MID-OHIO REGIONAL
MORPC
PLANNING COMMISSION

SECURING OUR ENERGY FUTURE:

PLANNING ENERGY RESILIENCE FOR A HIGH-DEMAND FUTURE

June 5, 2025

MORPC MEMBERS

AGENDA

9:00 – 9:15 AM | **Welcome & the Energy Landscape for Meeting Tomorrow's Demand** | *William Murdock & Brian Filiatraut, MORPC*

9:15 – 10:00 AM | **Energy Generation & Trends in Central Ohio** | *Jon-Paul d'Aversa, Power a Clean Future Ohio, & Dale Arnold, Ohio Farm Bureau Federation*

10:00 – 10:10 AM | **Break**

10:10 – 10:40 AM | **Planning for Big Projects & Data Centers** | *Mike Jacoby, Bricker Graydon*

10:45 – 11:30 AM | **Behind the Meter: Building Industrial Energy Parks** | *Dylan Borchers, Bricker Graydon*

11:30 AM – 12:00 PM | **Lunch & Networking**

12:00 – 12:50 PM | **Energy as an Essential Part of Planning** | *Holly Mattei, Crossroads Community Planning*

12:50 – 1:00 PM | **Wrap-Up & Last Two Session Previews** | *Brian Filiatraut, MORPC*

JOIN US

SECURING OUR ENERGY FUTURE

Informational and Workshop Forum Series

WHAT – A series of **informational webinars and workshops** featuring energy, regulatory, and economic development experts in Central Ohio.

WHO – These sessions will help **local government and community leaders** plan for a more secure, resilient, and affordable energy future for their communities.

- **MAY 15 | Landscape of Energy Planning**
  Focus: Big-Picture Challenges and Opportunities in Central Ohio
- **JUNE 5 | Planning Energy Resilience for a High-Demand Future**
  Focus: How to Set the Table and Open Your Community to Energy and Economic Opportunities
- **JULY 10 | Funding and Resource Opportunities to Build Your Energy Stack**
  Focus: What Is Available Now to Help with Energy Planning and Energy Projects?
- **AUGUST 27 | Emerging Energy Technologies and Future-Proofing the Region**
  Focus: What's on the Energy Horizon?

REGISTER TODAY

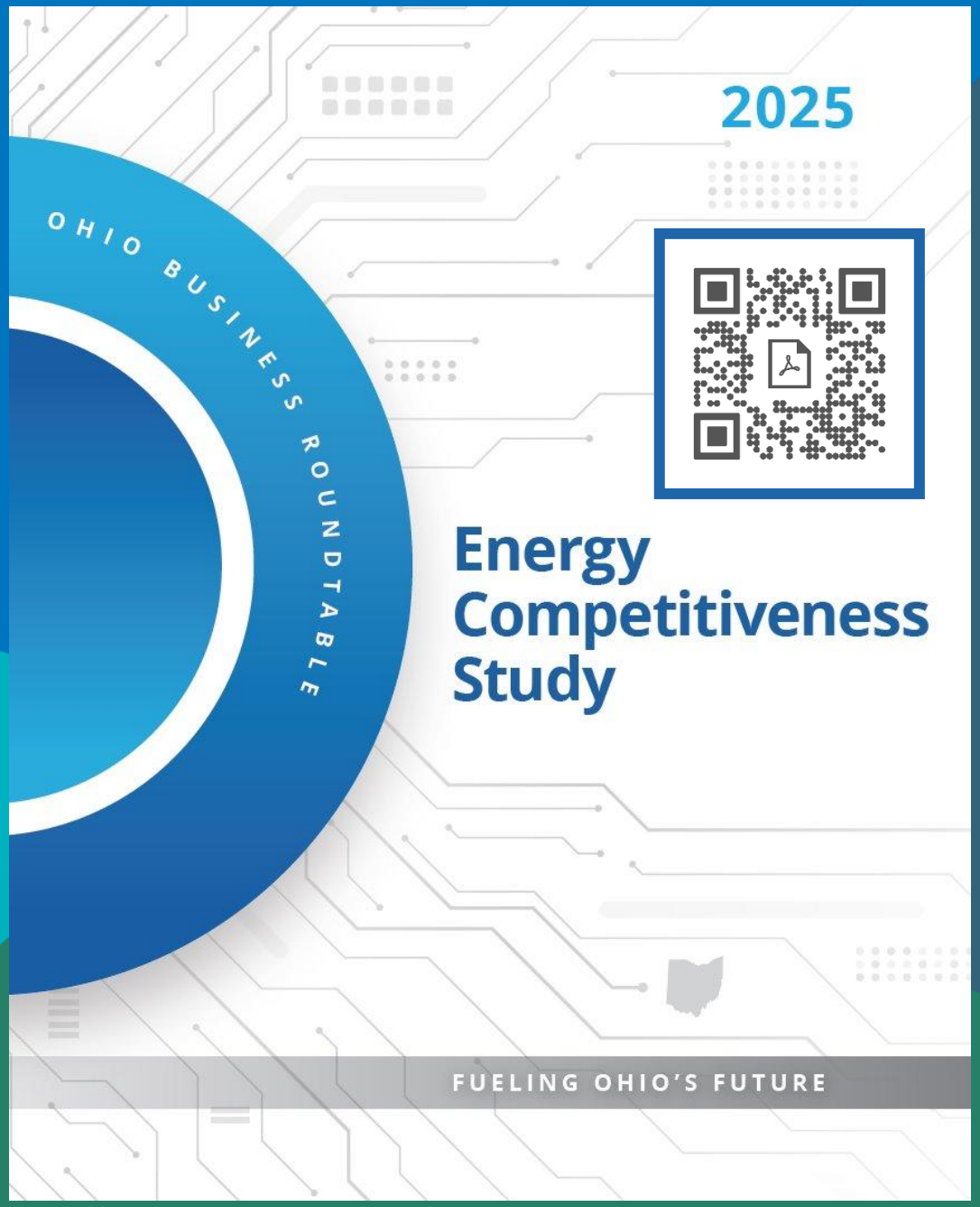
For more information, contact
Brian Filiatraut, bfiliatraut@morpc.org.

OHIO BUSINESS ROUNDTABLE (OBRT)

"The creation of this report was led by OBRT with the input and direction of 38 of its member companies."

“Since 2022, JobsOhio has won 1,016 economic development projects, with $74.27 billion in associated capital investment, demonstrating **Ohio is rapidly becoming a national hub for innovation, economic growth, and high-tech infrastructure**. However, the scale of this growth brings unprecedented **energy challenges**—aging infrastructure, the retirement of conventional power plants, and rising demand—all threatening to strain the very grid that fuels progress. To seize this moment of opportunity, **Ohio must take decisive action to modernize its energy infrastructure** and **ensure a resilient, affordable, and reliable power supply for both businesses and residents**.”

MORPC



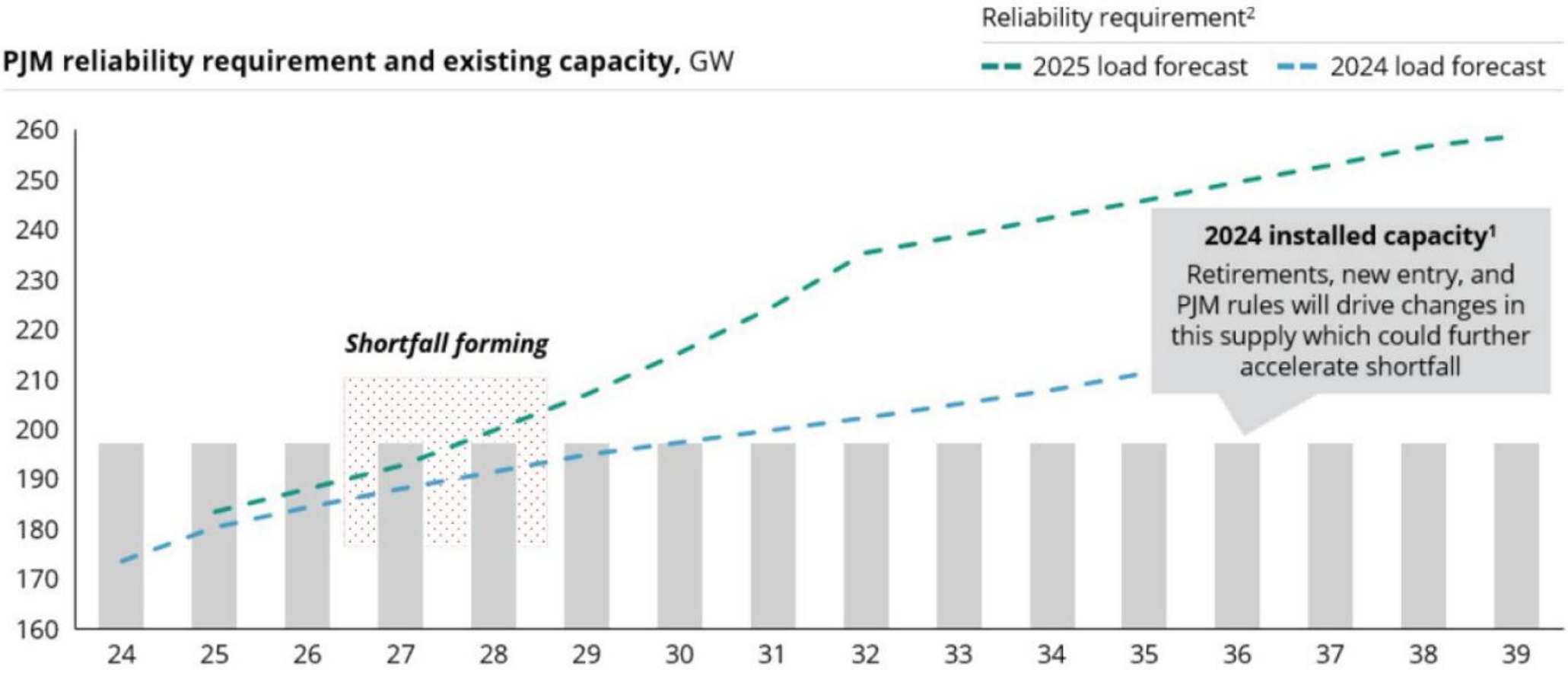
ENERGY COMPETITIVENESS STUDY

Ohio Business Roundtable (OBRT)

MORPC

The Demand for Electricity | PJM

PJM reliability requirement and existing capacity, GW



1. Total PJM net summer capacity as of 9/30/2024, regardless of whether the capacity participated in the PJM capacity market
2. Reliability requirement indicates forecasted peak demand multiplied by the installed reserve margin (IRM) required to meet reliability standards. IRM of 14.8% used for 23-24 and 17.6% used for 25-39.

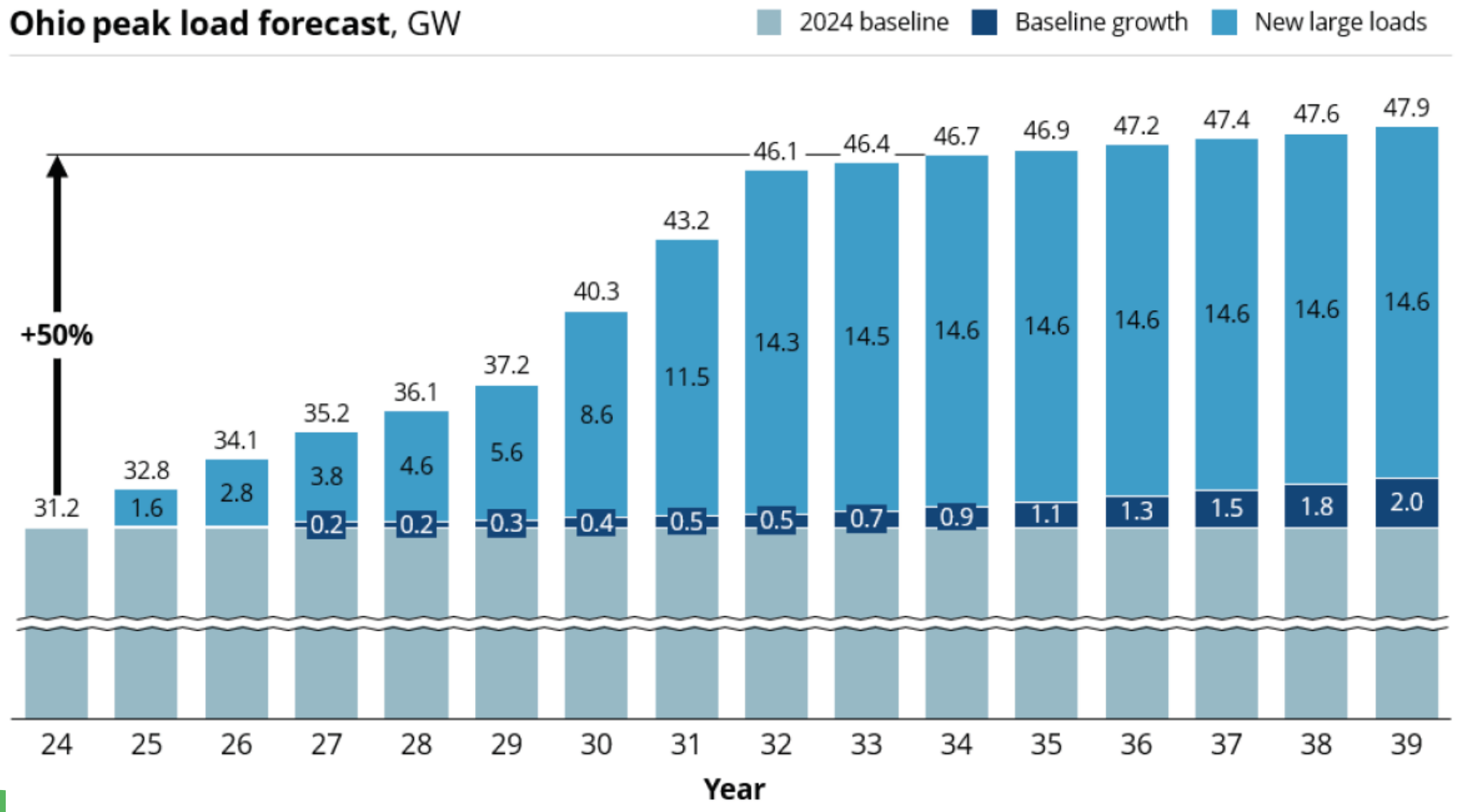
Source: Monitoring Analytics PJM State of the Market Reports; PJM 2024 load forecast report; PJM reserve requirement reports; PJM 2025 preliminary load forecast

ENERGY COMPETITIVENESS STUDY

Ohio Business Roundtable (OBRT)

MORPC

The Demand for Electricity | Ohio Peak Load



Source: PJM 2024 load forecast hourly data; PJM 2024 load forecast supplement; PJM 2025 large load updates

ENERGY COMPETITIVENESS STUDY

Ohio Business Roundtable (OBRT)

MORPC

6 OBRT Study Recommendations

1. Implement Permitting and Siting Reform
2. Establish an Office of Energy Resilience
3. Establish Priority Investment Areas
4. Enhance and Clarify Frameworks for Behind-the-Meter Generation
5. Reduce Regulatory Lag
6. Promote the Deployment of Grid-Enhancing Technologies

All in HB 15 (sans #2). Gov. DeWine signed into law on 5/15.

Securing Our Energy Future:
Landscape of Energy Planning

MAY 15 | 12:30 – 2:30 PM | MORPC

ALEX DENNEY
VP of Government Relations
& Communications

Ohio Business Roundtable

KAMRAN ALI
SVP of Transmission Grid
Planning & Engineering

AMERICAN ELECTRIC POWER

KENNY MCDONALD
President & CEO

ONE COLUMBUS

WILLIAM MURDOCK
Executive Director

MORPC

REGIONAL SUSTAINABILITY AGENDA

Coming Soon in August 2025

GOAL ONE

Improve air quality and reduce climate change impacts to protect public health and the environment.

GOAL TWO

Protect and preserve natural resources to support a healthy and resilient region.

GOAL THREE

Improve quality of life for all residents by creating sustainable and equitable communities.

GOAL FOUR

Promote robust, inclusive, and sustainable growth and development.

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The Regional Landscape: Energy Generation and Trends

Planning Energy Resilience for a High-Demand Future

June 5, 2025

Power a Clean Future Ohio

About PCFO

Power a Clean Future Ohio

Our Mission: Power A Clean Future Ohio is building momentum now for a clean, prosperous future by equipping local leaders for equitable, community-driven carbon reductions in Ohio.

While PCFO continues to be supported by a broad coalition of advocacy organizations, policy experts, and business leaders, in 2023, the organization was formally established as a 501(c)(3) nonprofit. In its continued growth and evolution, PCFO aims to better serve member communities and drive change across Ohio toward a clean energy future. PCFO is focused on providing new tools and resources to local governments and finding creative avenues to pursue meaningful reductions of carbon emissions throughout the state.

Jon-Paul d'Aversa, AICP

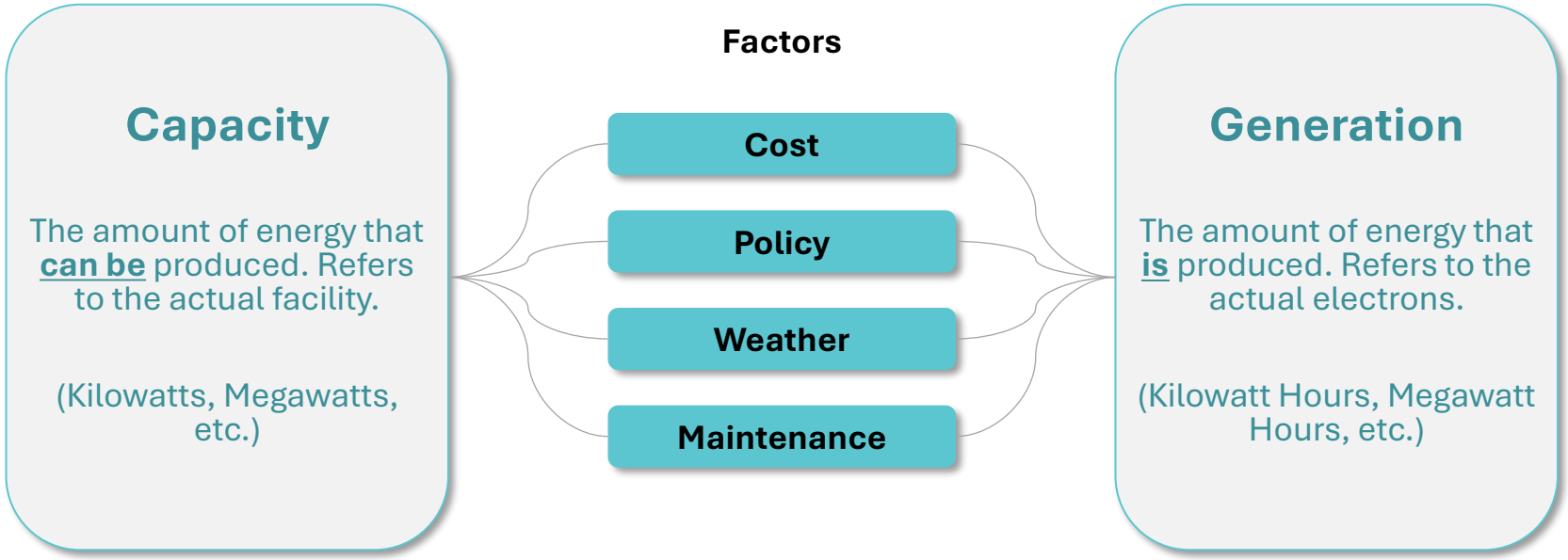
Founder and Principal, UNPREDICTABLEcity
Senior Energy Policy Advisor, Power a Clean Future Ohio

UNPREDICTABLEcity serves on PCFO's technical team, providing members with objective data and unbiased analyses to support local government decision making.

Jon-Paul is a nationally recognized expert in the energy and climate fields, providing guidance to over 100 local governments in Ohio. His impact extends beyond state borders, collaborating with esteemed organizations such as the US Department of Energy, Interstate Renewable Energy Council, Rocky Mountain Institute, National Renewable Energy Laboratory, the Energy Foundation, and the Electrification Coalition.

Capacity and Generation Trends Across PJM and Ohio

Definitions



Capacity and Generation Trends Across PJM and Ohio

Definitions

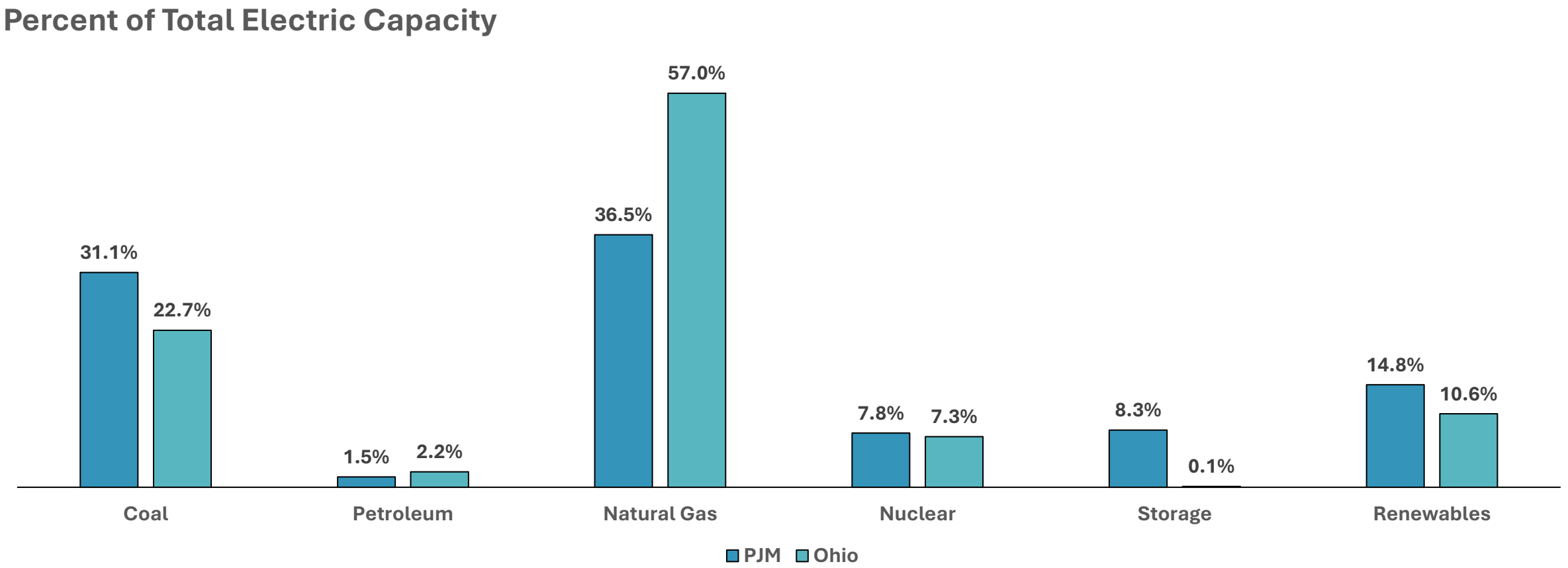
PJM, short for the Pennsylvania-New Jersey-Maryland Interconnection, is a regional transmission organization (RTO) that coordinates and manages the transmission of wholesale electricity across a large region of the United States. It's the largest RTO in the US, serving all or parts of 13 states and the District of Columbia.

PJM manages the bulk transmission system and operates competitive wholesale markets for electricity. This means it helps ensure the reliability of the grid and provides a platform for utilities and other electricity suppliers to trade electricity.

Capacity and Generation Trends Across PJM and Ohio

Current Electricity Capacity Mix – PJM West and Ohio

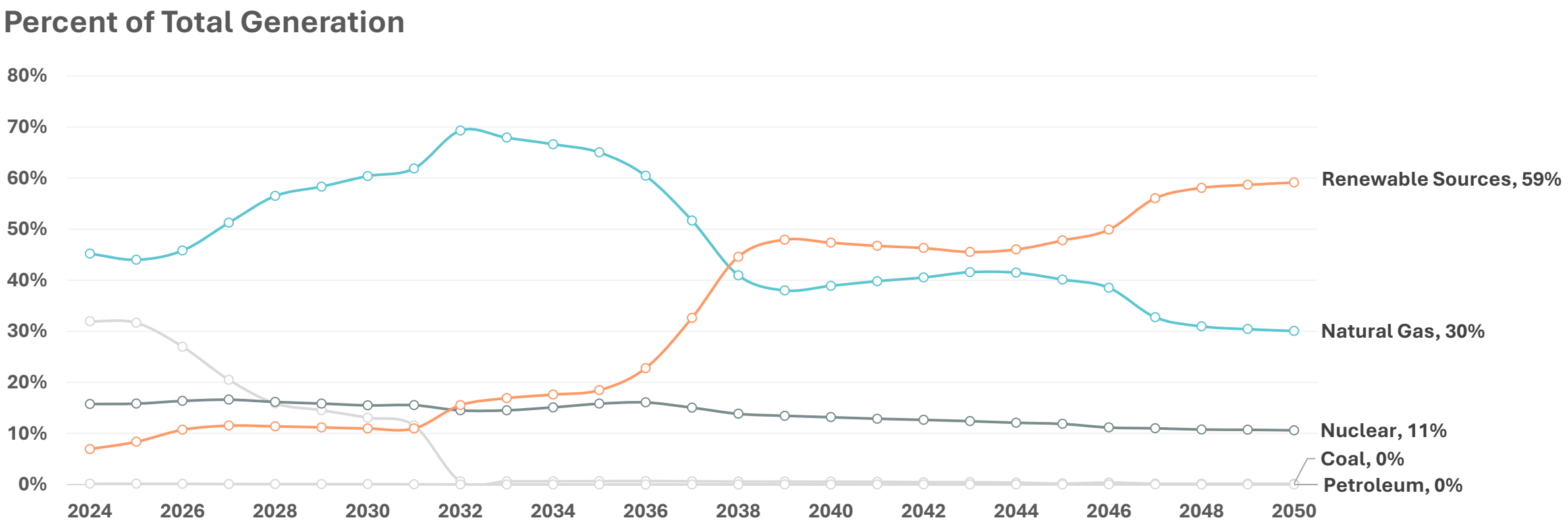
Source: Energy Information Administration



Capacity and Generation Trends Across PJM and Ohio

Electricity Generation Trends – PJM West

Source: Energy Information Administration – Annual Energy Outlook 2025

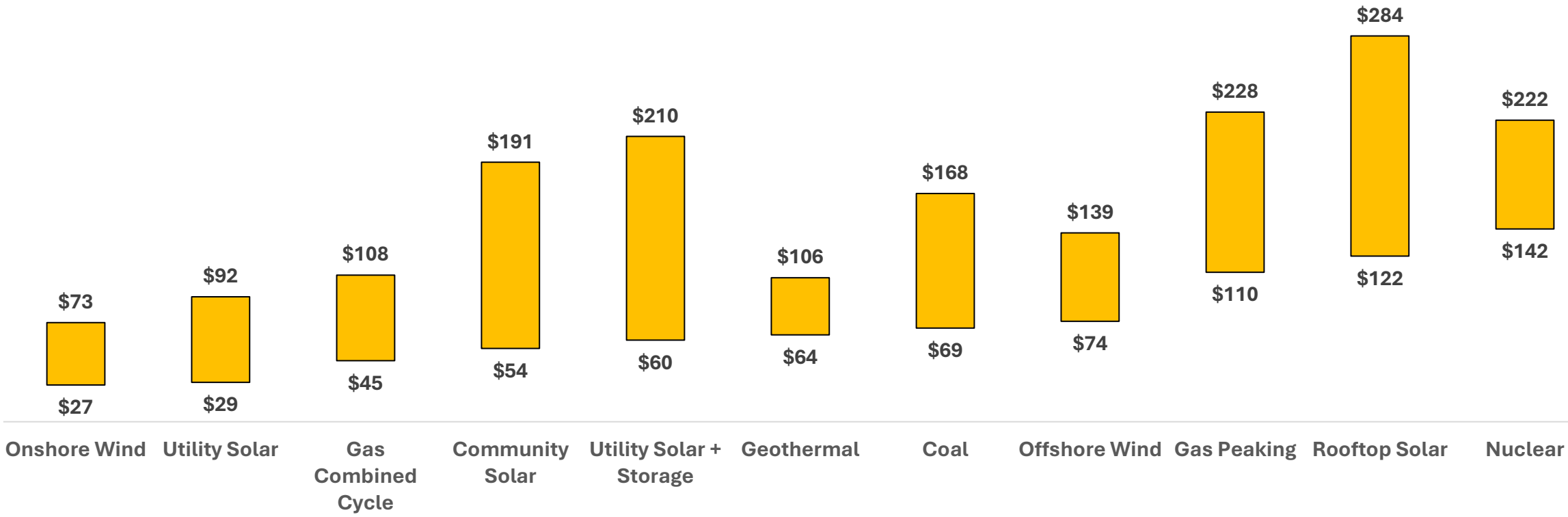


Market Signals

Levelized Cost of Energy

Source: Lazard's LCOE (June 2024)

Levelized Cost of Energy (2024 Dollars per MWh)



Market Signals

PJM

Cost per MWh increased **4.6%** last year

Locational Based Marginal price increased **8.5%**

July 2024 capacity auction saw an **833%** spike

2 GW of capacity are expected to be retired

Several factors contributed to these significant price increases, including rising fuel costs for natural gas and coal, increasing transmission service costs, necessary infrastructure investments, a general increase in electricity demand, and changes in PJM's capacity market rules.

PJM has also been actively working on market rule changes to enhance capacity market efficiency and provide accurate investment signals. In April 2025, the Federal Energy Regulatory Commission (FERC) approved a PJM proposal to implement a price cap ($325/MW-day) and floor ($175/MW-day) for the 2026/27 and 2027/28 delivery years, aiming to mitigate future steep price increases.

The energy transition is marked by a rapid pace of generator retirements. PJM received over 30 deactivation notifications in 2024, totaling more than 2 GW of capacity. Ohio alone is projected to see an additional 1,600 MW of power generation retired. Simultaneously, PJM forecasts significant load growth, with its summer peak projected to climb by approximately 70,000 MW to 220,000 MW over the next 15 years, a surge largely attributed to the proliferation of data centers and the electrification of various sectors.

PJM has also streamlined its interconnection process through a "first-ready, first-served" approach, which has reportedly reduced the backlog by 60%. However, critics contend that these reforms remain insufficient. Concerns persist, particularly regarding PJM's Reliability Resource Initiative, which has reportedly fast-tracked primarily fossil fuel projects (78% natural gas), despite over 95% of the pending projects in the broader interconnection queue being renewable and storage resources.

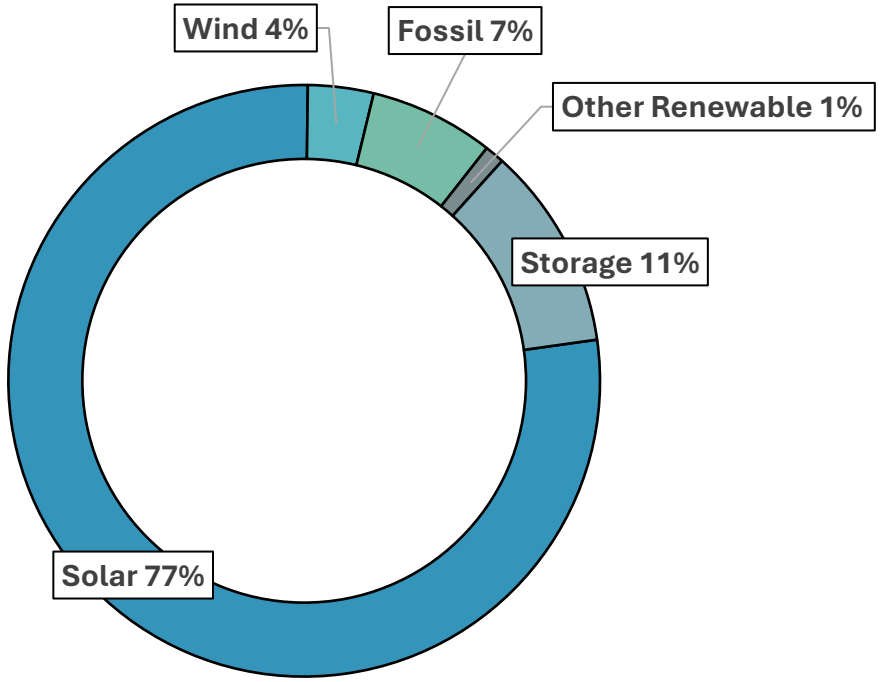
Market Signals

Ohio Interconnection Queue

There are currently 279 active projects in Ohio's interconnection queue, overseen by the Ohio Power Siting Board. These projects represent around 20 GW of capacity.

HB15 expedites permitting timelines at the Ohio Power Siting Board for energy generation and battery storage projects. The bill removes previous barriers to self-generation by no longer requiring facilities to be located on the generator's immediate premises, allowing developers to site behind-the-meter facilities as needed so long as they are connected to the consuming facility.

Projects in Ohio's Queue



Market Signals

Policy

Senate Bill 52

Purpose: Enacted in July 2021, SB 52 significantly increased local control over the siting of large-scale wind and solar facilities in Ohio. The intent was to give communities more say in projects that could alter their rural landscapes.

Key Provisions:

- Exclusion Zones
- Local Review Before OPSB Application
- Ad Hoc OPSB Members
- Decommissioning Plans and Bonds

Impact on Renewables: SB 52 has made it more challenging and time-consuming for large-scale wind and solar projects to be developed in Ohio due to increased local opposition and the power of local governments to block projects. It effectively changed the landscape from a state-centric siting process to one with significant local veto power.

House Bill 15

Purpose: Signed into law in May 2025, HB 15 is a comprehensive energy bill aimed at increasing energy generation, improving grid reliability, and supporting economic growth, particularly in response to high demand from data centers and other large industrial users. It aims to streamline processes and reduce taxes to incentivize new generation.

Key Provisions:

- Expansive Industrial Microgrid Framework
- Reduced Tangible Personal Property (TPP) Tax
- Expedited Permitting (OPSB "Shot Clocks")
- Priority Investment Areas (PIAs)

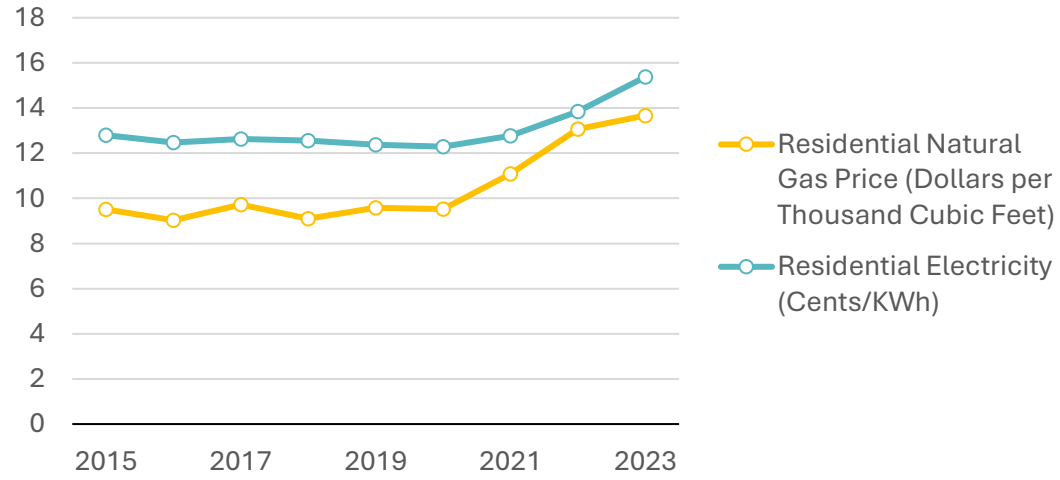
Impact on Renewables: HB 15 is intended to facilitate new power generation, particularly "behind-the-meter" and industrial-scale projects, by making it more financially attractive and removing some logistical barriers. It's a response to Ohio's rapidly increasing electricity demand, especially from the tech sector. HB 15 focuses on enabling large self-generation and reducing overall tax burdens for new energy infrastructure.

Market Signals

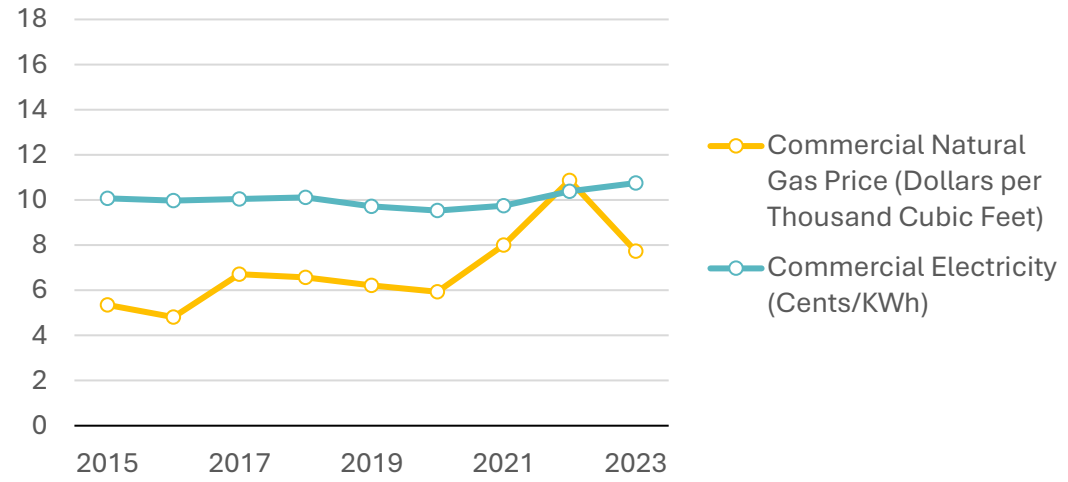
Ohio Prices

Source: Energy Information Administration

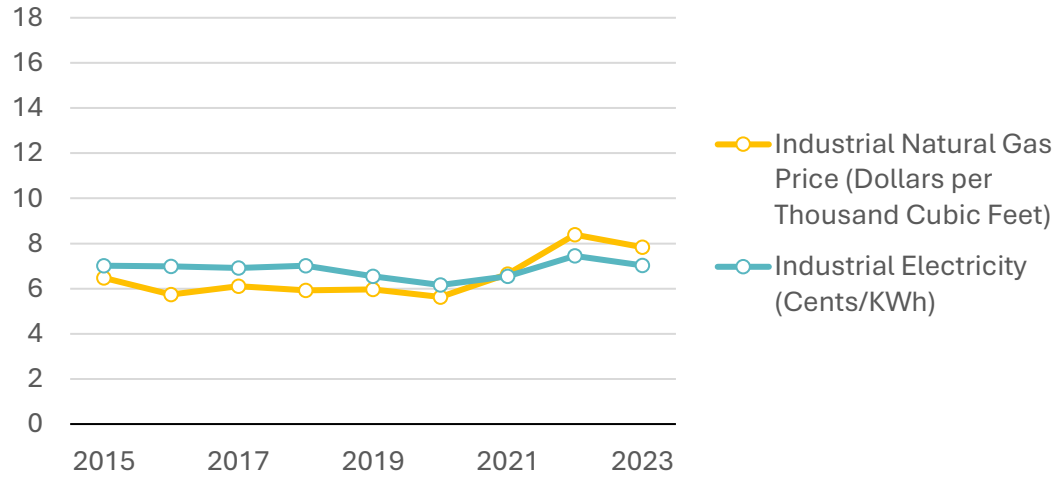
Residential Sector Prices - Ohio



Commercial Sector Prices - Ohio



Industrial Sector Prices - Ohio

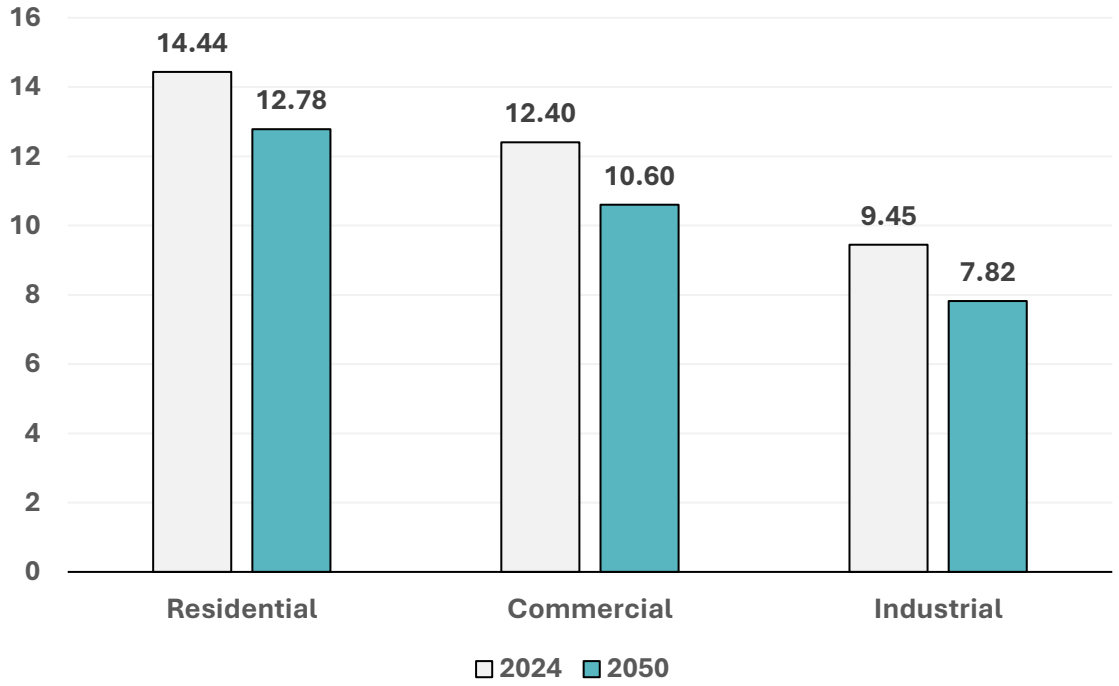


Market Signals

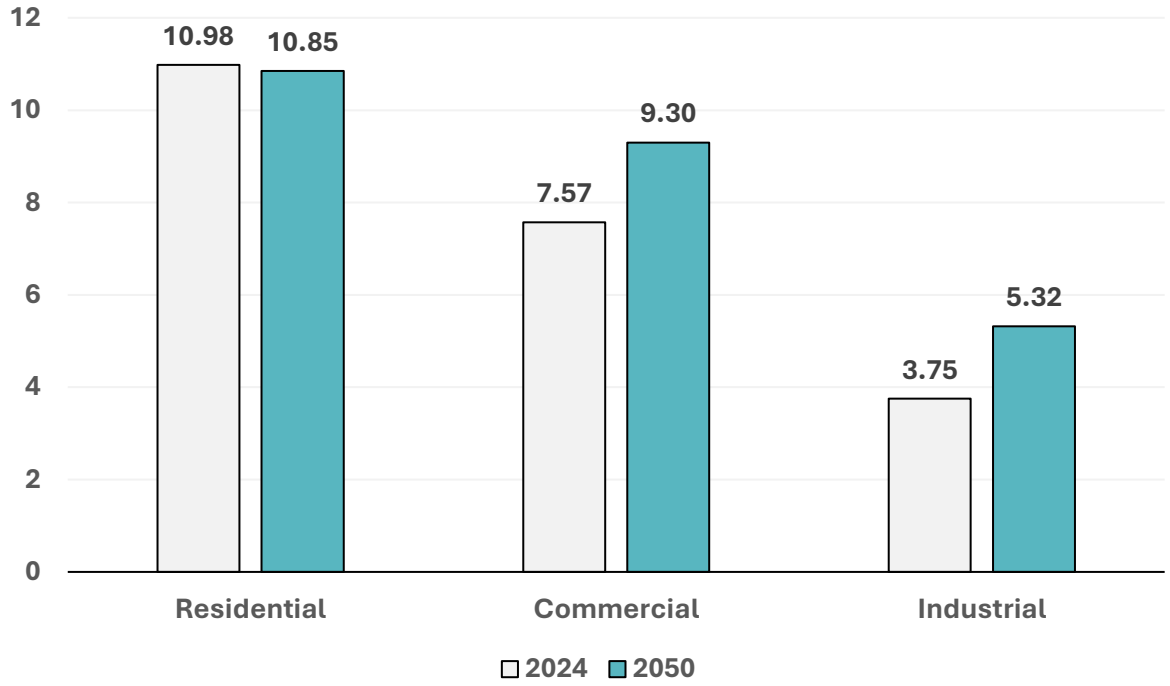
Forecasted Prices for the Ohio Region

Source: Energy Information Administration – Annual Energy Outlook 2025

Electricity Price Forecasts for Ohio's Regional Market (2024 Cents per KWh)



Natural Gas Price Forecasts for Ohio's Regional Market (2024 Dollars per MMBTU)

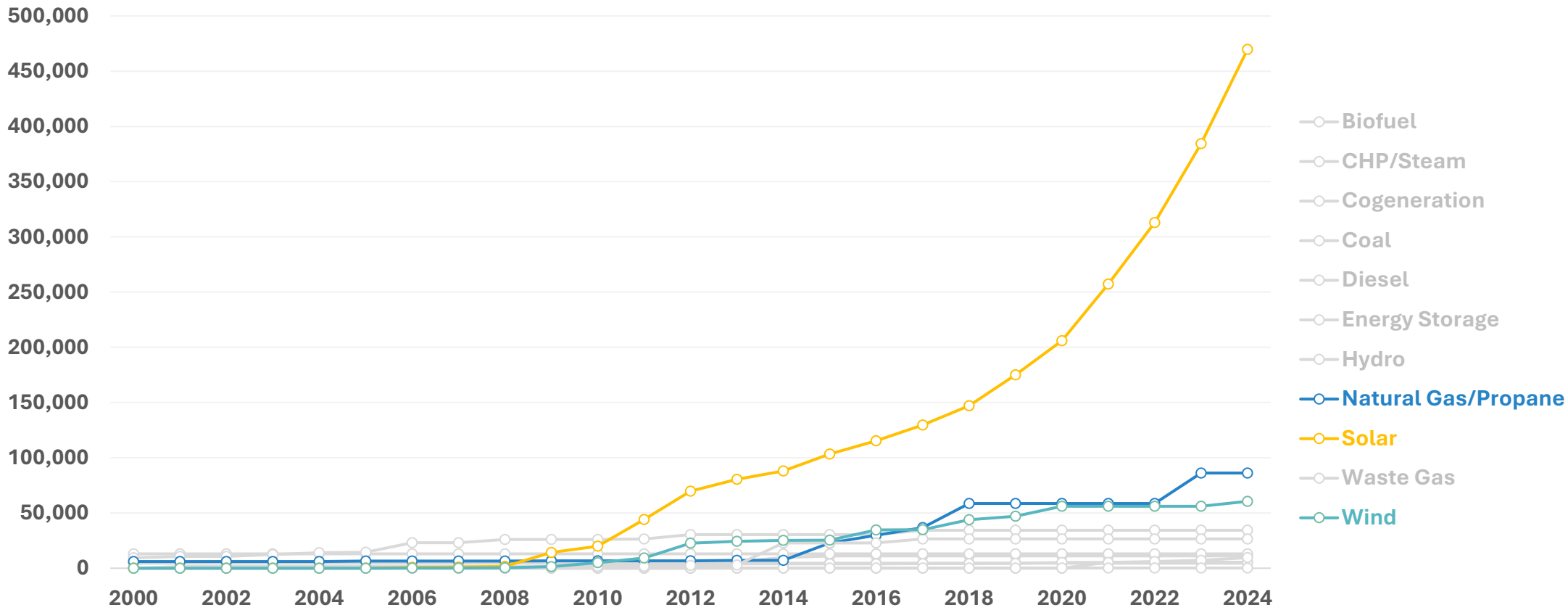


Market Signals

Local Energy in Ohio

Source: UNPREDICTABLEcity

Cumulative Onsite Capacity in Ohio (KW)

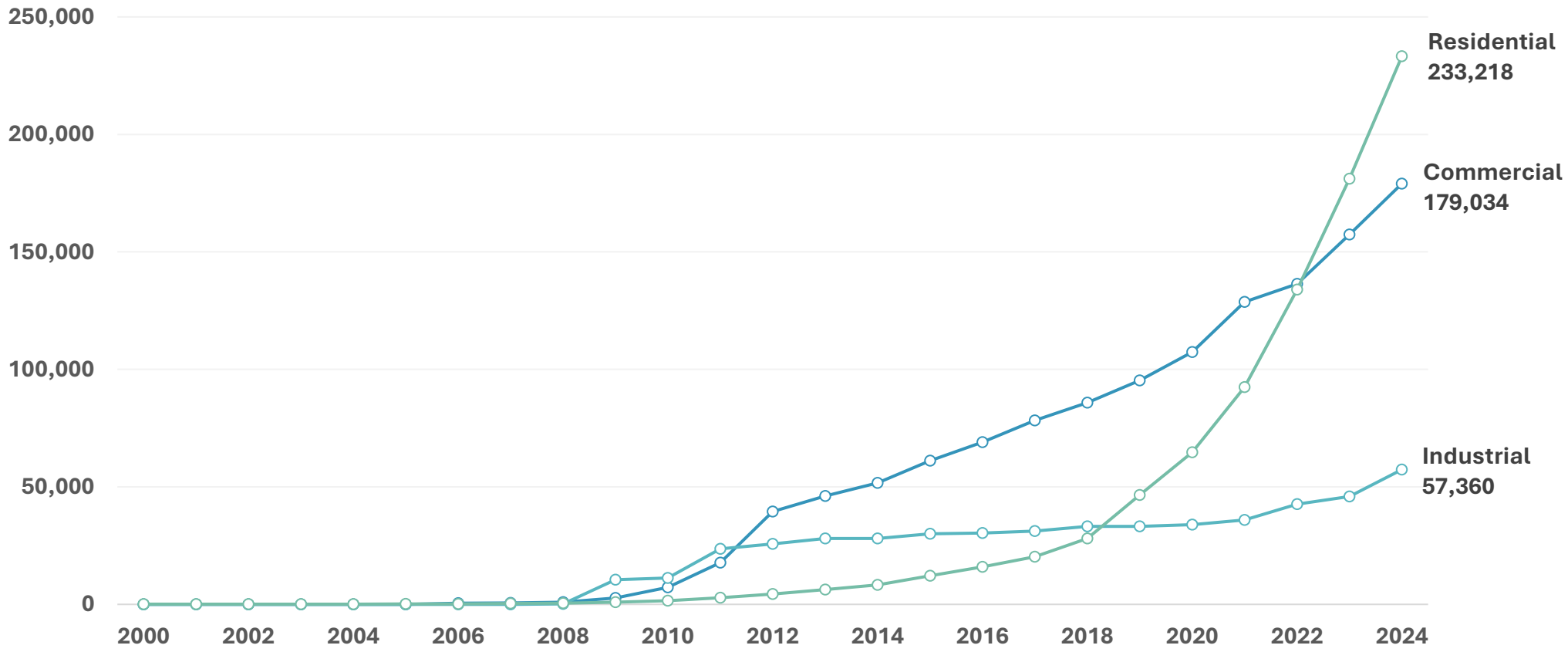


Market Signals

Local Energy in Ohio

Source: UNPREDICTABLEcity

Cumulative Onsite Solar Capacity in Ohio (KW)



Market Signals

Local Energy Costs in Ohio

Source: UNPREDICTABLEcity

Residential Solar

Prior to Incentives

$2.50-$3.50/watt

ITC and other tax credits may be available

Factors impacting cost:

Roof type, system size, specific equipment, installer labor costs, and permitting fees.

Commercial Solar

Prior to Incentives

$1.80-$2.50/watt

ITC/PTC and other tax credits may be available

Factors impacting cost:

System size, installation complexity, existing infrastructure, and specific business energy needs.

Small Wind

Prior to Incentives

$3.00-$5.00/watt

ITC/PTC and other tax credits may be available

Factors impacting cost:

Turbine size, tower height, wind resource availability at the site, installation complexity, and foundation requirements. Distributed wind is less common than solar for on-site applications in Ohio due to siting challenges and generally lower wind resources compared to other regions.

Small Natural Gas

Prior to Incentives

$0.33-$1.40/watt

Incentives not typically available unless CHP

Factors impacting cost:

Size of the unit, type of turbine/engine, balance of plant costs (e.g., fuel handling, electrical interconnections), permitting, and local labor rates.

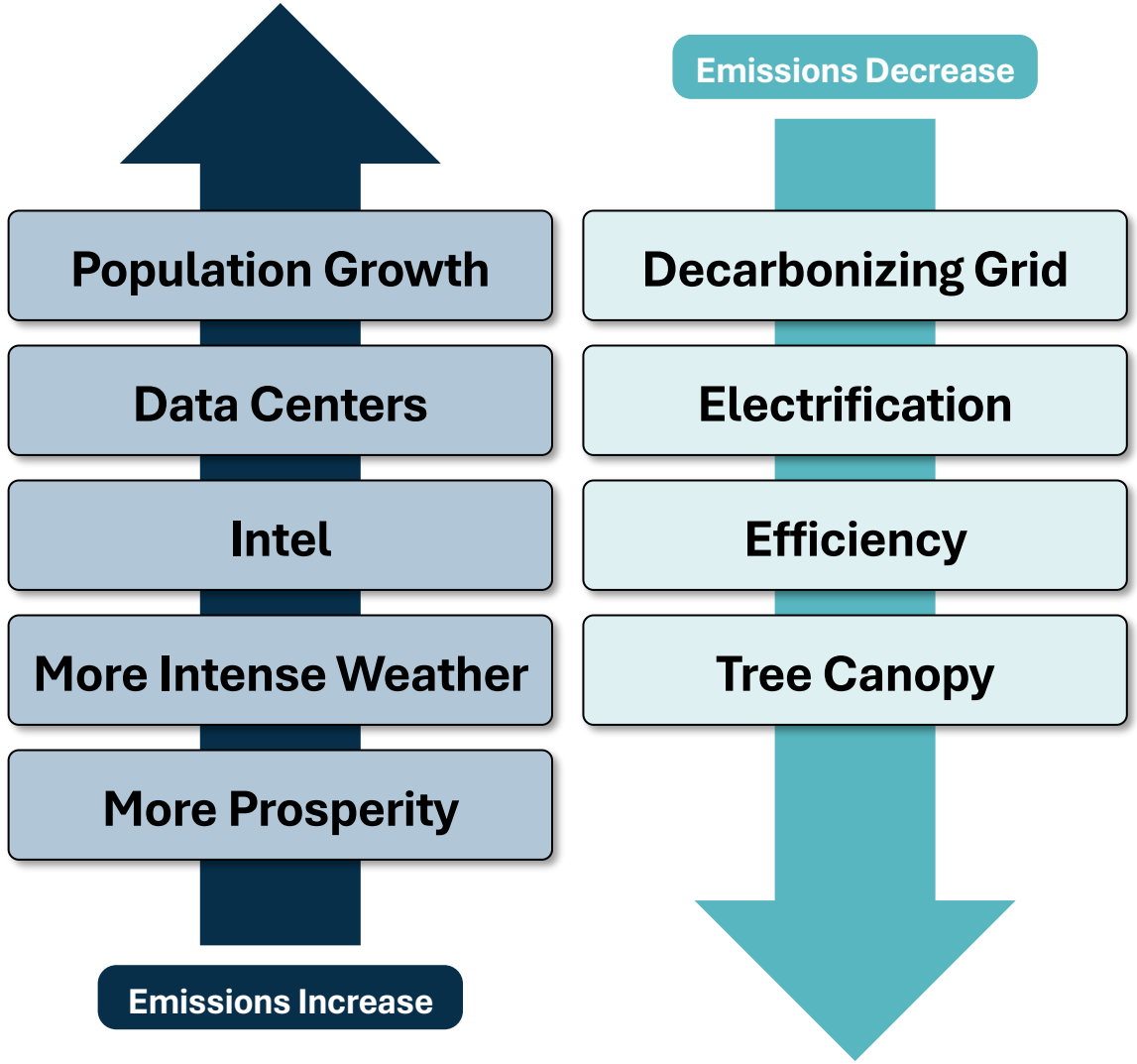
Energy Needs in Central Ohio

Central Ohio Climate Action Plan

The Central Ohio Climate Action Plan aims to create a unified approach to climate action across the 10-county region. As part of this project, PCFO forecasted the energy needs across all sectors.

Despite the clear and ambitious goals set by COCAP for carbon neutrality by 2050, Central Ohio is simultaneously experiencing rapid economic and population growth. While the region has made some progress in reducing emissions, the sheer scale of projected energy demand growth, particularly from energy-intensive sectors like data centers, presents a significant challenge to achieving these climate targets. This dynamic creates a critical paradox: how can a region accommodate unprecedented growth while simultaneously pursuing aggressive decarbonization goals?

Effectively navigating this challenge requires a fundamental shift in planning. Climate action must be directly integrated into all facets of land use planning, economic development strategies, and infrastructure investments, rather than being treated as a separate or secondary objective. This holistic approach is essential to ensure that growth is genuinely sustainable and does not inadvertently undermine environmental commitments.



Energy Needs in Central Ohio

The Role of Local Governments

Planning and Vision Setting

- **Comprehensive Plans:** Local governments can integrate energy goals directly into their comprehensive land use plans. This involves:
  - **Assessing Current and Future Energy Needs:** Understanding projected growth, new developments (like data centers), and their associated energy demands.
  - **Identifying Suitable Areas:** Designating appropriate zones for different types of energy development (e.g., industrial parks for large-scale energy users and generation, agricultural areas for solar farms, or urban areas for distributed solar).
  - **Promoting Mixed-Use Development and Compact Growth:** Reducing transportation energy consumption.
- **Community Energy Plans:** Developing dedicated energy plans that set specific targets for renewable energy adoption, energy efficiency, and greenhouse gas reduction.
- **Planning for Grid Modernization:** Collaborating with utilities and regional planning organizations to understand future grid needs and identify opportunities for local support of transmission and distribution upgrades, smart grid technologies, and energy storage.

Energy Needs in Central Ohio

The Role of Local Governments

Zoning and Permitting Authority

- **Controlling Siting (especially post-SB 52)**
  - **Large-Scale Renewables:** As discussed with SB 52, county commissioners now have significant power to designate "restricted areas" where large wind and solar projects are prohibited.
  - **Local Zoning Ordinances:** For projects not under OPSB jurisdiction, local zoning boards regulate setbacks, height restrictions, buffering, noise, and other land-use impacts. This includes specific ordinances for solar arrays, wind turbines, and energy storage. The zoning code can also be used to incentivize projects.
  - **Streamlining Permitting:** Developing clear, predictable, and efficient permitting processes for energy projects (e.g., solar permits) can encourage development by reducing time and cost burdens for developers.
- **Aesthetic and Impact Mitigation:** Establishing standards for landscaping, screening, noise limits, and glare to minimize the visual and environmental impacts of energy facilities on surrounding communities.

Energy Needs in Central Ohio

The Role of Local Governments

Safeguarding Community Health and Environment

- **Equitable Distribution of Impacts:** Ensuring that the burdens and benefits of energy development are equitably distributed and do not disproportionately affect vulnerable or underserved communities.
- **Air Quality:** Local governments can influence energy development to improve local air quality, which directly impacts respiratory and cardiovascular health.
- **Reducing Greenhouse Gas Emissions:** By promoting renewable energy and energy efficiency, local governments contribute to reducing greenhouse gas emissions, which helps mitigate climate change impacts such as extreme heat, flooding, and air quality degradation that directly affect community health.
- **Building Resilience:** Encouraging energy systems that enhance local resilience (e.g., microgrids, energy storage) can protect critical community facilities (hospitals, emergency services) during power outages caused by severe weather events, thus safeguarding public health during crises.
- **Brownfield Redevelopment**: Utilizing incentives (like those in HB 15 for PIAs) to encourage energy projects on previously disturbed lands (brownfields, former industrial sites) rather than pristine greenfields, thereby avoiding further habitat destruction and potentially remediating contaminated sites.

Considerations for Local Governments

Key Takeaways

- **Cost Declines in Renewables:** Capital costs for solar and wind have fallen dramatically over the last decade, making them increasingly competitive, especially with incentives.
- **Fuel vs. Capital:** Renewable energy sources have high upfront capital costs but essentially "free" fuel, leading to long-term price predictability. Natural gas, while potentially having lower upfront capital costs for some configurations, is highly susceptible to fuel price volatility.
- **Scale Matters:** Generally, larger projects (utility-scale) benefit from greater economies of scale, leading to lower per-unit costs than smaller, on-site systems, though on-site systems offer benefits like resilience and direct control over energy use.
- **Ohio Context:** Ohio's regulatory environment and PJM's market dynamics play a significant role in determining the final attractiveness and cost of projects within the state.
- **Community Health:** Energy investments are long term, as will be their health impacts. As a home rule state, local government have the authority and responsibility to ensure their community's well-being.

Contact

Jon-Paul d'Aversa, AICP

Principal – UNPREDICTABLEcity
Senior Energy Policy Advisor – Power a Clean Future Ohio

e: jpdaversa@UNPREDICTABLE.city

Power a Clean
Future Ohio

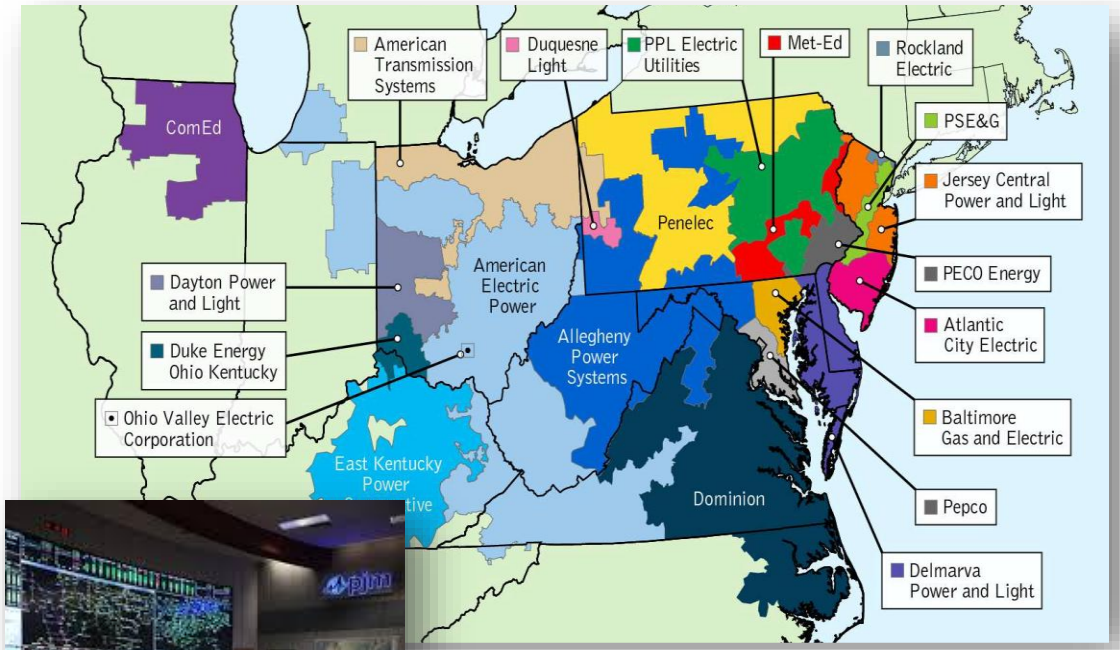
Energy Development Briefing

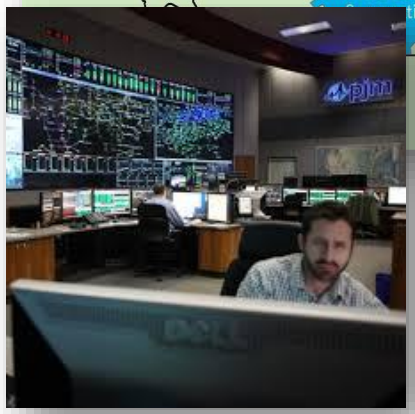
Collaboration Key in Energy and Community Planning

Dale Arnold
Director, Energy Development
Ohio Farm Bureau Federation
614.246.8294 darnold@ofbf.org

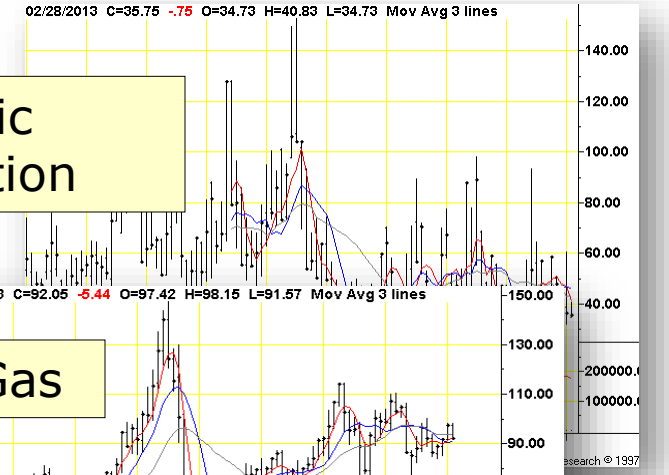
Energy - Technology in Transition

Energy Markets & Operations

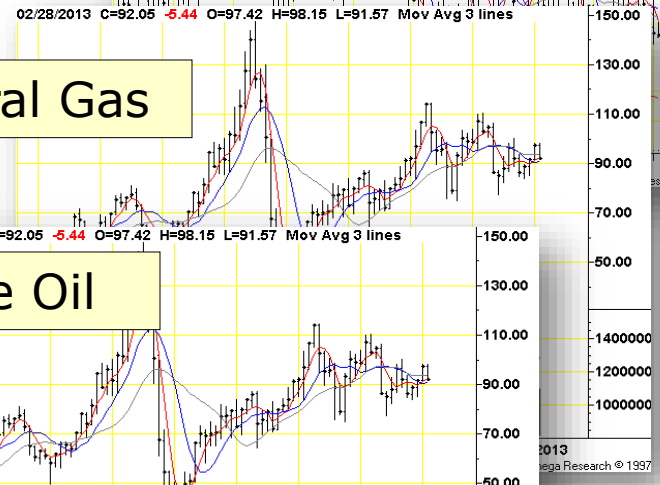




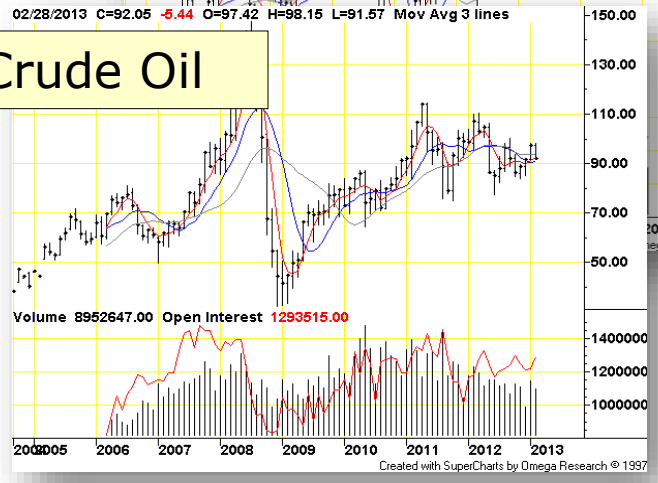
Electric Generation



Natural Gas



Crude Oil



pjm®

CME Group

Planning and Involvement…

Discussion, Outreach, and Action

Developers are seeking open, rural areas to accommodate generation, transmission, storage and sequestration projects. Farmers are on the "front lines" on all aspects of energy development.

Creation and development of projects that address environmental and safety concerns, consider aesthetic needs and provide economic benefits.

Creating jurisdictional and logistic "balance" before we all sit in the cold and in the dark.

AGENDA

9:00 – 9:15 AM | **Welcome & the Energy Landscape for Meeting Tomorrow's Demand** | *William Murdock & Brian Filiatraut, MORPC*

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Economic Development Planning for Large Projects & Data Centers

Mike Jacoby, CEcD
Director of Economic Development
Bricker Graydon/Argus Growth Consultants

Bricker Graydon

Topics to Be Covered

1. Big Projects vs. Data Centers
2. An overview of data center activity in Central Ohio
3. Typical project characteristics
4. Data center site selection factors
5. What to Expect as a Community
6. How to be prepared

Typical Big Projects vs. Data Centers

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Traditional Big Project

- Typically, Site Selection Consultant Led and funneled through JobsOhio
- Site Readiness Essential
- Drivers: Labor Force, Market Access, Transportation, Supply Chains, Utilities, Capital Costs, Operating Costs, Speed, Permitting, Housing, Quality of Life, etc.
- May be land price sensitive
- Incentives are key to final site decision

Hyperscale Data Center

- Typically, Company Led Search
- Typically working with Electric Utilities to find sites
- Electricity Capacity trumps Site Readiness
- Drivers: Electricity, Large site availability, Possibly water, Speed, Clusters desired; Low tolerance for business interruption risks
- Appear less sensitive to land price
- Incentives may be sought early in the discussion

Data Center Locations Across USA

Source: DataCenterMap.com

- Northern Virginia is the national leader
- TX, CA and IL also leaders
- Ohio Ranked #5 and growing

Central Ohio Dominates the Ohio Market

- According to JobsOhio, recent hyperscaler announced investments:
  - AWS = $23 Billion
  - Google = $6.7 Billion
  - Meta = $4.7 Billion
  - Microsoft $1 Billion
- However, projects are being developed all across Ohio, including in very rural locations and brownfield sites, likely because of high capacity demands on the central Ohio grid.

Source: DataCenterMap.com

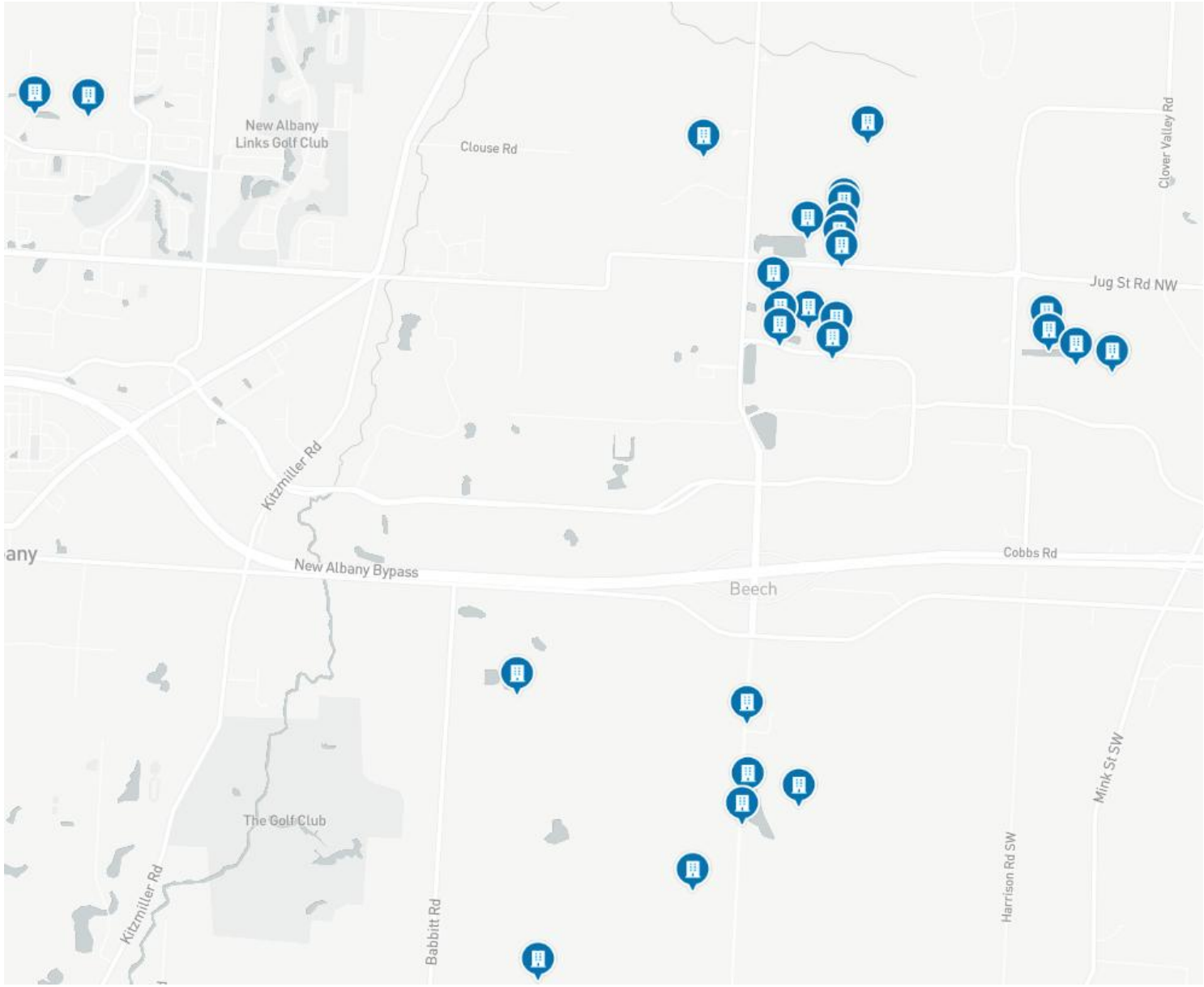
Central Ohio Data Centers

Some of the Players in the Market

- Amazon Web Services (AWS)
- Google
- Meta
- Microsoft
- Cologix
- Aligned Data Centers
- Vantage
- Compass Data Centers

New Albany Data Centers

- 24 built and 15 under construction according to the City.
- Heavy Concentration along Beech Road



Typical Data Center Characteristics

Physical Size

- Range of 70 acres to 1,500 acres
- Norm: 100 acres to 300 acres (purchase range ($70k - $344k/acre)
- Multi-stage projects typical, often with more than one building per stage/deployment/region
- Individual Buildings typically range from 150,000 SF to 500,000 SF

Jobs

- 50 jobs per deployment is typical
- Multiple deployment project sites can reach hundreds of jobs.
- Average wages $80,000 to $100,000 per year
- Co-locations may have operator jobs and client jobs on site

Electric Usage

- Typical range: 10 MW to 200MW
- Ohio examples
  - Vantage 192 MW
  - Cologix 27MW
  - Stack Infrastructure 60MW
- Companies seeking scalability. AWS reportedly is working on a deal for 960 MW of nuclear power in PA.
- Hearing about current non central Ohio projects that could reach 400 MW to 1,000 MW (1 Gigawatt)

Water Usage

- Will depend upon the technology used. Air cooling is an option, but more expensive and can create more noise.
- We have seen ranges of 15,000 GPD to 5,000,000 GPD*

** We believe the high range is peak usage not an average usage*

Data Center Site Selection Considerations

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1. **Electricity** - is driving the site selection driving the process: available capacity, costs and reliability.
2. **Water** - availability may or may not be a driver.
3. **Fiber** - Generally, trunk fiber lines can be brought to the site much more cheaply than electricity or water.
4. **Clustering** with other tech companies *used to be* the norm.
5. **Location, Topography & Previous Use** - Challenging sites (remote, hilly, brownfield, distant from water and sewer) can now be competitive if the electricity service is sufficient.

What to Expect as a Community

1. Sites in your community may be evaluated without your knowledge.
2. Community may be brought in to help find a site in proximity to the electric infrastructure or soon after a site near power has been identified.
3. Company likely to expect confidentiality up until an announcement.
4. Clock is ticking against a purchase option for site due diligence period, community preparedness can be a huge help to the company

What to Expect as a Community (continued)

1. The Community is likely to be critical for several factors of the deal:
   A. Providing a clear, predictable transparent pathway for local permitting (zoning, planning commission, lot splits/assembly, site access, site work, any applicable building permits, utility connections, and curb cuts
   B. Provision of Public Infrastructure – Water, Sewer & Roads
   C. Cooperation and facilitation with landowners, neighbors
   D. Incentives:
      1) Property taxes
      2) Income taxes
      3) Cost of Extension/Improvement of roads and utilities

How to Be Prepared

1. Know your team: local governments, local and regional ED groups, utility providers, possibly major landowners, school leaders, and training providers.
2. Have your team ready – Clear roles, have a primary point of contact, updated policies/guidelines, confidentiality is a must.
3. Clear, consistent, factual communication – at this stage you are seeking to reassure the project team you can get them across the finish line in time to meet their schedule.
4. Be professional, be engaged, be responsive… but don't over promise or make premature promises that will hurt your negotiating position.
5. Do your homework on incentives to assure a win-win-win scenario

Hypothetical Tax Increment Financing Scenario

TIF Year	Tax Year	Collection Year	Land Increment	Improvement Increment	Total Increment	% Complete	Total TIF Increment	Gross TIF Revenues	Less Auditor Collection Fee 1%	Allocated To Schools	Proportional JVS Compensation	Net TIF Revenues	Allocated to Public Infrastructure Debt	Excess TIF Revenues
0	2025	2026	-	-	-	0%	-	-	-	-	-	-		
0	2026	2027	-	-	-	0%	-	-	-	-	-	-		
1	2027	2028	17,015,625	209,859,375	226,875,000	50%	226,875,000	3,668,431	(36,684)	(1,703,075)	(222,246)	1,706,426	(1,023,855)	682,570
2	2028	2029	25,523,438	314,789,063	340,312,500	75%	340,312,500	5,502,647	(55,026)	(2,554,613)	(333,369)	2,559,639	(1,535,783)	1,023,855
3	2029	2030	34,031,250	419,718,750	453,750,000	100%	453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
4	2030	2031	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
5	2031	2032	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
6	2032	2033	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
7	2033	2034	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
8	2034	2035	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
9	2035	2036	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
10	2036	2037	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
11	2037	2038	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
12	2038	2039	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
13	2039	2040	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
14	2040	2041	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
15	2041	2042	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
16	2042	2043	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
17	2043	2044	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
18	2044	2045	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
19	2045	2046	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
20	2046	2047	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
21	2047	2048	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
22	2048	2049	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
23	2049	2050	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
24	2050	2051	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
25	2051	2052	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852	(2,047,711)	1,365,141
26	2052	2053	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852		3,412,852
27	2053	2054	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852		3,412,852
28	2054	2055	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852		3,412,852
29	2055	2056	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852		3,412,852
30	2056	2057	34,031,250	419,718,750	453,750,000		453,750,000	7,336,862	(73,369)	(3,406,150)	(444,492)	3,412,852		3,412,852
							Totals	214,603,222	(2,146,032)	**(99,629,898)**	(13,001,382)	**99,825,909**	**(49,656,991)**	**50,168,918**
							PV at 6%	85,348,381	(853,484)	(39,623,126)	(5,170,691)	39,701,080	(24,755,103)	19,853,031

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Thank You

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Behind the Meter:
Building Industrial Energy Parks

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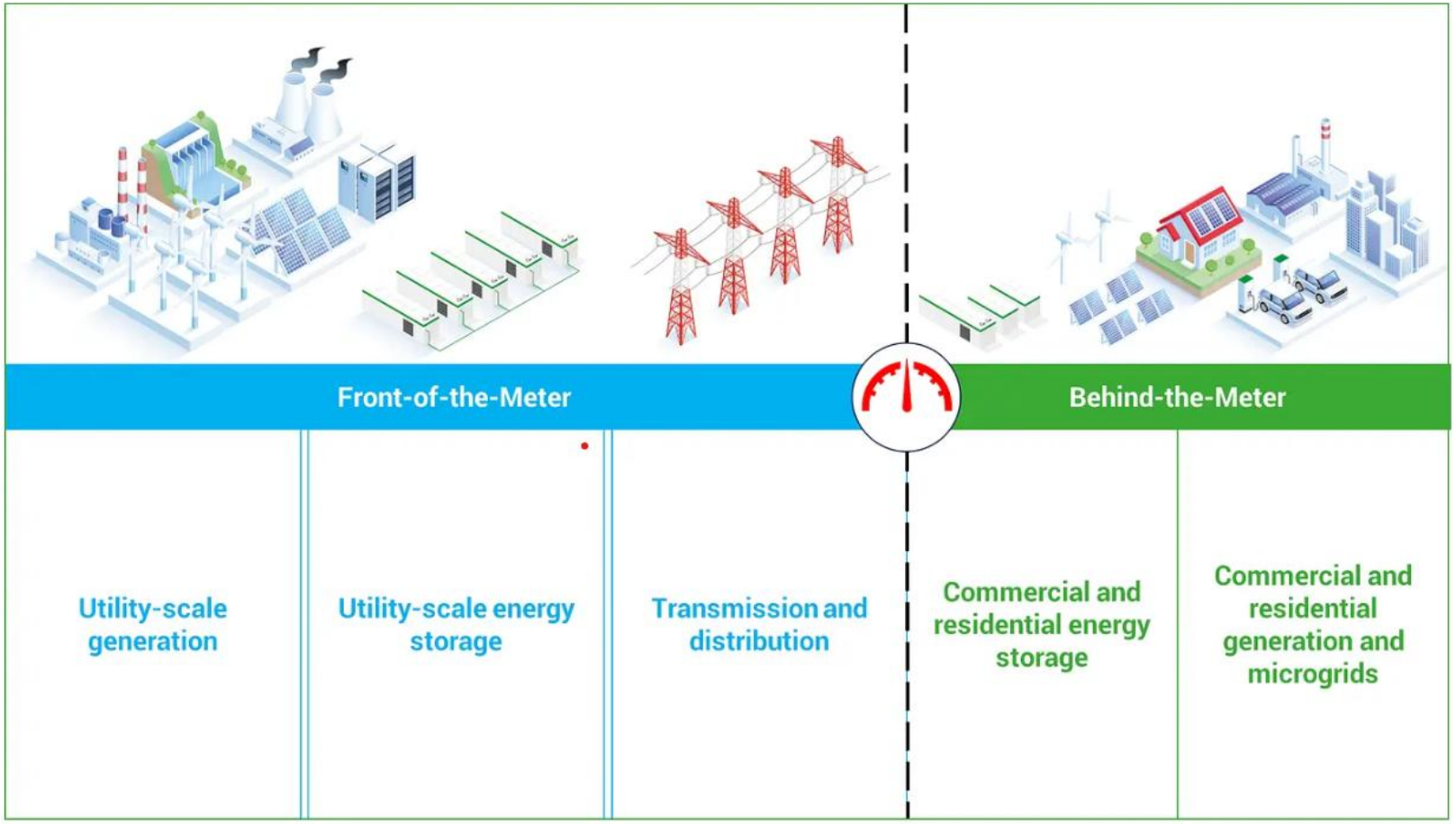
Bricker Graydon

Roadmap

- BTM Overview – What & Why?
- BTM in Ohio (Pre-HB15): Types of Projects
- HB 15 Changes to BTM in Ohio (Pre-HB15): Constraints
- HB 15 Changes to BTM Generation: Overview
- HB 15 Changes to BTM Generation: Self-Generation Definition
- HB 15 Changes to BTM Generation: Mercantile Self-Power System
- Implications and Opportunities

BTM OVERVIEW
What & Why?



BTM in Ohio (Pre-HB15):
Types of Projects

- Ohio is no stranger to self-generation arrangements
- Going back to the 1980s, some industrial customers deployed cogeneration systems
- Over the last 15 years, net-metering (smaller renewable) projects became more common
- The Ohio State University 105 MW CHP Project
- Data center onsite power plants

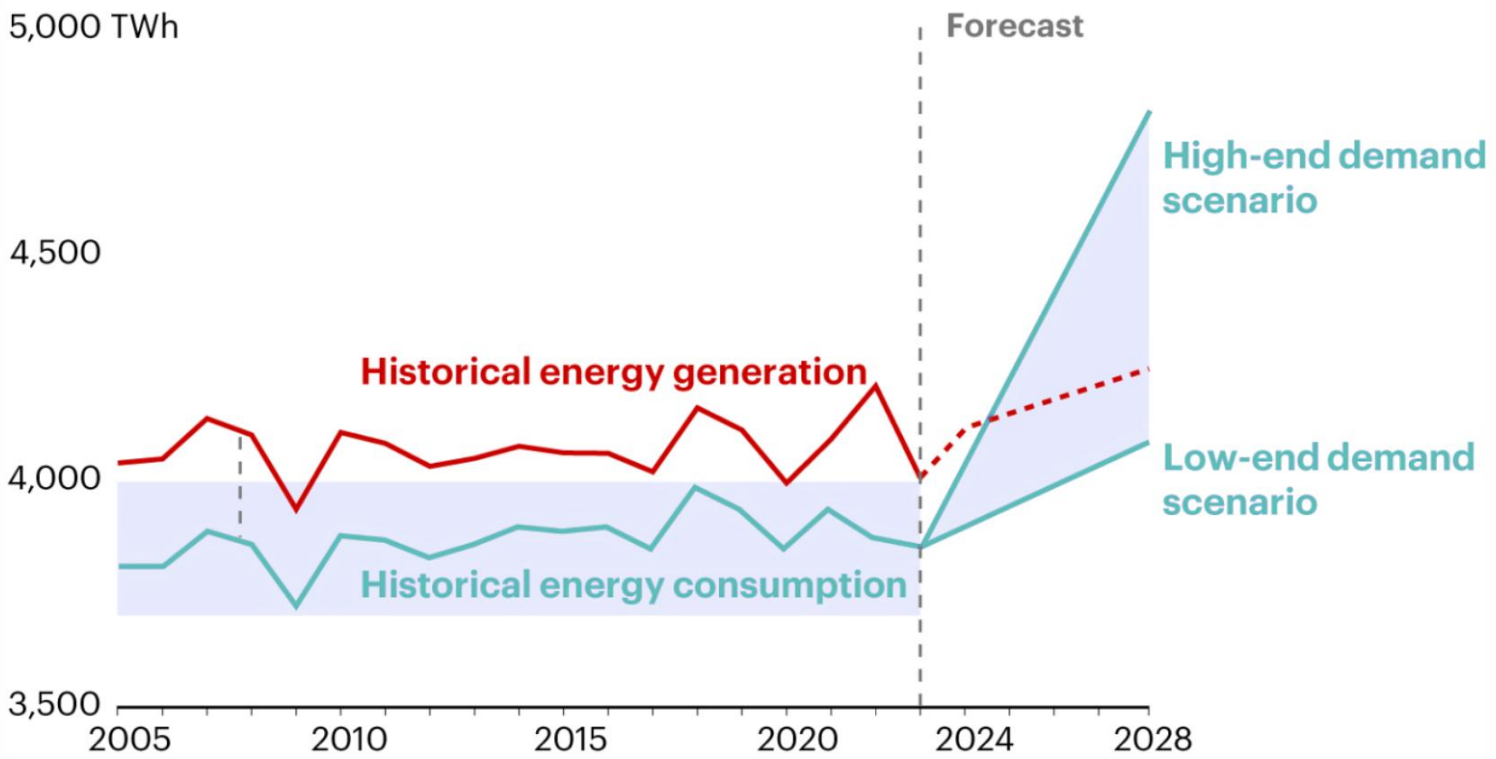
BTM in Ohio (Pre-HB15):
Constraints to Self- Generation

- Ohio law has been limited in defining the contours of self-generation arrangements.
- R.C. 4928.01(A)(32):
  - "Self-generator" means an entity in this state that owns or hosts **on its premises** an electric generation facility that produces electricity primarily for the owner's consumption and that may provide any such excess electricity to another entity, whether the facility is installed or operated by the owner or by an **agent under a contract**."
- Constraints in meaning of "premises" and what arrangements are permissible with a 3rd party

HB 15 Changes to BTM Generation:
Overview

- Why?
  - Growing concerns over grid constraints due to significant increases in load growth and increasing delays to interconnect new generation to the grid.
- HB 15 is expansive energy legislation, but one primary goal is to facilitate energy generation development via reforms to permitting, taxes, and the BTM framework.
- Reforms BTM by:
  1. Clarifying the definition of “self-generation”
  2. Creating “mercantile customer self-power systems”

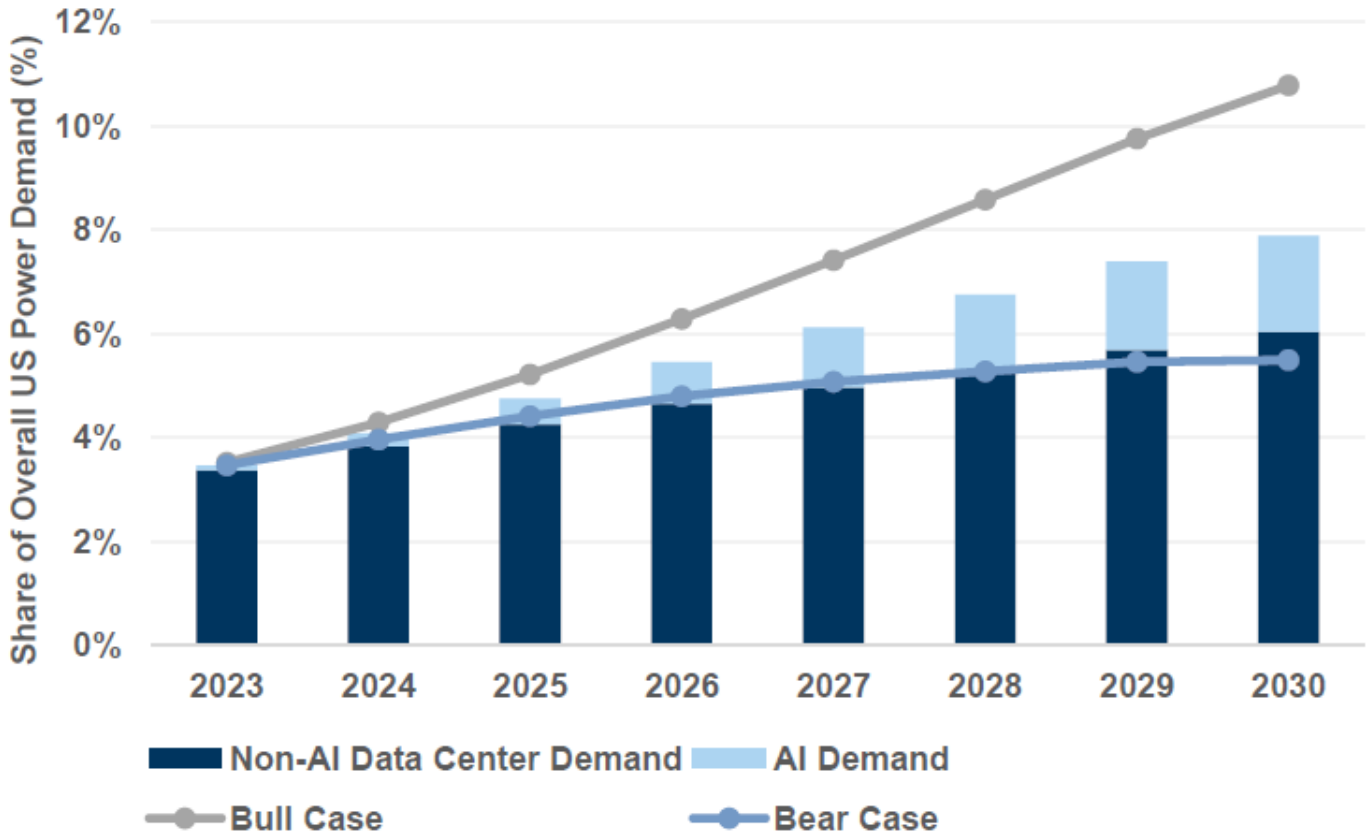
US electricity demand vs generation (terawatt hours)



Notes: Demand forecast is an aggregate of multiple industry forecasts; historical numbers and generation forecast based on EIA data; historical gap between energy generation and consumption necessary to ensure sufficient load that accounts for some energy loss in transmission
Sources: EIA 2023–2025 Short-Term Energy Outlook (May 2024); EIA 2025–2028 Energy Outlook (March 2023); ISO reports (H2 2023 – H1 2024); FERC; Grid Strategies; Goldman Sachs and Bank of America analyst forecasts (April 2024); Bain analysis

Exhibit 20: We expect data centers to comprise ~8% of US power demand by 2030 in our base case, with potential for 11% in our bull case and 5% in our bear case

Data center demand as a share of total US power demand, %



Source: IEA, Goldman Sachs Global Investment Research, EIA

Ohio – and Central Ohio

- These national trends are present in PJM and Ohio, especially Central Ohio
- Limited capacity in Central Ohio until new transmission lines are built (5-10 years)
- PUCO “Data Center Tariff Case”
  - Case No. 24-508-EL-ATA

HB 15 Changes to BTM Generation:
Self-Generation Definition

(32) "Self-generator" means an entity in this state that owns or hosts on ~~its premises~~ property the entity controls an electric generation facility that produces electricity primarily for the owner's consumption and that may provide any such excess electricity to another entity, ~~whether the~~ and that meets all of the following:

(a) The facility is installed or operated by the owner or by ~~an agent~~ a third party under a contract, including a lease, purchase power agreement, or other service contract.

(b) The facility connects directly to the owner's side of the electric meter.

(c) The facility delivers electricity to the owner's side of the electric meter without the use of an electric distribution utility's or electric cooperative's distribution system or transmission system.

HB 15 Changes to BTM Generation:
Mercantile Self-Power System

- A mercantile customer self-power system includes one ***or more*** electric generation facilities, electric storage facilities, ***or both***, as long as:
  - The system produces electricity primarily for the use of a large customer ***or a group of large customers***;
  - Electricity delivered to the large customer(s) from the system is connected directly to the customer's side of the meter; and
  - Electricity is delivered without using a utility's distribution or transmission lines.

(Sec. 4928.73(2)(a)-(c))

Implications and Opportunities

- The mercantile customer self-power system is perhaps the most extensive self-generation framework in the county.
- Why?
  - 1) Divorces proximity requirement between the customer and generating/storage facilities.
  - 2) Allows groups of customers to utilize a shared BTM generating/storage resource.
- This allows new opportunities for coordinated development
  - Clusters
  - Defined industrial parks
  - Layered development in other ways, such as water and steam districts

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Together, We Waste Less and Do More!

Please help us recycle and compost

Recycle – Place your bottles, cans, cardboard, and paper in the recycling bin.

Compost – Place your food scraps, paper towels, and napkins in the compost container.

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Planning for Energy

June 5, 2025

Holly Mattei, AICP
Crossroads Community Planning
hollym@crossroadscommunityplanning.com

Comprehensive Plan

Energy as its own Planning Consideration

What would this look like?

Existing Conditions

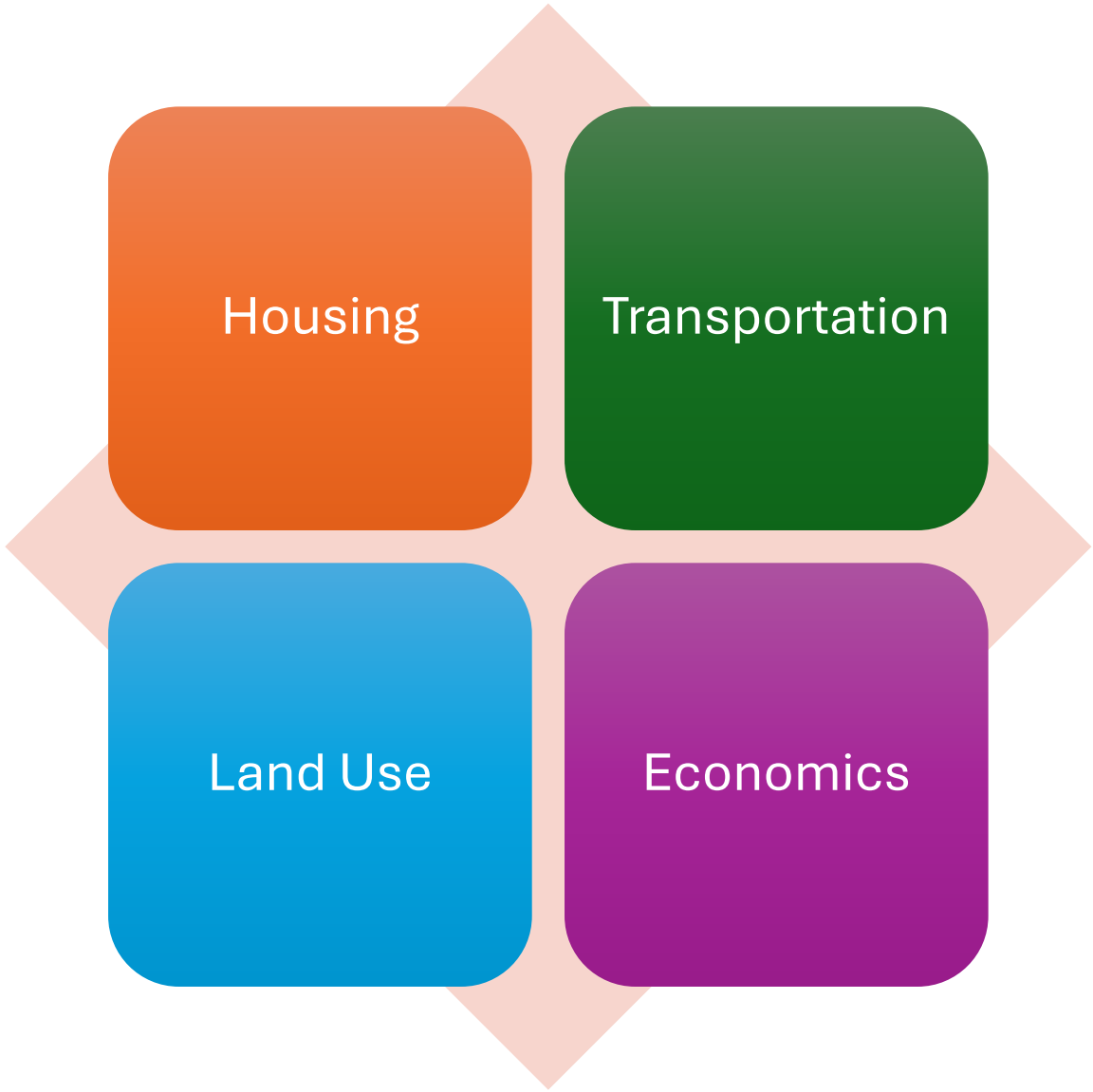
Community's existing energy profile

- Energy Usage
  - Residential, commercial, industrial
- Energy Sources
  - Existing facilities
- Trends and Patterns

Community's existing energy policies and programs

- Incentives for efficiency
- Incentives for self generating facilities for high demand uses

Analyze Energy Impact to the Community



Community Involvement

- Include ***energy*** as part of your community engagement process for the comprehensive plan
  - Identifying both positive impacts and concerns in your planning process will help set a foundation for future projects
  - ***Educate and Engage***

Residents, Small Businesses, & Institutions

- Replacing light bulbs
- Purchases energy efficient appliances
- Upgrading HVAC systems – Smart Thermostats
- Improving insulation and windows
- Solar panels or other alternative energy facilities

Policies and Recommendations

- Residential, Small Business, & Institutional
  - Public awareness
  - Energy Audits
  - Grant programs to assist with home improvements
  - Revising zoning regulations to encourage alternative energy facilities for residential properties
  - Expedited permitting processes

Local Government to Show the Way

- Municipality or governmental entity to conduct pilot program
  - Improve energy efficiency in buildings
  - Add alternative energy facilities to service government building
  - Run educational program on success stories

Large Energy Users

DATA CENTERS AND OTHER HIGH ENERGY USERS

INDEPENDENT ENERGY PRODUCTION FACILITIES

(IE MICRO GRID)

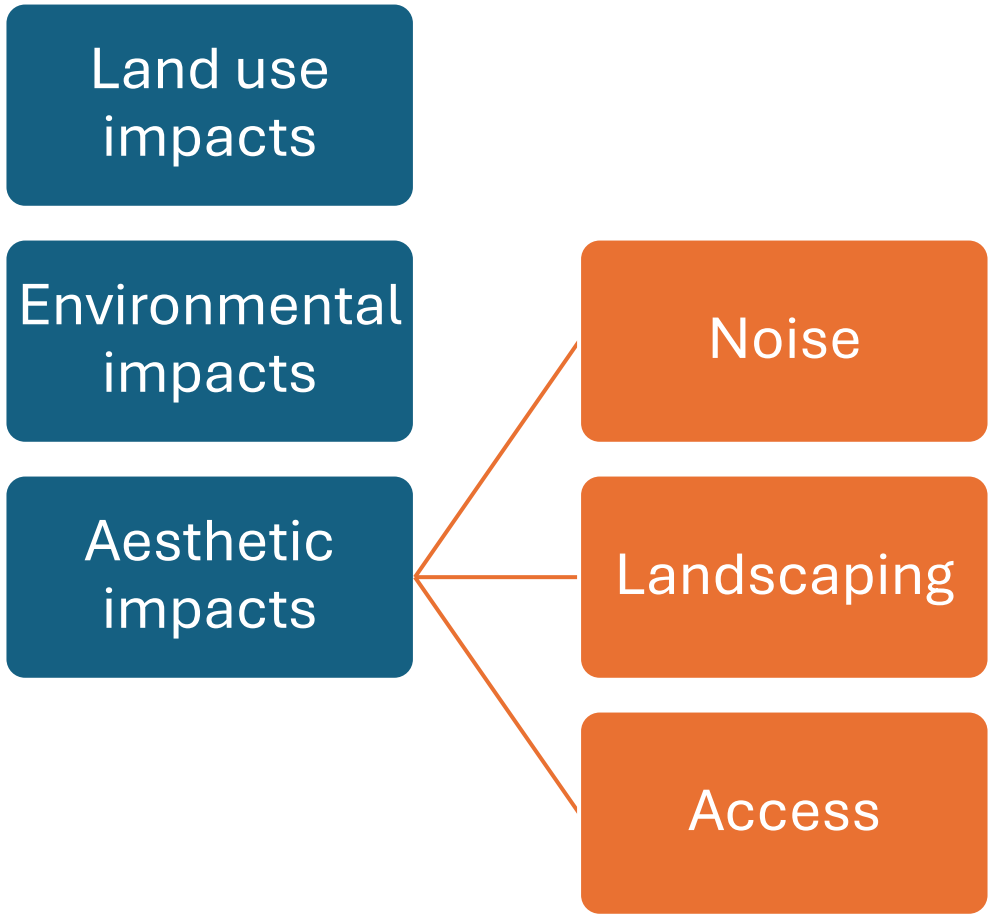
What is a Microgrid?

- A small network of electricity users with a local supply that is usually attached to a centralized national grid but can function independently,

Positive Impacts of Microgrids on Community

- Enhanced resilience
- Cost savings and stability
- Economic benefits
- Environmental benefits
- Enhanced security
- Social impacts

Community Concerns



State Preemption

- Local communities can regulate energy uses under 50 MW
- 50 MW or larger reviewed and approved by Ohio Power Siting Board
- Remember – utility may be exempt but your primary use is probably still subject to zoning (i.e., data center).

Policies and Recommendations to Address Community Concerns

Updating zoning resolutions

- Ensure zoning clusters high energy uses in appropriate locations within community
- Enhance landscaping requirements
- Include noise requirements

Incorporating design standards into development agreements

- Particularly important when such uses are exempt from local regulations (i.e. 50 MW or more)

Community partnerships from high energy user to offset impacts

- Planning can predetermine community improvements

Zoning Regulations

Create an Advanced Manufacturing – Technology - Employment Zone

- Target high energy uses to this area
- Increase height limitations in this area
  - i.e. 60-80 feet for buildings – no height limitation for cooling towers, exhaust systems, and mechanical equipment
- Concentrate these uses to designated area within the community
- Reduces sprawling developments
- Ensure appropriate parking requirements to encourage these uses

Landscaping Standards

- 75% opacity using mounding, landscaping and fencing

Reasonable Noise Limitations

- 65 dB at the property line

Understand the Big Picture

Consider ancillary uses:

Laydown yards	Temporary offices	Construction Traffic

Ensure to include plans for these uses into your land use planning.

Build Relationships

- Even when the utility may be exempt from local requirements, most companies are willing to work with you to create a positive impact on your community.

Community Relations – Partnerships

- Road improvements
- Water and sewer upgrades
- Redevelopment of brownfields
- STEM education
- Skills training
- Green space initiatives
- Volunteering and Philanthropy
- ***Community Plan Initiatives***

Economic Development Agreement (EDA)

Negotiate

- Negotiate financial package to benefit the community

Community Revenue

- Increase revenue through the use of:
  - New Community Authority
  - Joint Economic Development Districts (Township)
  - Tax Increment Finance Districts
  - Community Reinvestment Areas

Identify

- Identify community improvement projects and negotiate the completion of these projects into the EDA.

Continued Public Engagement

- Community engagement doesn’t stop after the comprehensive plan is finished.
- During project proposal, partner with the energy producer/high energy user to address landscaping, aesthetics, environmental and noise concerns.
- Build upon the education and engagement process utilized to create the comprehensive plan
    - Use the foundation built from the comprehensive plan
    - Identify community benefits
        - Job creation
        - Spin of for other local businesses

Conclusion

- Energy planning includes efforts to increase resilience in both:
  - Residential, small business and institutional uses
  - Large high energy uses
- Flip the script
  - Establish energy planning as its own planning consideration
  - Analyze how it impacts all areas of the comprehensive plan
  - Plan accordingly through:
    - Local initiatives for small energy productions (residential, small businesses, institutional uses)
    - Large scale – high energy uses

Questions?

- Holly Mattei, AICP

  Crossroads Community Planning

  hollym@crossroadscommunityplanning.com

AGENDA

9:00 – 9:15 AM | **Welcome & the Energy Landscape for Meeting Tomorrow's Demand** | *William Murdock & Brian Filiatraut, MORPC*

9:15 – 10:00 AM | **Energy Generation & Trends in Central Ohio** | *Jon-Paul d'Aversa, Power a Clean Future Ohio, & Dale Arnold, Ohio Farm Bureau Federation*

10:00 – 10:10 AM | **Break**

10:10 – 10:40 AM | **Planning for Big Projects & Data Centers** | *Mike Jacoby, Bricker Graydon*

10:45 – 11:30 AM | **Behind the Meter: Building Industrial Energy Parks** | *Dylan Borchers, Bricker Graydon*

11:30 AM – 12:00 PM | **Lunch & Networking**

12:00 – 12:50 PM | **Energy as an Essential Part of Planning** | *Holly Mattei, Crossroads Community Planning*

12:50 – 1:00 PM | **Wrap-Up & Last Two Session Previews** | *Brian Filiatraut, MORPC*

JOIN US

SECURING OUR ENERGY FUTURE

Informational and Workshop Forum Series

WHAT – A series of **informational webinars and workshops** featuring energy, regulatory, and economic development experts in Central Ohio.

WHO – These sessions will help **local government and community leaders** plan for a more secure, resilient, and affordable energy future for their communities.

- **MAY 15 | Landscape of Energy Planning**
  Focus: Big-Picture Challenges and Opportunities in Central Ohio
- **JUNE 5 | Planning Energy Resilience for a High-Demand Future**
  Focus: How to Set the Table and Open Your Community to Energy and Economic Opportunities
- **JULY 10 | Funding and Resource Opportunities to Build Your Energy Stack**
  Focus: What Is Available Now to Help with Energy Planning and Energy Projects?
- **AUGUST 27 | Emerging Energy Technologies and Future-Proofing the Region**
  Focus: What's on the Energy Horizon?

REGISTER TODAY

For more information, contact
Brian Filiatraut, bfiliatraut@morpc.org.

July 10, 1 – 3 PM

Securing Our Energy Future:

Funding and Resource Opportunities to Build Your Energy Stack

KEY TOPICS

- Discover funding opportunities to support energy planning and projects in your community.
- Explore how financing tools, like PACE, CRA, and TIFs, can reduce project costs and support development opportunities.
- Learn how to leverage federal, state, and local incentives for energy initiatives.
- Ideal for local government and community leaders seeking to fund resilient and affordable energy solutions.

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Audience: Targeted toward Public officials, school board members, township trustees, planning and zoning board members

Benefits

- ✓ Knowledge
- ✓ Networking
- ✓ Insights

FIRST CLASS: AUGUST 7, 2025

REGISTRATION OPENS: JUNE 2025

SAVE THE DATE

Summit on Sustainability
September 30, 2025

THANK YOU

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