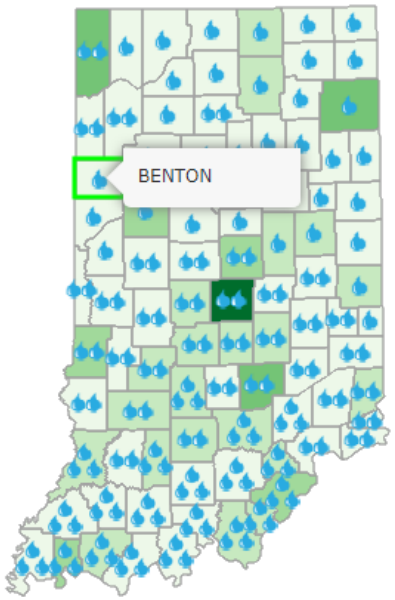

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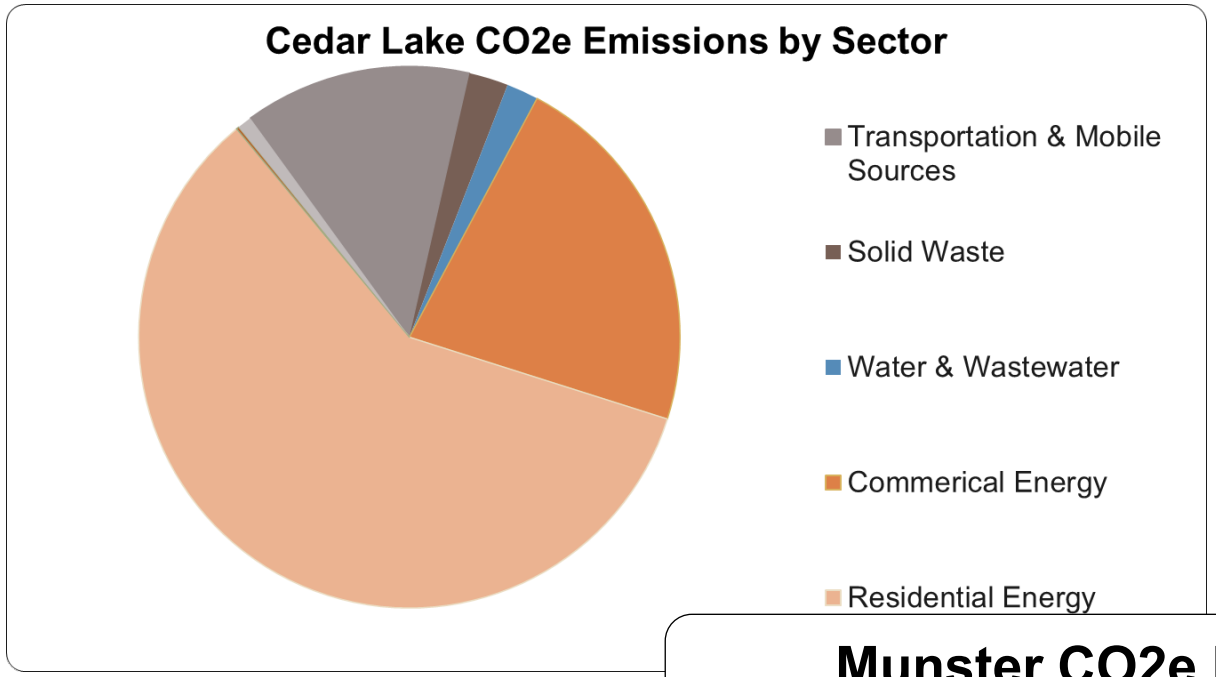
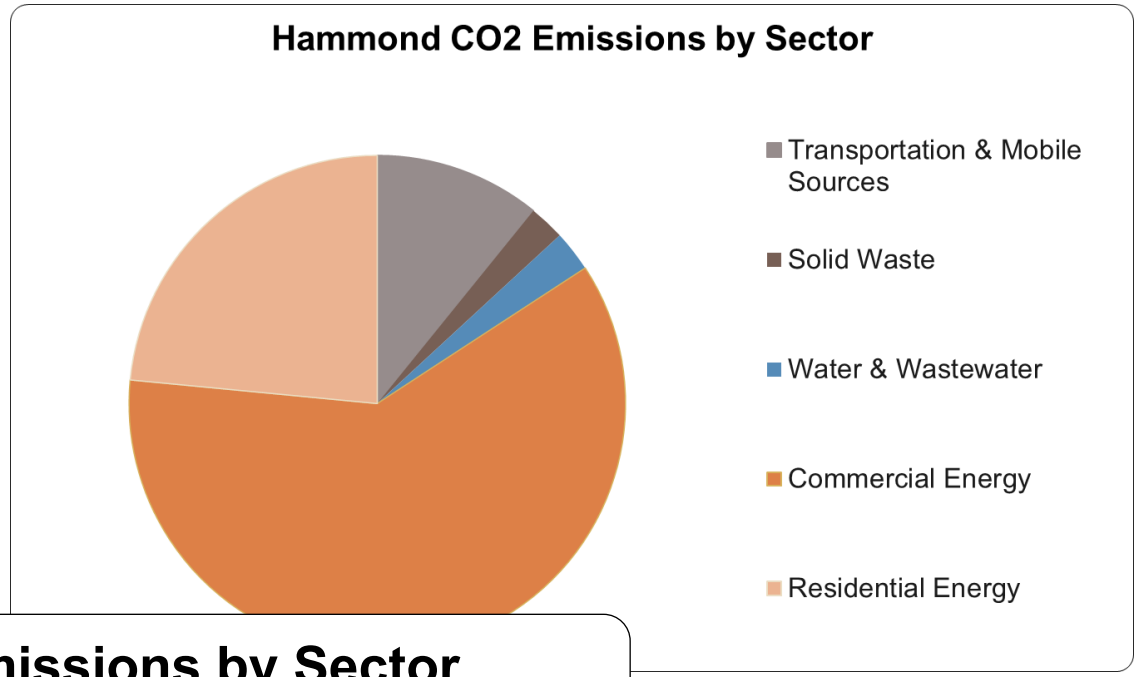
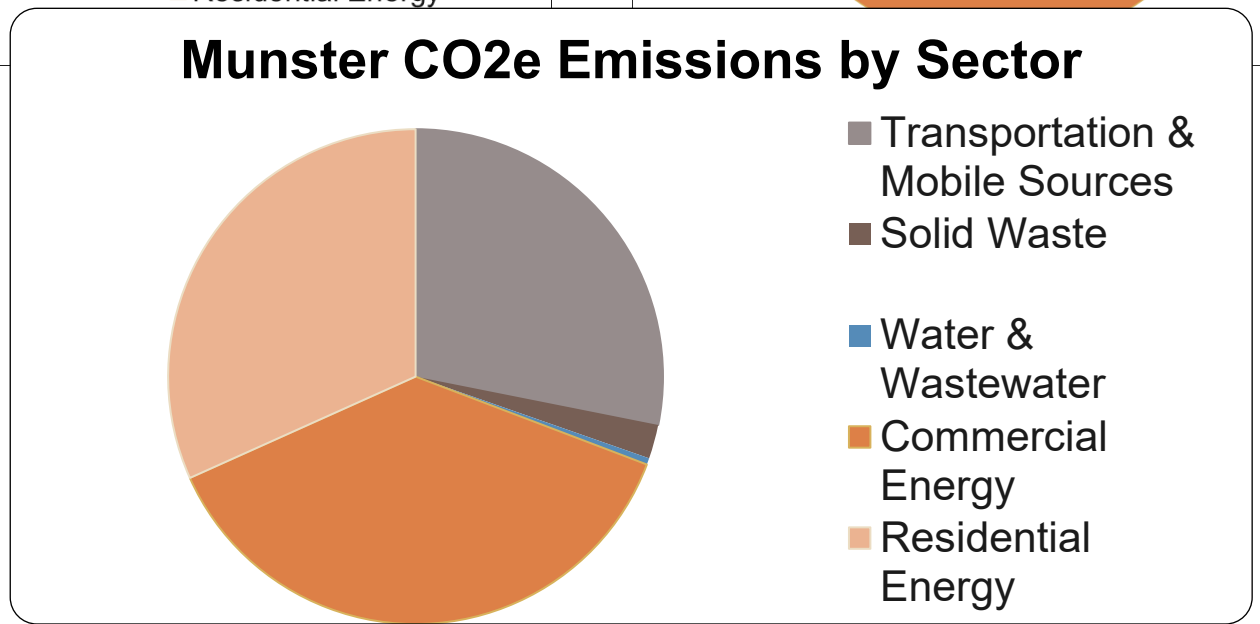
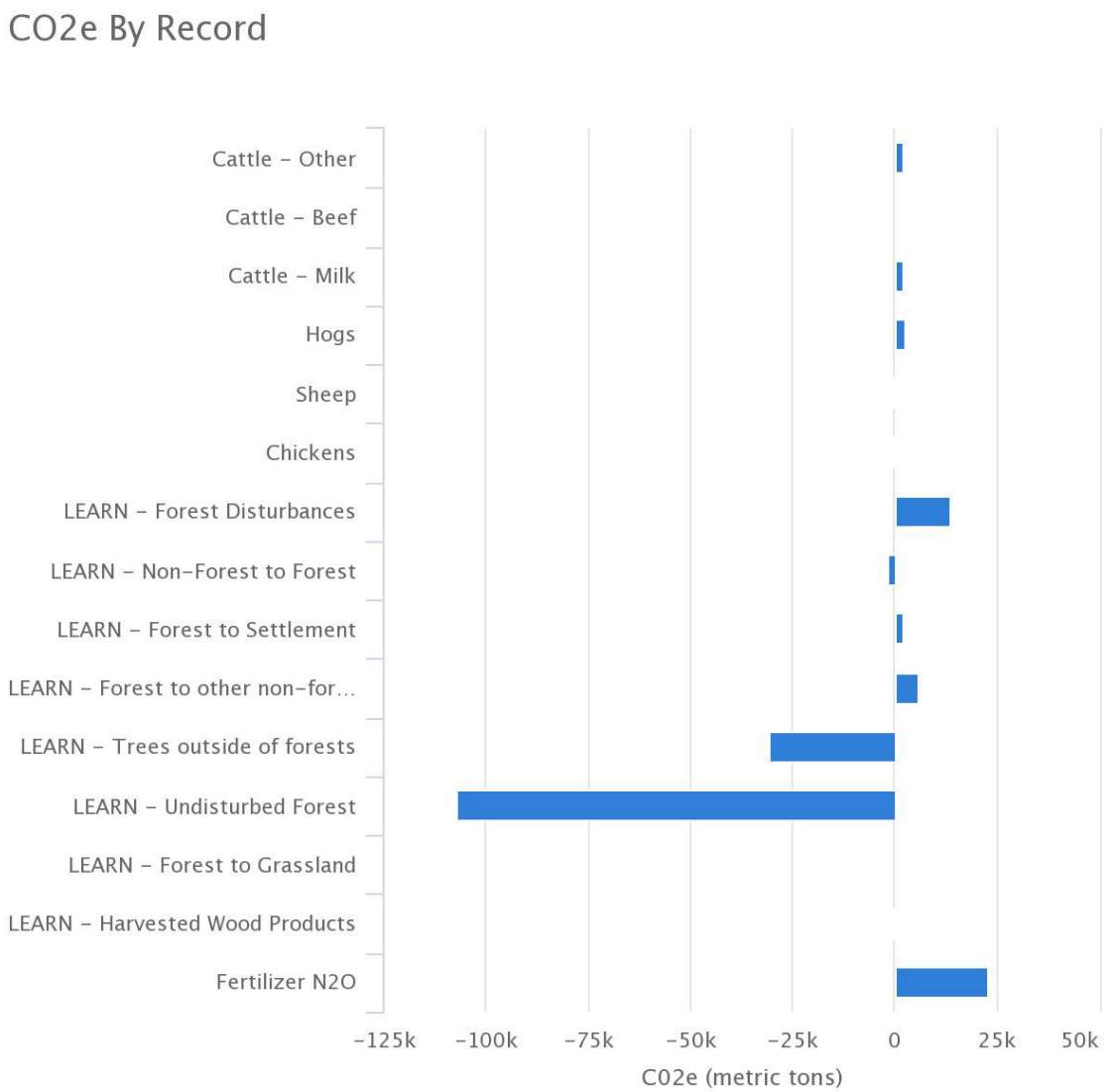
Develop Community Typologies and Strategies







Land Use and Carbon Sequestration Strategies



Develop Local CAP Support Plan and Performance Metrics

How do we make this a plan that won't sit on a shelf?

How can we help local communities to pursue and implement their own Climate Action Plans?

Questions?

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