

**RESOLUTION 2025-047:
CLEVELAND-ELYRIA METROPOLITAN
STATISTICAL AREA (MSA) COMPREHENSIVE
CLIMATE ACTION PLAN (CCAP)**

**Board of Directors
September 12, 2025**

INTRODUCTION BY ED/CEO

- The CCAP includes different measures (or actions) Northeast Ohio communities and organizations may consider (recommendations). These actions are strictly voluntary. The CCAP provides examples communities and organizations may choose to reach targets.
- US EPA allocated \$1M planning grants (each) to 67 most populous metro areas, including Cleveland-Elyria MSA (NOACA's five counties), Cincinnati MSA, Columbus MSA, Dayton-Kettering MSA; \$3M to State of Ohio to plan in less populous areas.
- US EPA awarded \$129M implementation grant to City of Painesville, City of Cleveland, and Cuyahoga County, one of only 25 such awards in US and the only award in Ohio.

INTRODUCTION BY ED/CEO

From US EPA Desk Review with NOACA and the City of Cleveland on September 8, 2025 (current administration):

- *“US EPA applauds the work by the Cleveland-Elyria MSA team”*
- *“US EPA continues to be impressed by the work your team is accomplishing. It was a pleasure to learn about the strong progress being made on your CCAP, subawards, and general milestones.”*

ACTION REQUESTED

Request that the Board of Directors adopt the following Resolution:

- Resolution 2025-047, which adopts the Cleveland-Elyria Metropolitan Statistical Area (MSA) Comprehensive Climate Action Plan (CCAP)

PREVIOUS ACTION

Recommended by the Policy Committee and the Executive Committee

CLIMATE POLLUTION REDUCTION GRANTS (CPRG) PROGRAM

- Inflation Reduction Act (IRA) §60114 appropriates nearly \$5 billion to US EPA for climate pollution reduction efforts by states, U.S. territories, municipalities, air pollution control agencies, and tribes.

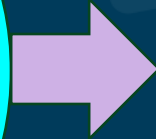
**PHASE I (Planning)
Non-Competitive
GHG Reduction Plans
(\$250M)**

**PHASE II
(Implementation)
Competitive
Projects
(\$4.6B)**

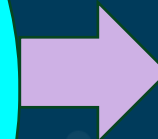
- US EPA CPRG Program provided \$1 million (Phase I) to NOACA and Cleveland (Cleveland-Elyria MSA one of 67 most populous).

CPRG PROGRAM PHASE I DELIVERABLES

**PRIORITY
CLIMATE
ACTION PLAN
(PCAP)
APPROVED
MARCH 2024**



**COMPREHENSIVE
CLIMATE ACTION
PLAN (CCAP)
DUE DECEMBER
2025**



**STATUS
REPORT DUE
JULY 2027**

CCAP DEVELOPMENT PROCESS

**March
2024: US
EPA
approved
PCAP**

**December
2024:
NOACA
Board
approves
regional
emissions
reduction
targets**

**July 2025:
Bring draft
CCAP to
NOACA
Policy
Committee**

**September
2025:
NOACA
Board
reviews
CCAP**

**Summer-Fall
2024:**

- **Develop 2022 GHG Inventory**
- **CCAP Public Engagement**

**Spring
2025:
Complete
technical
analysis
for CCAP,
draft
report**

**July-August
2025:
Public
comment
period**

**December
2025:
Submit
CCAP to US
EPA**

CCAP KEY MESSAGES

- **Climate action already happening in Cleveland-Elyria MSA**
- **Real barriers remain to achieve our region's targets**
- **Need to start with leadership, vision, partnerships, and multi-sectoral strategies**
- **CCAP is centered on widespread electrification, clean energy, transforming industry, and emissions removal**
- **MSA must attract businesses to support transition, such as tree nurseries, waste reduction & reuse companies**

CCAP – BUILDING OFF THE PCAP

- **PCAP: initial plan centered on near-term, high-priority, implementation-ready measures**
 - Laid groundwork for CPRG Implementation grants
 - Not required to be comprehensive in nature
- **CCAP: detailed plan that addresses all sources of emissions, provides plan to achieve region's targets**
 - Builds off PCAP but does not need to be 1:1
 - Adds several elements not required for PCAP

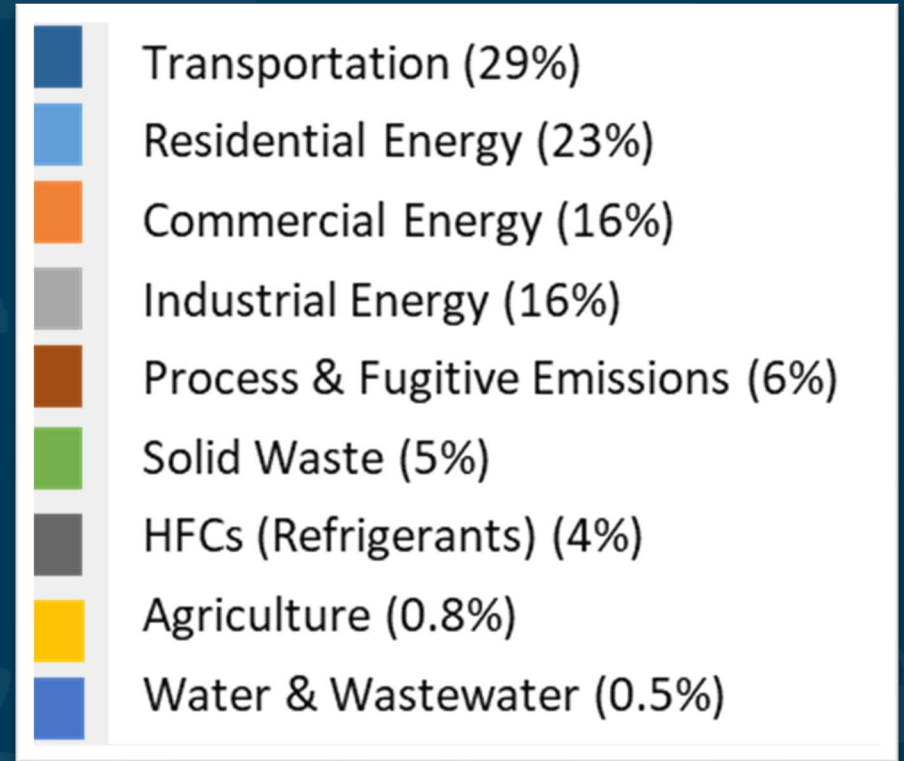
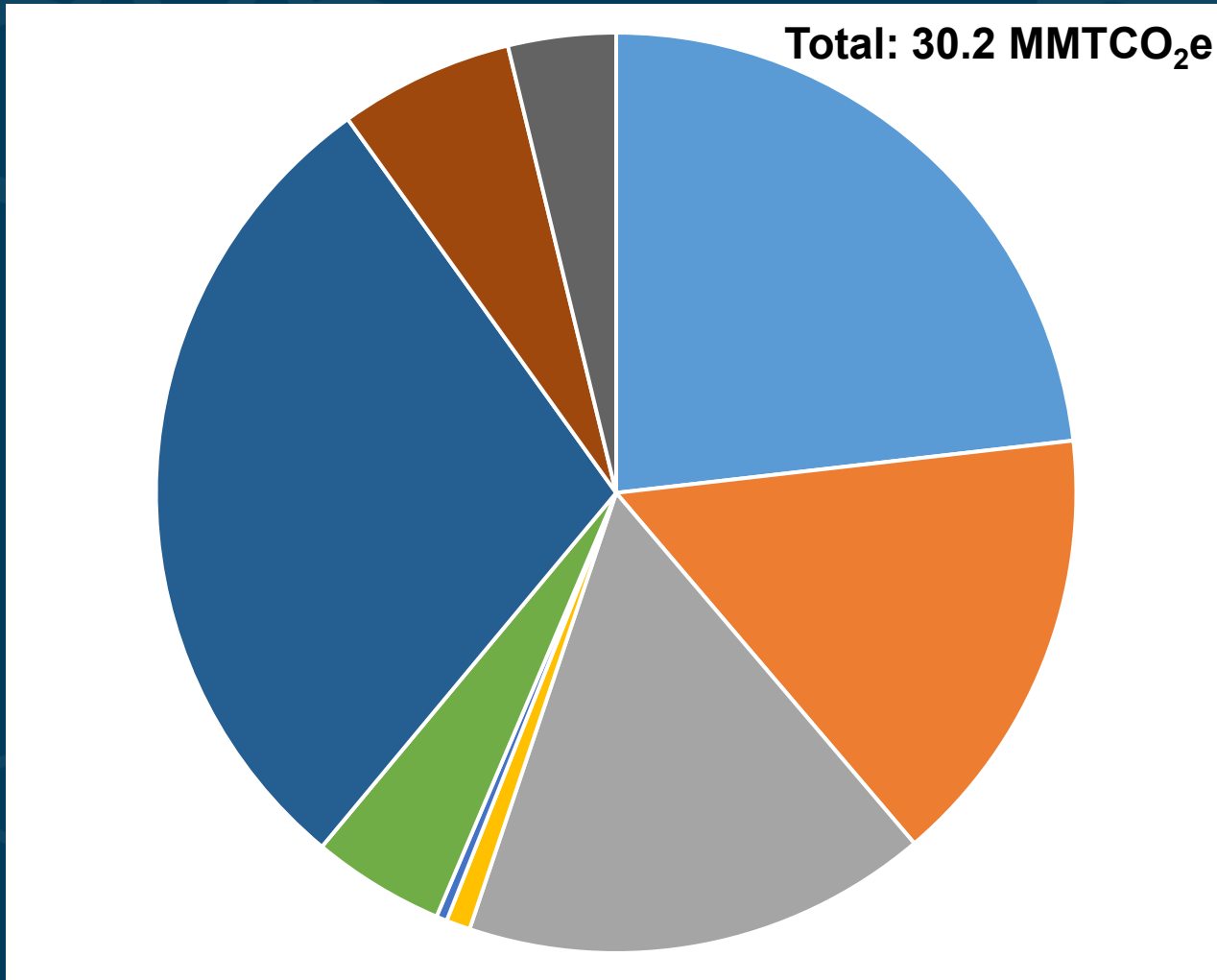
CCAP REQUIRED ELEMENTS

Plan Element	Priority Climate Action Plan	Comprehensive Climate Action Plan	Status Report
GHG Inventory	Required	Required	Update Encouraged
GHG Emissions Projections	Not Required	Required	Update Encouraged
GHG Reduction Targets	Not Required	Required	Not Required
Quantified GHG Reduction Measures	Required (priority measures only)	Required (comprehensive)	Status and Updates Required
Benefits Analysis	Encouraged	Required	Required

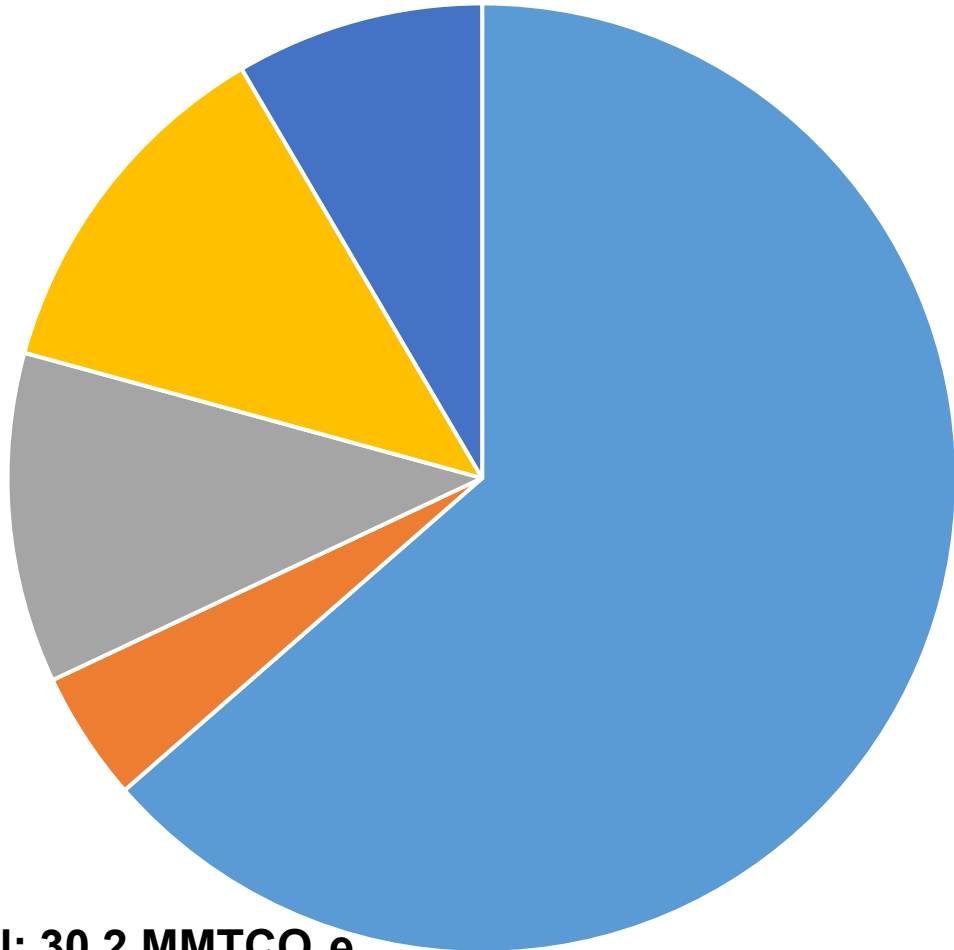
CCAP REQUIRED ELEMENTS

Plan Element	Priority Climate Action Plan	Comprehensive Climate Action Plan	Status Report
Low Income/ Disadvantaged Communities Benefits Analysis	Required	Encouraged	Encouraged
Review of Authority to Implement	Required	Required	Update Required
Intersection with Other Funding Availability	Encouraged	Required	Required
Workforce Planning Analysis	Encouraged	Required	Required
Next Steps/Future Budget and Staffing Needs	Not Required	Not Required	Required

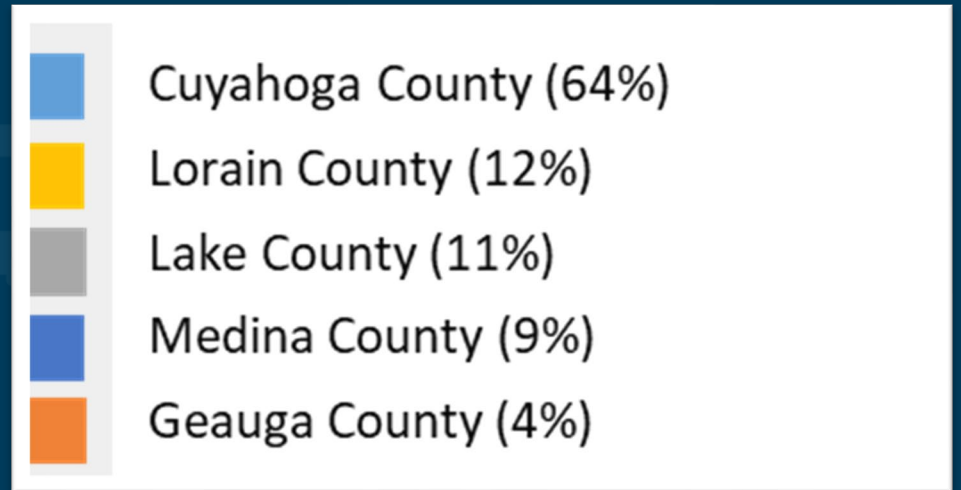
2022 GHG EMISSIONS BY SECTOR



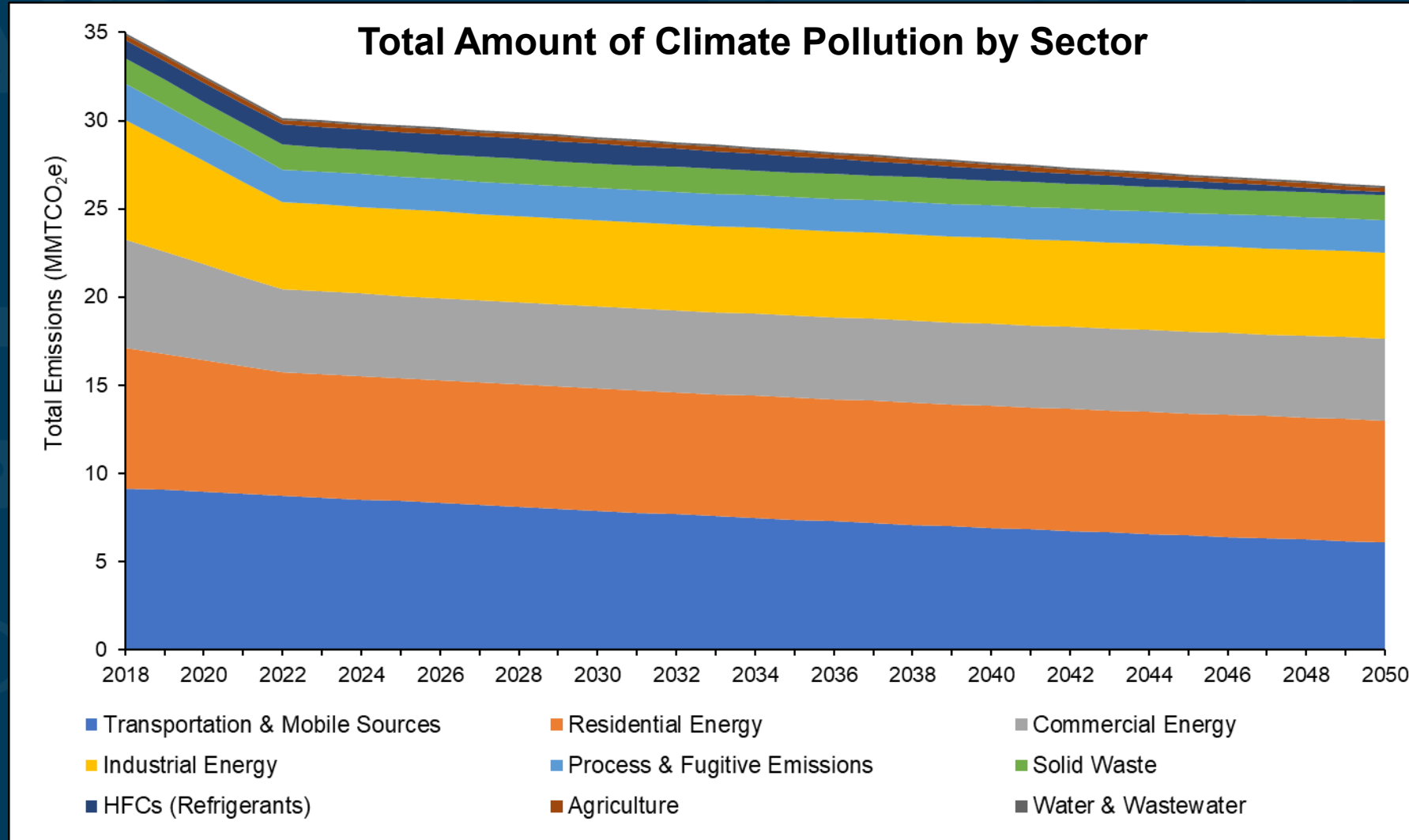
2022 GHG EMISSIONS BY COUNTY



Total: 30.2 MMTCO₂e



BUSINESS AS USUAL PROJECTIONS



CLIMATE POLLUTION REDUCTION TARGETS

- **NOACA Board adopted targets in December 2024**
 - 2030: 49% reduction from 2018 levels
 - 2050: Net zero emissions
- **2030 target comes directly from Priority Climate Action Plan (PCAP)**
- **GHG emissions need to decline by:**
 - 6.4% per year through 2030
 - 5% per year from 2030-2050

GO BIG STRATEGIES

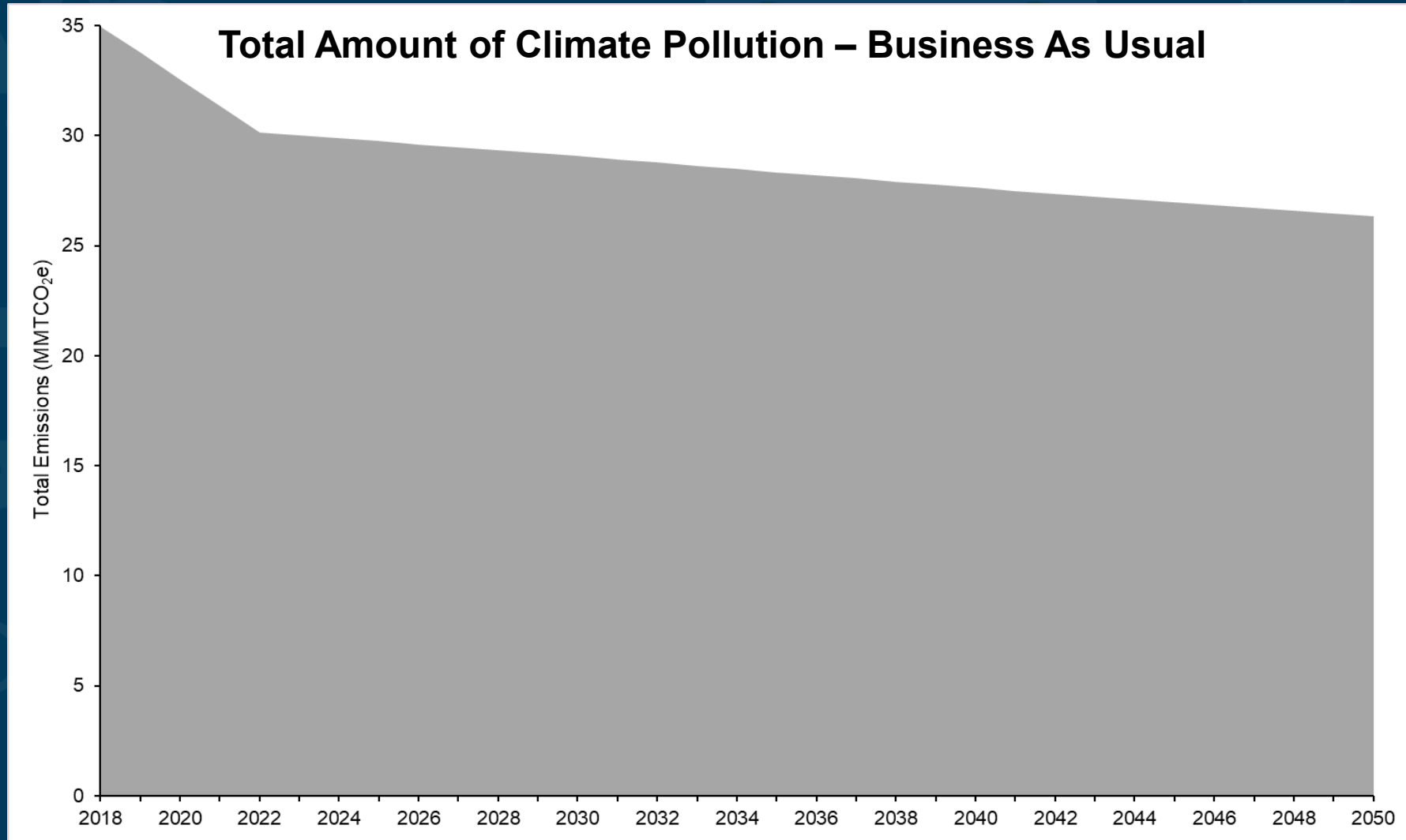
1. Expand nuclear generation at Perry Nuclear Power Plant
2. Develop offshore wind on Lake Erie
3. Net-Zero steelmaking
4. Expand passenger rail & light-rail
5. Develop a regional Direct Air Capture (DAC) facility
6. Implement “Headwaters Forests Initiative” to reforest 10 square miles



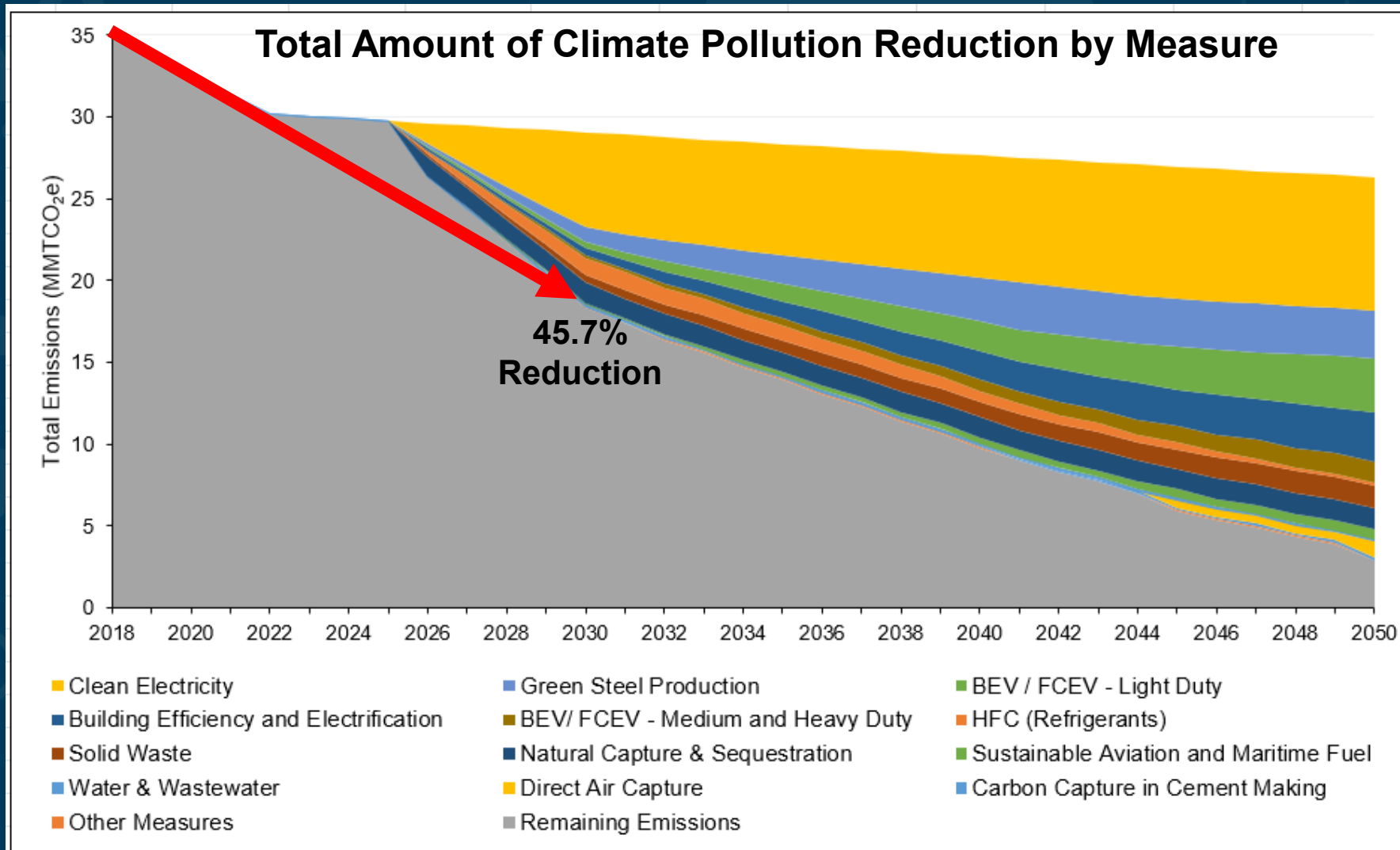
EMISSIONS REDUCTION MEASURES

PCAP Measure	CCAP Measure	GHG Reduced by 2030 (MMTCO ₂ e)	GHG Reduced by 2050 (MMTCO ₂ e)
Clean Electricity	Clean Electricity	5.84	8.13
Light-Duty Vehicle Electrification	BEV / FCEV - Light Duty	0.33	3.32
Building Efficiency & Electrification	Building Efficiency and Electrification	0.51	2.97
Green Steel Production	Green Steel Production	0.89	2.94
Solid Waste Diversion	Solid Waste	0.51	1.40
Heavy-Duty Vehicle Electrification	BEV/ FCEV - Medium and Heavy Duty	0.14	1.28
Nature-Based Solutions	Natural Capture & Sequestration	1.20	1.26
N/A	Direct Air Capture	0	1.00
Heavy-Duty Vehicle Electrification	Sustainable Aviation and Maritime Fuel	0.13	0.63
Green Steel Production	Carbon Capture in Cement Making	0	0.18
Refrigerants Capture	HFCs	1.02	0.17
Solid Waste Diversion	Water & Wastewater	0.10	0.10
Building Efficiency & Electrification, VMT Reduction, Refrigerants Capture	Other Measures	0.08	0.05
Total Emissions Reduction		10.74 (-45.7%)	23.44 (-91.5%)

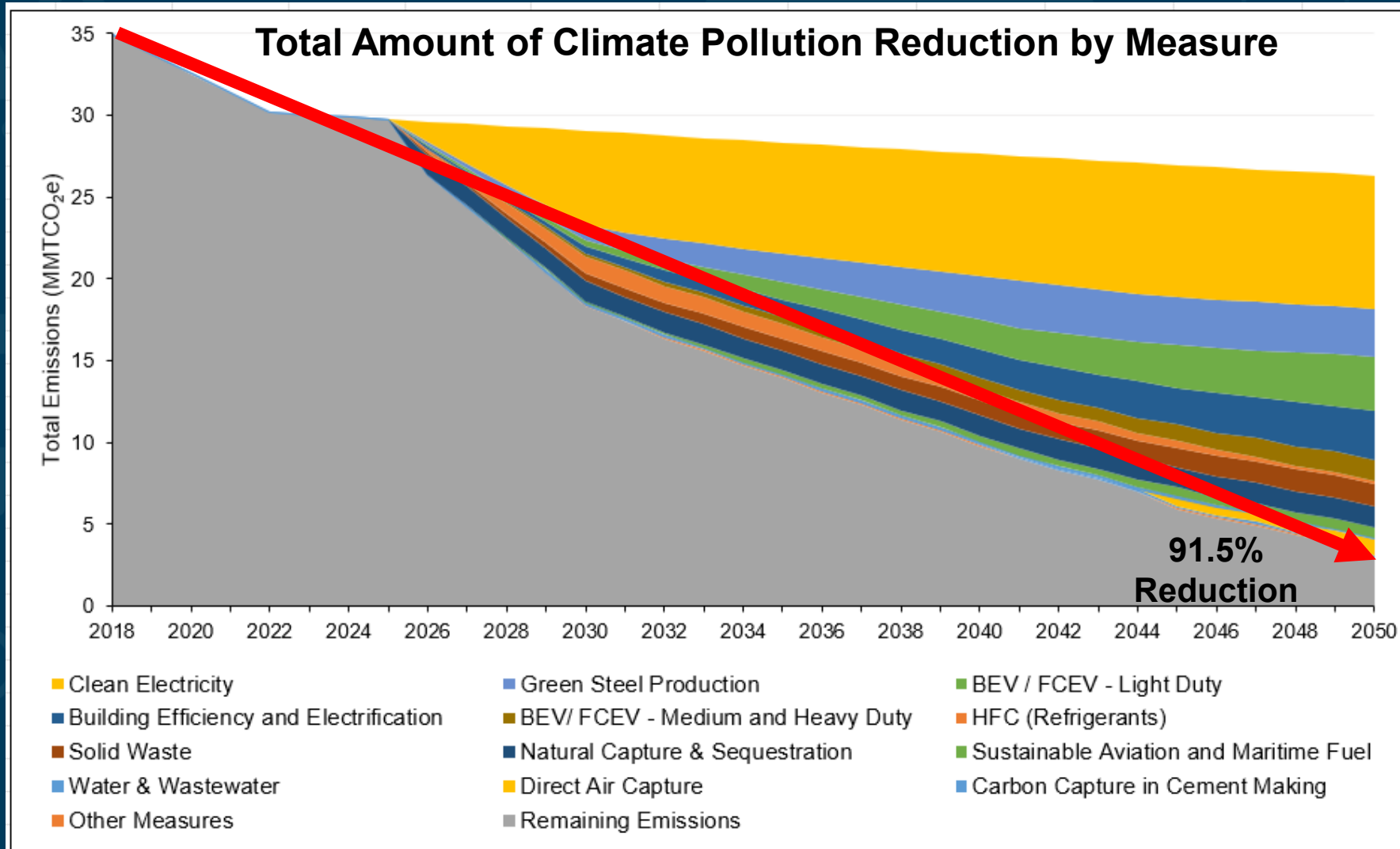
EMISSIONS REDUCTION MEASURES



EMISSIONS REDUCTION MEASURES



EMISSIONS REDUCTION MEASURES



CO-BENEFITS OF CCAP MEASURES

- Improved public health from better air quality
- Improved water quality from reduced runoff, limiting harmful algal blooms
- Reduced household energy costs for utilities, transportation
- Increased resilience to extreme weather events
- Reduction in traffic crashes, increased physical activity



CITY OF CLEVELAND
Mayor Justin M. Bibb
MAYOR'S OFFICE OF
SUSTAINABILITY

NOACA
Northeast Ohio Areawide Coordinating Agency

AUTHORITY TO IMPLEMENT MEASURES

- **CCAPs must include review of whether local governments within the MSA have authority to implement measures**
- **Focus on measures where local governments have existing authority**
- **Some key measures require additional authority outside the MSA, particularly from the State of Ohio**
 - Offshore wind on Lake Erie
 - New nuclear at Perry Nuclear Power Plant
 - Carbon Capture, Sequestration, and Utilization
 - Intercity passenger rail

WORKFORCE PLANNING ANALYSIS

- CCAP assesses key occupations where MSA has workforce shortages
- Occupations with potential shortages:
 - Foresters
 - Building Inspectors
 - Maintenance Workers, Machinists
 - Quality Engineers
 - Electrical Engineers



CCAP IMPLEMENTATION PLAYBOOK

- Created *Implementation Playbook* to help communities act on CCAP measures
- Identified measures most appropriate for different kinds of communities, using *Vibrant NEO 2040* typology



City Architecture

Legacy City
(Pre 1910)

Akron, Canton, Cleveland, Elyria, Lorain, Warren, Youngstown



City Architecture

1st Ring Suburbs
(1910-1959)

Cleveland Heights, Wickliffe, Sheffield, Parma, Mogadore, East Canton, Howland, etc.



City Architecture

2nd Ring Suburbs
(1950-1969)

Orange, Eastlake, Norton, Fairlawn, Boardman, Liberty, North Olmsted, etc.



City Architecture

Outer Ring Suburbs
(1970-present)

Bainbridge, Avon, Westlake, Twinsburgh, Bazetta, etc.



Sasaki Associates

Established Cities & Towns
(varies)

Medina, Painesville, Ravenna, Wooster, Niles, Ashtabula, Kent, Oberlin, etc.



Ken Lund,
<http://www.flickr.com/photos/kenlund/7984528214/>

Rural Townships
(varies)

Parkman, Wellington, Westfield, Hiram, Wyndham, Saybrook, Jackson, Gustavus

CCAP IMPLEMENTATION PLAYBOOK

Implementation Playbook includes:

- Information on low-income and disadvantaged communities (LIDACs) within the Cleveland-Elyria MSA
- Best practices on engaging LIDACs for climate action
- Community Benefits Rubric to assess potential actions
- List of emissions reduction measures by community type
- Overview of No- and Low-Regret measures
- Information on policies and funding sources to support implementation

PUBLIC COMMENTS

- **Public comment period: July 17-August 31**
 - Comments could be submitted by email, online, phone, or mail
 - 47 comments received
- **August 21 Virtual Public Meeting**
 - 87 attendees
 - 21 comments/questions
 - Recording available at: vimeo.com/1112055688

PUBLIC COMMENTS

Of the 47 public comments submitted outside of the August 21 virtual event:

- **13 comments resulted in specific revisions to technical information**
- *Example: Updated CCAP to include NOPEC's opt-in program. Also updated the CCAP to minimize use of term community choice aggregation (CCA). However, it is used currently, as the City of Cleveland refers to its program as CCA, and Power a Clean Future Ohio also uses this term widely.*
- **34 comments resulted in general revisions**
- *Example: Clarification about the CCAP as a menu of measures and examples for different communities to consider; local government authority to implement; and recognition of diverse viewpoints.*

PUBLIC COMMENTS

Additional comments from stakeholders led to additional revisions. For example, the Implementation Playbook:

- §6.2.3. Industrial Energy and IPPU (p. 32)

3. Implement carbon capture and geologic sequestration at major industrial sites: For industrial facilities unable to eliminate emissions entirely, CCUS can mitigate climate impacts. The MSA could work to capture carbon emissions **from** high-emitting facilities, then transport and sequester that CO₂ geologically in suitable formations. ~~located in the following counties: ○ Geauga ○ Mahoning ○ Portage ○ Stark ○ Summit ○ Trumbull~~

- §6.7.3. Industrial Energy and IPPU (p. 41)

Rural communities ~~in Geauga County (as well as in Portage, Summit, Trumbull, Mahoning, and Stark Counties)~~ can provide geological sequestration of CO₂ emissions from major point sources.

FINANCIAL IMPACTS

There is no financial impact of this action.

NEXT STEPS

- **Pending Board approval:**
 - City of Cleveland and NOACA will work with firm to create designed drafts of CCAP and Implementation Playbook.
 - NOACA and the City of Cleveland will finalize and submit CCAP to US EPA by December 1, 2025.
 - Subawards to Geauga, Lake, Lorain, and Medina Counties
 - \$300,000 total (allocated based on share of GHG emissions)
 - Counties may spend until end of CPRG award period (mid-2027)
 - Appropriate projects focused on planning and engagement
 - No match required

ACTION

Approval of Resolution 2025-047, which adopts the
Cleveland-Elyria Metropolitan Statistical Area (MSA)
Comprehensive Climate Action Plan (CCAP)



Motion
Second
Discussion
Put the Question





NOACA

Northeast Ohio Areawide Coordinating Agency

NOACA will **strengthen** regional cohesion, **preserve** existing infrastructure, and **build** a sustainable multimodal transportation system to **support** economic development and **enhance** quality of life in Northeast Ohio.