

Advanced Energy Opportunities for Northeast Ohio

Smart Grid
Energy Storage
Fuel Cells
Waste & Biomass to Energy

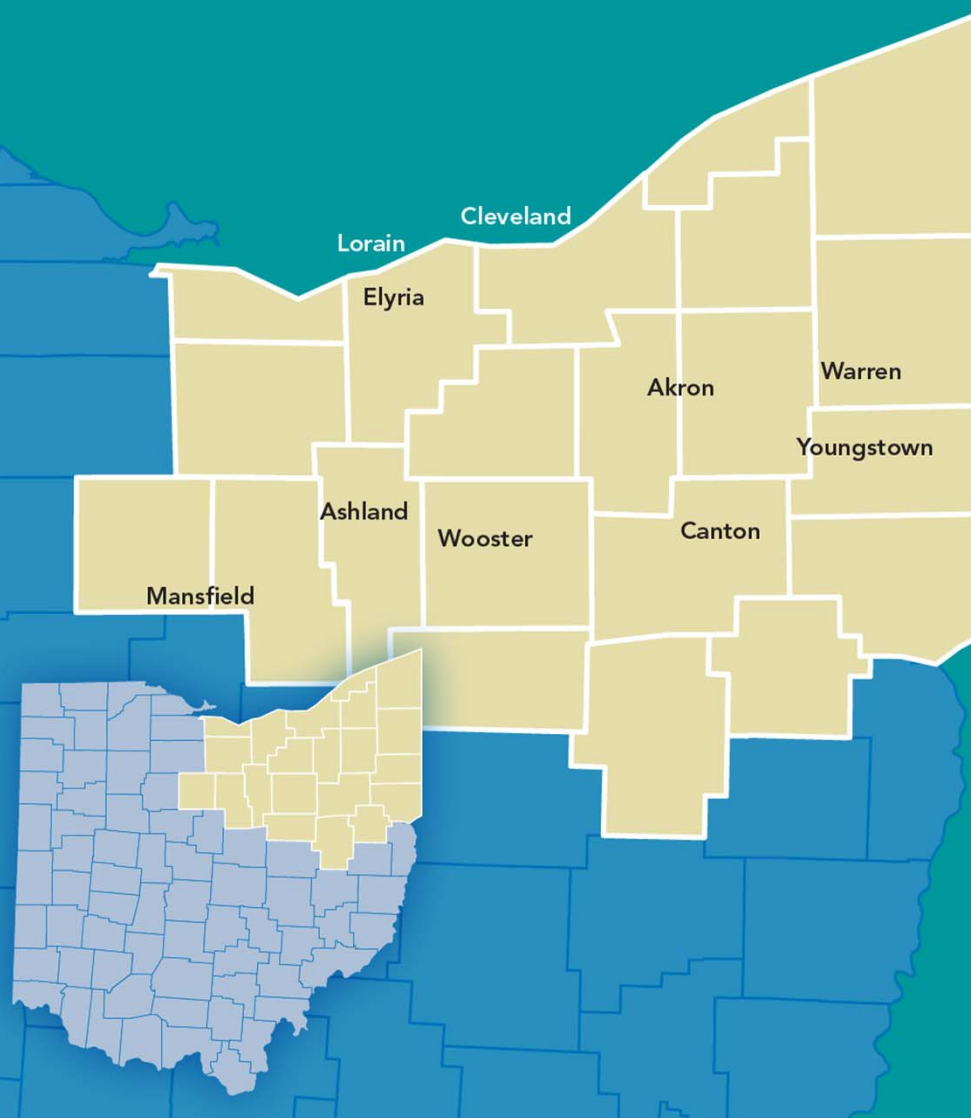


About NorTech



What we are:

A nonprofit
technology-based
economic
development
organization serving
21 counties in
Northeast Ohio.



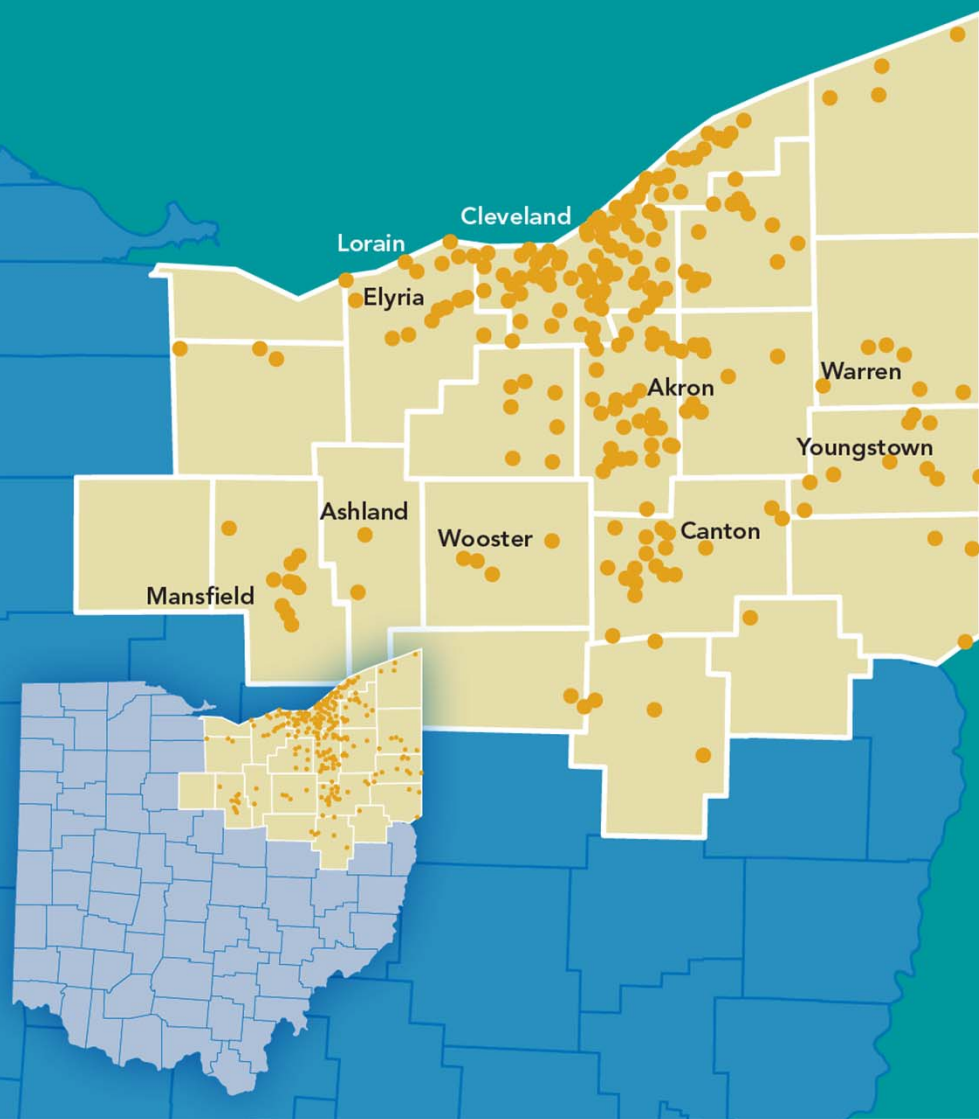
About NorTech



What we do:

Develop Regional Innovation Clusters by

- Attracting new members
- Building relationships
- Creating market-driven roadmaps
- Engaging with government
- Collecting, reporting & utilizing data



Significant Sectors in Northeast Ohio's Advanced Energy Cluster



Energy
Storage



Waste &
Biomass-to-
Energy



Smart Grid



Transportation
Electrification



Fuel Cells



Wind



Clean Coal



Energy
Efficiency



Nuclear



Solar



Shale Gas

InSeven™

The NorTech Roadmapping Process



Phase I

1

- Plan for launch: define scope, convene Working Group participants, “kick off”

2

- Define subsectors, technologies, products; determine “core” vs. “supporting” value chain elements

3

- Catalog the region’s “core” assets; map to subsectors; identify region’s critical mass and determine focus subsectors

4

- Define market segments; quantify growth potential, drivers, and projections for the region’s potential participation

5

- Identify top global & nationally competitive regions; assess to determine share potential

6

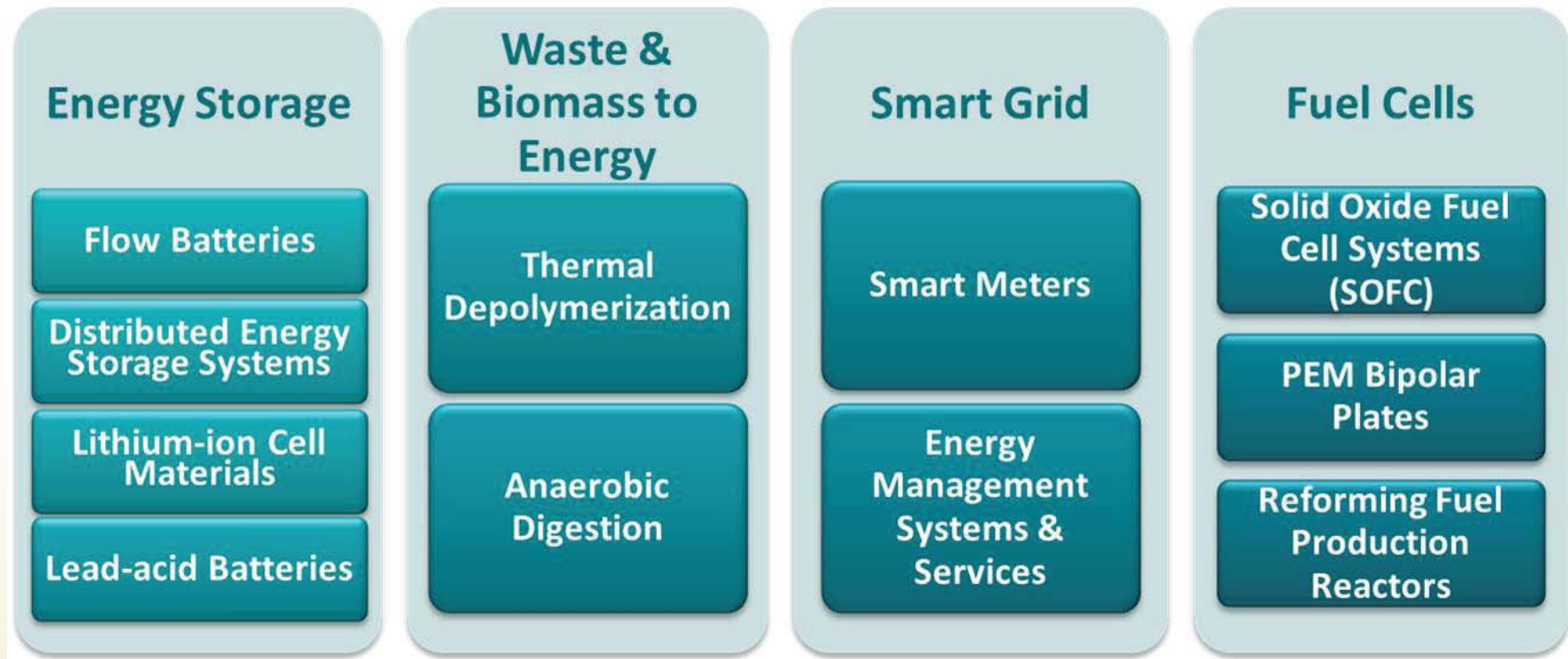
- Based on insights, draft a 7-year plan to capitalize on strengths and opportunities

7

- Syndicate plan throughout the region and revise as appropriate; finalize roadmap

Portfolio of Opportunities for NEO

Target growth of 6,860 Jobs over next 7 years in the portfolio



Core Cluster Companies & Institutions



Aclara	Emerson Network Power	Lockheed Martin	Seaman Corp.
American Trim	Energy Technologies Inc.	NASA Glenn Research Center	Stark State College
Ashlawn Energy	Enersys	NexTech Materials	Technology Management Inc.
BASF	Exide Technologies	Novar	University of Akron
Battelle	Faraday Technologies	Ohio Agricultural R&D Center (OARDC)	Vadxx Energy
Beckett Energy Systems	Garick Corporation	Polyflow	Vogelsang
Case Western Reserve University	GrafTech International	Powdermet	Volt Research
Catacel	InnoVentures Inc.	quasar energy group	Youngstown State University
Crown Battery Manufacturing Co.	Intwine Energy	Refractory Specialties	
Die-Matic Corporation	LG Fuel Cell Systems	Rockwell Automation	

Questions? Comments?

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