

Climate Action Plan

Project Kick-off Meeting

October 11, 2023



Agenda

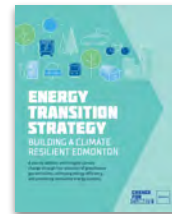
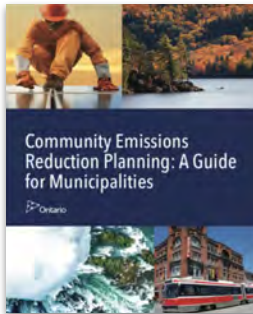
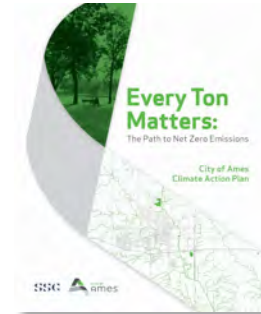
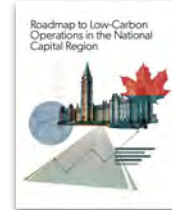
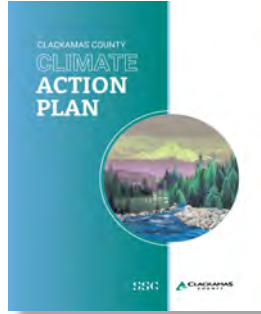
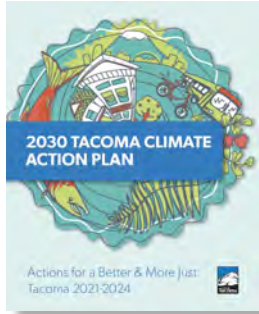
1. Welcome and Introductions
2. Project Background
3. Project Approach
4. Project Schedule
5. Discussion & Questions

Introductions

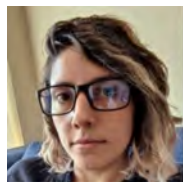
SSG



We are the leading climate action planners for the Americas



SSC



Project Background

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Project Background

- MVRPC received \$1 Million grant from federal government for climate action planning for the Miami Valley region
- Sustainability Solutions Group (SSG) contracted to support MVRPC in developing climate action plans over next three years
- CPRG-specific implementation grant applications due in April 2024
- Climate action supported by many other federal grant and revenue sources

Project Approach

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Project Overview

Elements of Deliverables	Associated Deliverables		
	PCAP	CCAP	SR
	Deadline: March 1, 2024	Deadline: June 5, 2025	Deadline: June 1, 2027
GHG Inventory			
Identification and Quantification of Priority GHG Reduction Measures			
LIDAC Benefits Analysis			
Engagement Plan			
Coordination with Other Ongoing Climate Plan Engagement Activities			
Review of Authority to Implement			
Intersections with Other Federal Funding Availability			
GHG Projections and Targets			
Identification and Quantification of Comprehensive GHG Reduction Measures			
Leverage and Intersection with Other Funding			
Workforce Planning Analysis			
Implementation Status of GHG Reduction Measures			
Updated Benefits Analysis for Full Geographic Scope and Population			
Updated LIDAC Benefits Analysis			
Updated Review of Authority to Implement			
Updated Review of Intersection with Other Funding Availability			
Next Steps/Future Budget/Staffing Needs			

Two* Projects in One

Priority Climate Action Plan

High-priority, near-term, implementation-ready actions

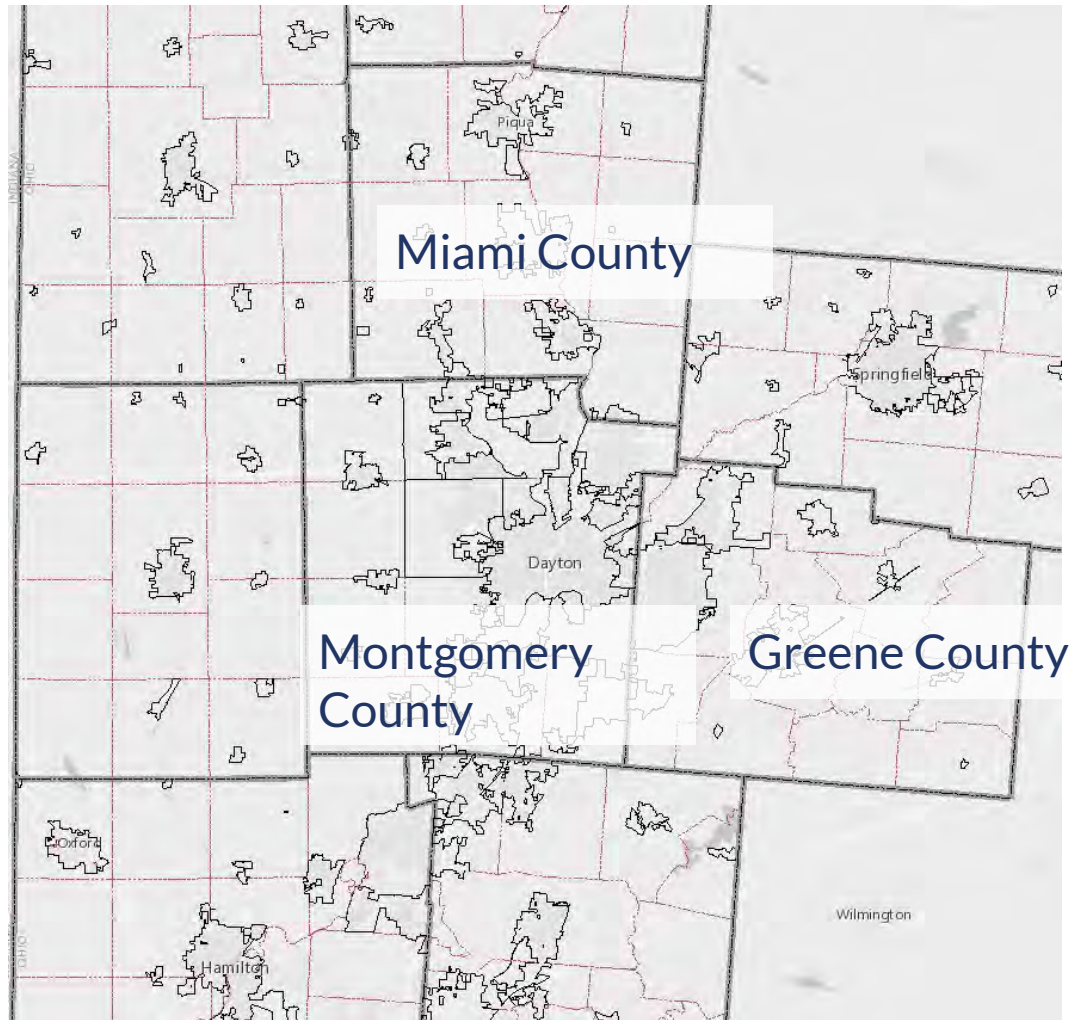
- Three-county GHG inventory
- Actions gathered from MVRPC members and SSG's Actions Database, in key sectors
- Selection for:
 - High emissions impact
 - LIDAC benefits,
 - 'Implementation-ready'
- Support April 2024 competitive funding applications.

Comprehensive Climate Action Plan

Full plan to reach long-term reduction targets

- Primary energy use, building portfolio, transportation, industry, green infrastructure and waste data,
- Comprehensive modeling and analysis of geographically-specific actions to achieve MVRPC's long-term, emissions reduction goals.

Geographic Scope



Where do Miami Valley's emissions come from?

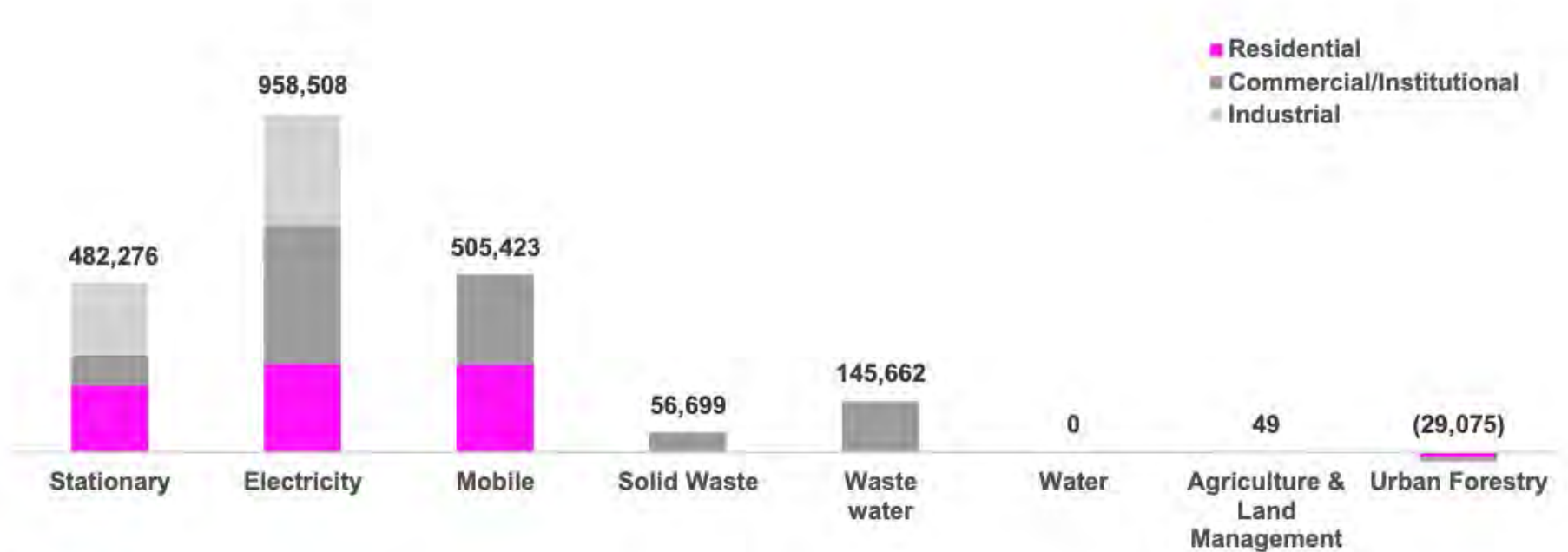


Figure 3.
Emissions by Source and Sector – City of Dayton 2019 (MTCO_{2e})

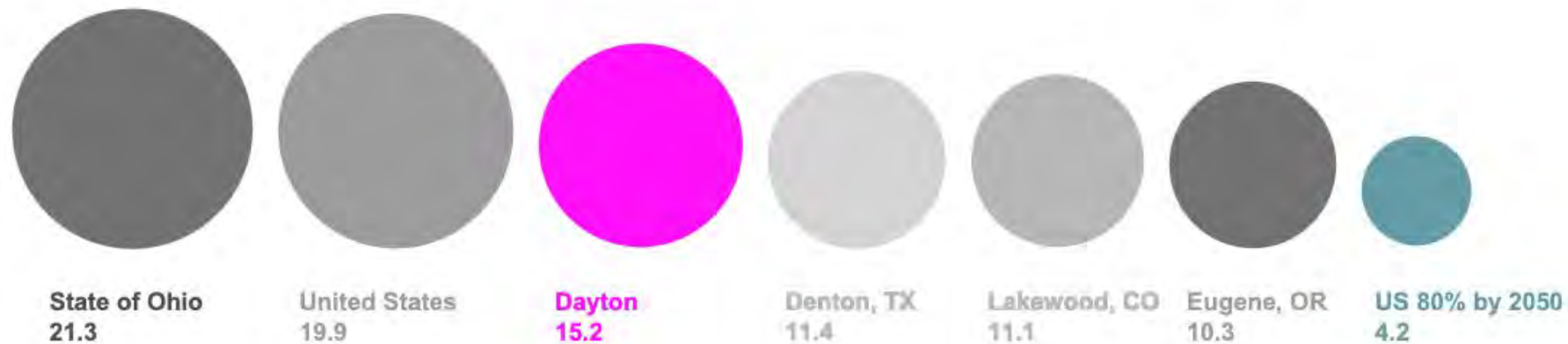
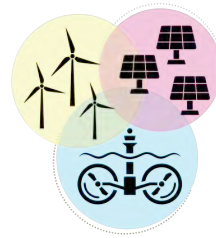
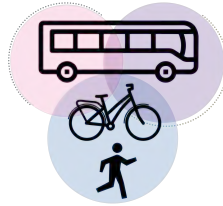
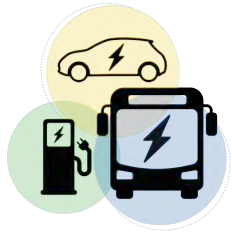


Figure 6.
2019 Gross Emissions per Capita

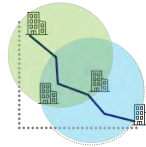
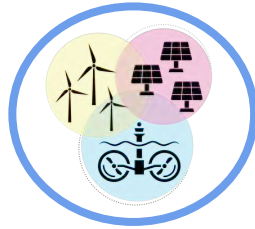
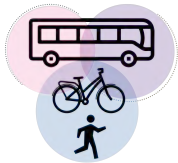
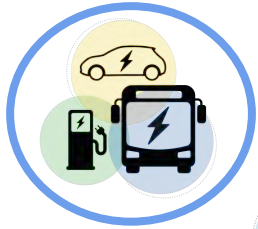
PCAP Approach: Which actions will provide the greatest benefits in those sectors?



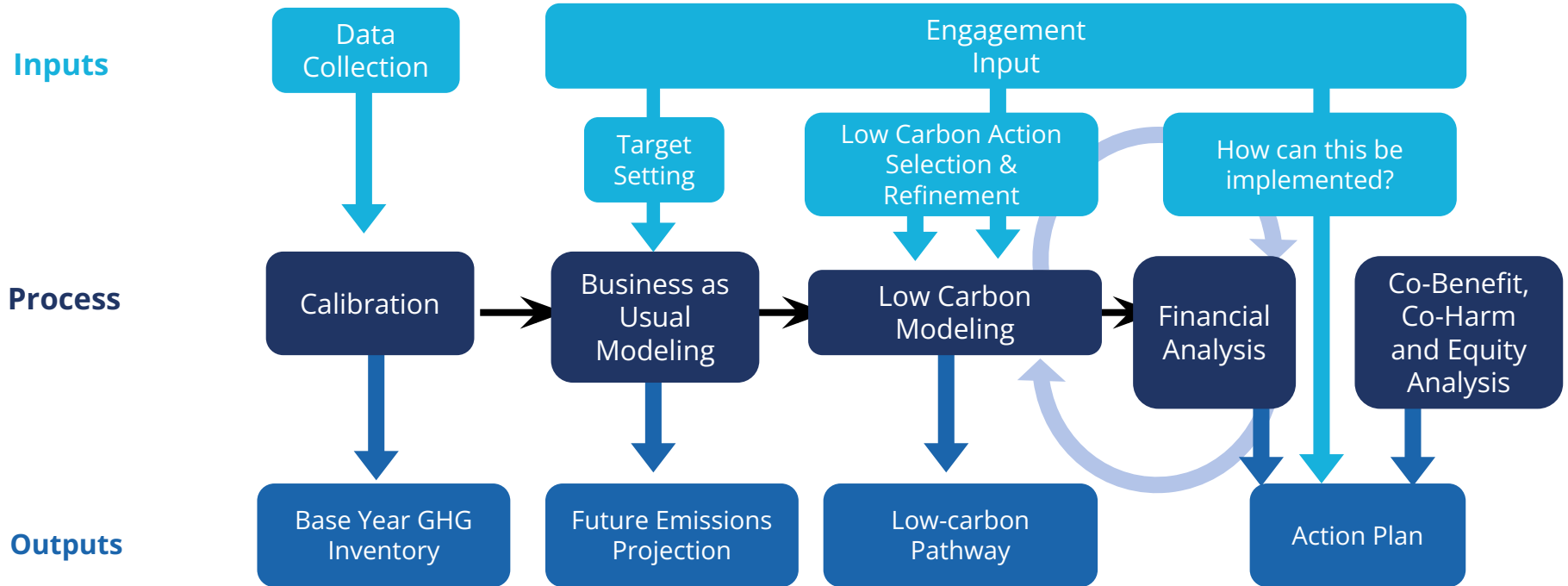
PCAP Approach: Evaluate Actions

Records	Standardized Action Name	Paradigm Approach	About this action	Proportion of total reduction	Co-benefits	Mandatory/ Optional Depend...	Case Studies for Reference
	Decarbonized Energy	Procure RNG	Replace	—	10.6%	Capital cost savings Supports 'greening of the grid' for th	If significant need for nat...
	Decarbonized Energy	Add energy storage	Reduce	Many of the lea...	4.6%	Ongoing power availability during grid outages Lower or	Blatchford Community in Edmonto
	Water Use Local Energy	Increase fresh water storage	Avoid Replace	—	—	Increased resilience	The Aguas Andinas water utility in
		Pumped hydro storage	Replace	This refers to a ...	—	—	—
	Decarbonized Energy	Store heat underground or in sand	Replace	Heat can be sto...	—	—	Sand battery is in use in Kankaanpi
	Buildings	Demolish selected buildings	Reduce	If buildings exis...	3.5%	Creates opportunities for upgrading/ transforming neighbt	If buildings exist that can...
	Land Use	Increase small-scale mix of building types	Reduce Avoid	—	3.5%, 0.0%	Reduced energy bills Reduced road congestion Creates	This is one approach to d...
	Land Use	Increase urban density	Avoid Reduce	—	2.0%, 3.7%, -5.0%	Reduced energy bills Reduced road congestion Creates	—
	Land Use	Fix or reduce municipal boundary	Reduce	—	—	Shorter commute distances Lower municipal developmen	This reduces overall com...
	Land Use	Reduce lot size	Avoid Reduce	—	—	Lower municipal development costs Protects areas outsid	This reduces overall com... Blatchford Community in Edmonto
	Decarbonized Energy	Expand areas using district energy	Reduce	This action focu...	1.0%, 0.2%	Lower or zero utility bills Space savings Reduces overall	Adding district energy is ... Blatchford Community in Edmonto
	Transportation	Reduce driving ICE vehicles - both the number of trips and the distances driven	Reduce	—	0.9%	Improved Safety Better outdoor air quality Reduced road	Having a goal like this is a... Oslo's Zero Emissions City Centre
	Transportation	Use cargo bikes for last km / mile delivery	Avoid	—	2.5%, 0.5%, 0.0%, 1.1%, 1.0%	Reduced vehicle km or miles travelled Less pollution Red	This is an approach to de... Europe's Cargo Bike Friendly Cities
	Transportation	Reduce available parking at destinations and origins	Avoid Reduce	—	0.9%, 1.1%	Reduced road congestion Creates opportunities for upgr	This is one approach to di... Blatchford Community in Edmonto
	Transportation	Increase transit mode share	Reduce	—	0.6%, 0.8%, -0.3%, 8.1%, ...	Improved mental health Improved long-term affordability	If there is transit and it's e... France mandates car ads must urg
	Transportation	Increase active transportation mode share	Avoid	Shifting a large ...	0.5%, 1.1%, 1.8%, 2.5%, 0.0%	Reduced health costs Improved mental health Less emp	—
	Transportation	Work/ study from home	Avoid	—	0.2%, 0.2%	Capital cost savings Space savings Reduced road conge	This is one approach to re... —
	Transportation	Create Commercial Delivery Hubs	Reduce	—	0.2%, 6.7%	Reduced vehicle km or miles travelled Less pollution Red	Very effective when there ... Europe's Cargo Bike Friendly Cities
	Transportation	Decarbonize and increase shared mobility	Reduce Replac	—	0.1%, 0.7%, 0.1%	Less noise Better outdoor air quality Financial savings or	This is one approach to re... Montreal's bike share service goes
	Transportation	Decrease vehicle km traveled	Reduce	—	0.1%, 1.3%	Reduced road congestion Less noise Better outdoor air i	Having a goal like this is a... Tokyo's population travels almost e
	Transportation	Discourage use of ICE vehicles with congestion charges, parking charges for ICE veh...	Reduce Replac	—	0.0%	Better outdoor air quality Reduced road congestion Imp	This is one approach to di... Gas cars totally banned from Paris
	Transportation	Establish car-free zones	Avoid Reduce	—	0.0%	Better outdoor air quality Less noise Creates opportuniti	This is one approach to a... Europe's Cargo Bike Friendly Cities
	Transportation	Eliminate fossil fuel vehicle fueling locations	Avoid Replace	—	—	Creates opportunities for upgrading/ transforming neighbt	This is one approach to a... —
	Transportation	Decrease vehicle ownership	Reduce	—	—	Capital cost savings Reduced health costs Financial savir	Depends on how much of... Tokyo's population travels almost e
	Transportation	Reduce purchases of non-local products requiring delivery	Reduce	—	—	Reduced road congestion Creates opportunities for circul	—
	Agriculture Decarboni	Install anaerobic digesters on individual farms	Reduce	—	—	Lower or zero utility bills Better outdoor air quality Pote	Dairy farmers of Canada 2016 LCA
	Agriculture	Reduce conventional tillage practices for crops	Reduce	—	—	Increased resilience Reduced risk of pollution Reduced li	—
	Industry	Improve industrial energy efficiency	Avoid Reduce	—	0.9%, 0.9%, 3.8%, 9.0%, 8.0%	Reduced energy bills Lower or zero utility bills Better air	If there is industry presen... Replace pneumatic motors with ele

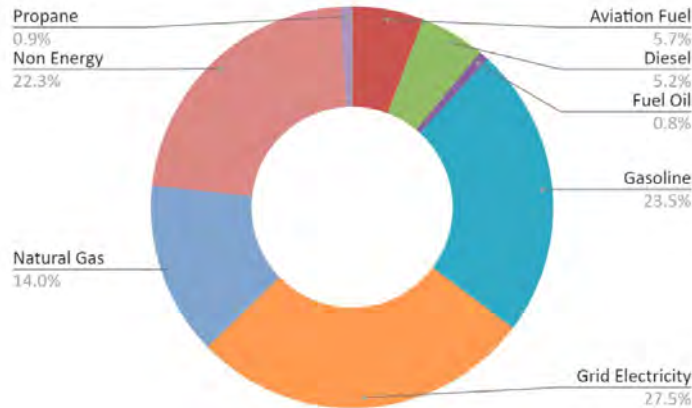
PCAP Approach: Present Actions for Approval and Prepare for 2024 Funding Applications



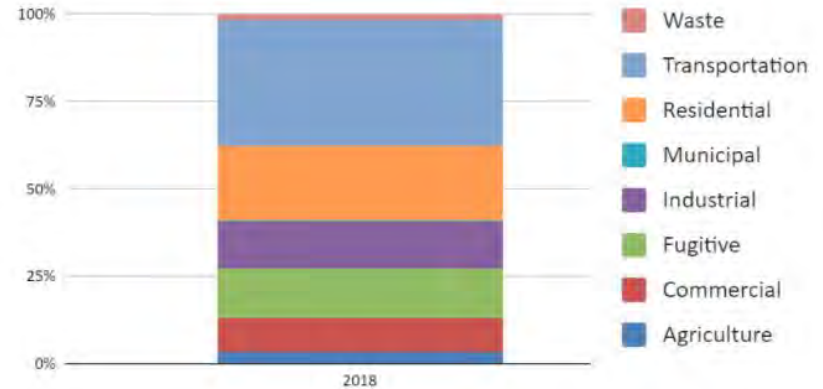
CCAP Approach: Iterative Feedback + Analysis



CCAP Approach: Where do Miami Valley's emissions come from?

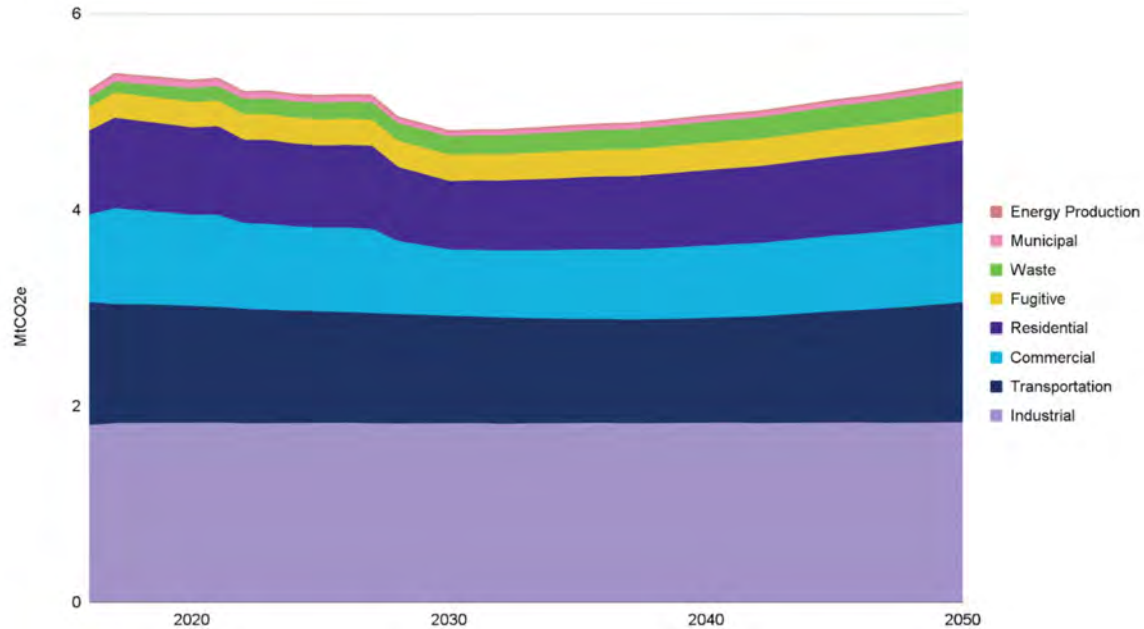


By Fuel

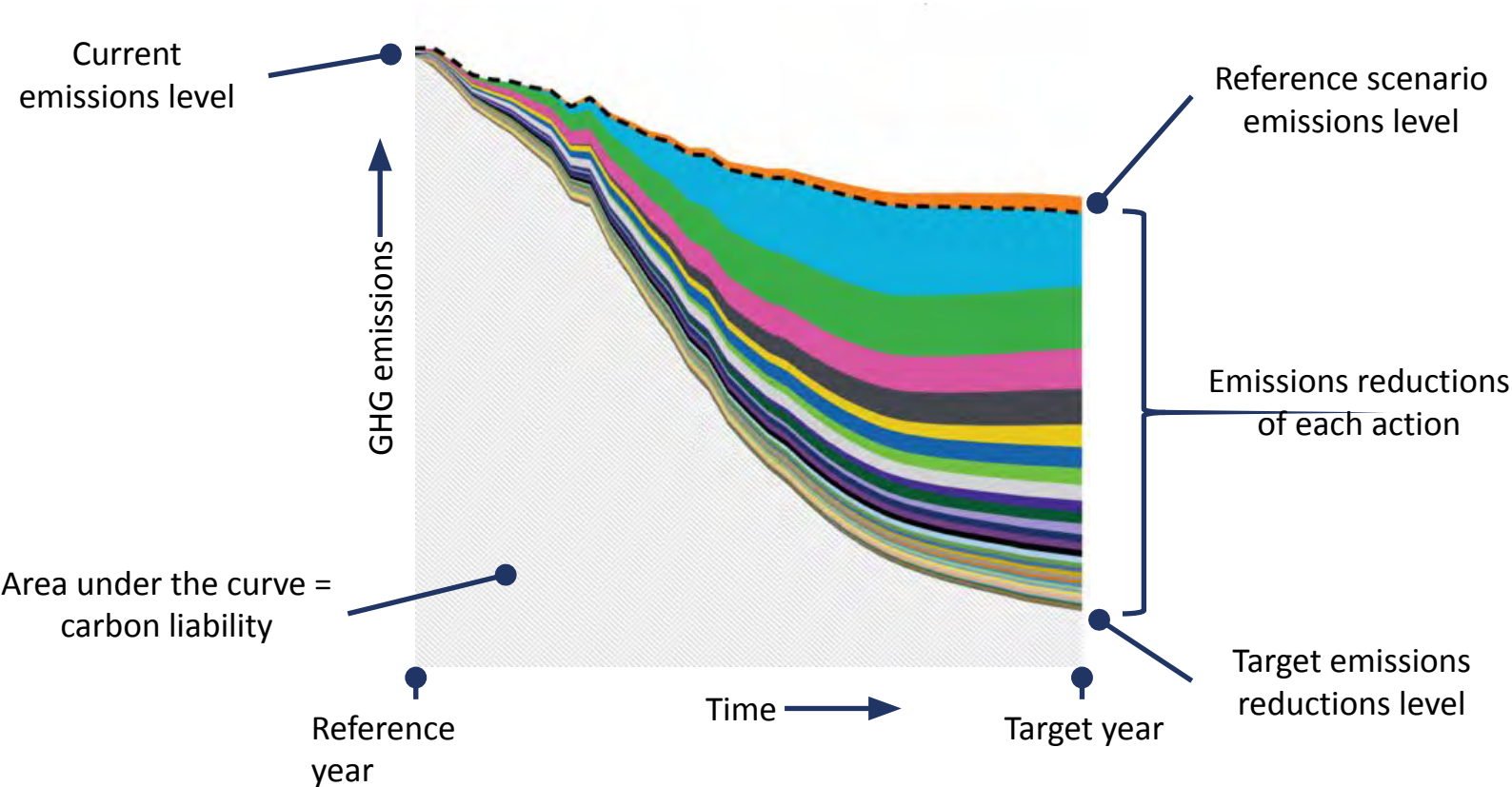


By Sector

CCAP Approach: What will happen if we don't change?



Approach: Develop Comprehensive Action Set



Approach: Engagement and Equity Strategy

1. Pre-Engagement

- Interviews
- Pre-engagement summary

2. Engagement Plan

- New Reach Community Consulting
- IAP2 framework
- Justice40
- Dayton and MVRPC's existing equity information

3. Active Engagement Activities

4. Equity Lens informs PCAP and detailed feedback informs CCAP.

40% of Dayton households can afford their home energy bills.



27% of Dayton households may be struggling with some of their home energy bills.



Another 33% of Dayton households are unable to afford their home energy bills.



Project Schedule

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Consultant work	Meeting/Engagement	Estimated deliverable	2023																							
			September			October			November			December			January			February								
			1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Phase 1: Project Management																										
1.01	Project Kick-off Meeting		█																							
1.02	Regular Check-in Meetings with Project Team			█			█			█			█			█			█			█			█	
1.03	Quarterly Reports & Invoicing																									
1.04	Review of Existing Plans, Local Context, and Legislation																									
1.05	Data Request																									
1.06	Federal Compliance Reporting																									
1.07	Quality Assurance Project Plan (QAPP)																									
Phase 2: Engagement																										
2.01	Pre-Engagement Preparation		█	█	█																					
2.02	Final Engagement Plan																									
2.03	Engagement Materials		█	█	█																					
2.04	Engagement Reporting																									
2.05	Webinar #1: Intro to the PCAP		█	█	█																					
2.06	MVRPC Water & Environment Committee Meetings																									
2.07	Partner Workshops #1 - PCAP																									
2.08	LI/DC Focus Groups - PCAP and CCAP																									
2.09	Public PCAP Meetings #1: PCAP																									
2.10	Dayton City Commission Meeting #1: Draft PCAP																									
2.11	Webinar #2: Intro to the CCAP																									
2.12	Partner Workshops #2 - CCAP																									
2.13	Public CCAP Meetings #1 - Intro to CCAP																									
2.14	Public CCAP Meetings #2 - CCAP Findings																									
2.15	Public CCAP Meeting #3: CCAP Implementation																									
2.16	MVRPC Board of Directors Meeting #1: Draft CCAP																									
2.17	Webinar #3: Status Report																									
2.18	Public Status Report Meeting #1 - CCAP Updates																									
2.19	MVRPC Board of Directors Meeting #2: Status Report																									
2.20	Engagement Summary																									
Phase 3: PCAP																										
3.01	GHG Inventory Review																									
3.02	Priority GHG Reduction Measures																									
3.03	Quantify GHG Reduction Measures																									
3.04	Benefits Analysis for Priority GHG Reduction Measures																									
3.05	LI/DC Benefit Analysis for Priority GHG Reduction Measures																									
3.06	Review of Authority																									
3.07	Draft PCAP																									
3.08	Documents for Each Reduction Measure																									
3.09	Final PCAP																									



Discussion

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Discussion:

1. What are your goals for climate action planning in the Miami Valley?
2. What are your priority actions for the PCAP?
3. What challenges do you anticipate?