



***Offshore Wind Energy in Pennsylvania
March 14, 2011***

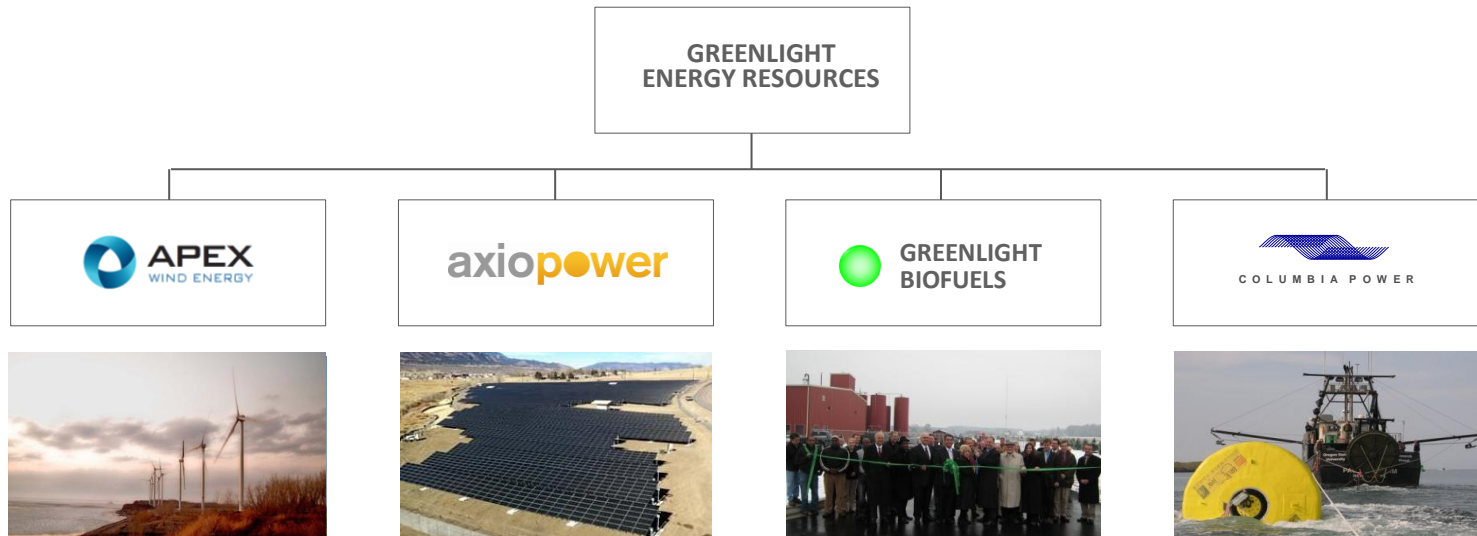
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Key Messages

- *Apex Wind is an experienced, well-capitalized company, with local presence in Erie*
- *In considering an offshore wind project in Lake Erie, Apex seeks local acceptance, local involvement and local benefit from a portion of the revenues*
- *Done right, offshore wind presents significant opportunity for Pennsylvania supply chain and jobs*
- *Working with the Corbett Administration and Legislative Leaders on offshore land lease legislation is a critical first step*



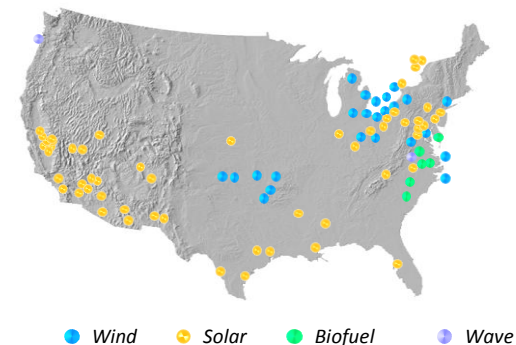
The Erie Roots of Apex Offshore Wind



Apex Offshore Wind was formed by the merger of Erie-based energy developer BQ Energy and Apex Wind Energy.

Apex is part of the Greenlight Energy Resources family of companies, active in the development of wind, solar, biofuel and wave energy resources.

Greenlight Energy Resources Companies



Apex Wind Areas of Focus



Greenfield



Brownfield / Industrial



Offshore

Offices in:

Erie, PA
Charlottesville, VA
Poughkeepsie, NY

Experience and Capabilities

Management Team Experience

- 29 projects, \$1.1 billion in wind facilities completed
- More than \$22 billion of financings in wind and fossil energy financing
- Offshore wind expertise
- Negotiated \$4 billion+ turbine purchases; close relationships with leading and emerging vendors

Team

- 40+ employees
- 100+ years experience in the wind industry
- Expertise in finance, legal, PPA negotiation, transaction structuring, project acquisition
- Experience in development, permitting, regulatory, transmission interconnections, construction and operations

Projects Completed by Management Team



Colorado 300MW



Texas 50MW



Montana 135MW



New York 20MW



Kansas 200MW



Holland 23MW

Steel Winds, New York (2007)



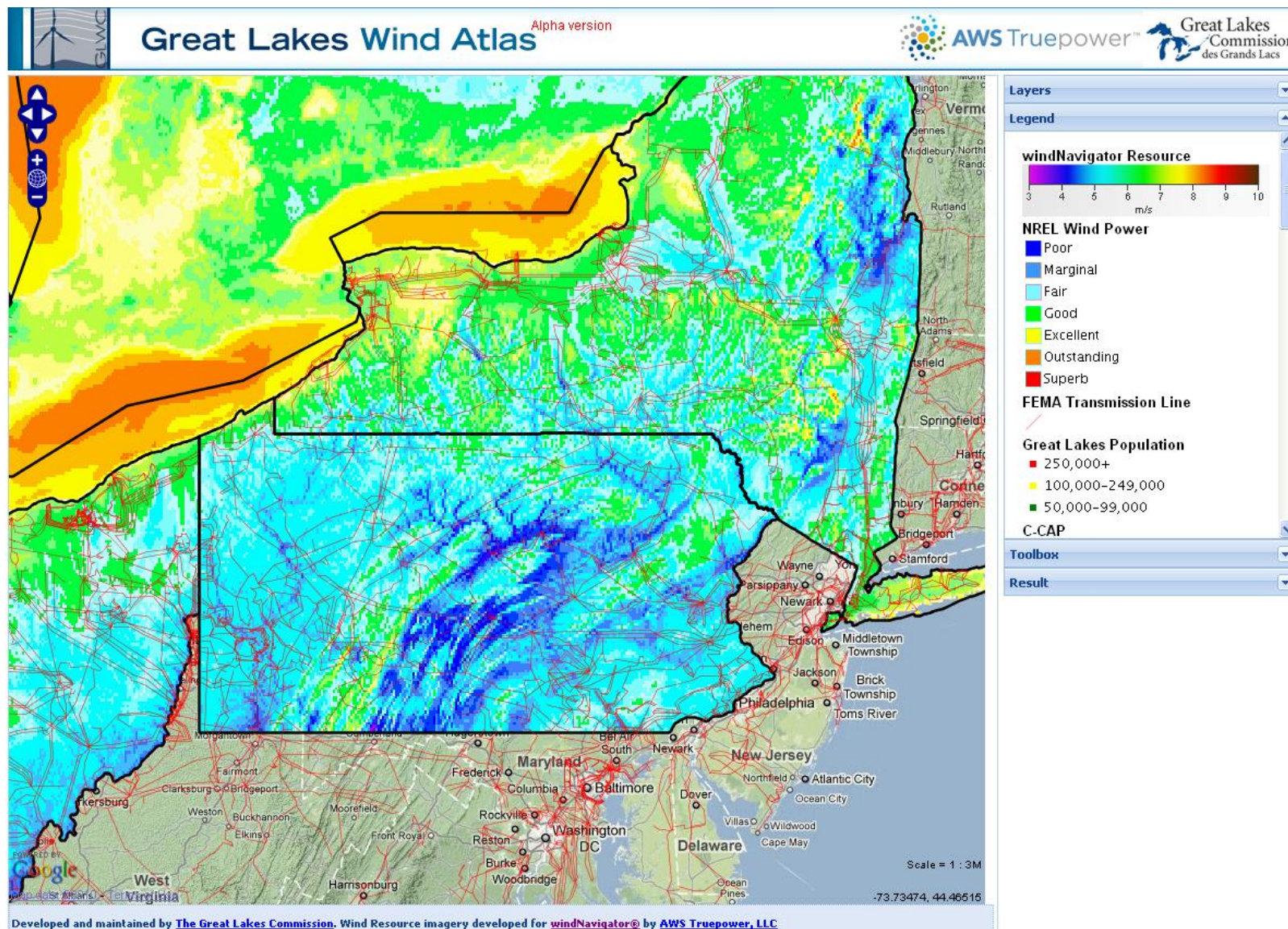
20 MW wind energy capacity
\$34 million facility

*Developed by Apex management team,
Purchased by First Wind*

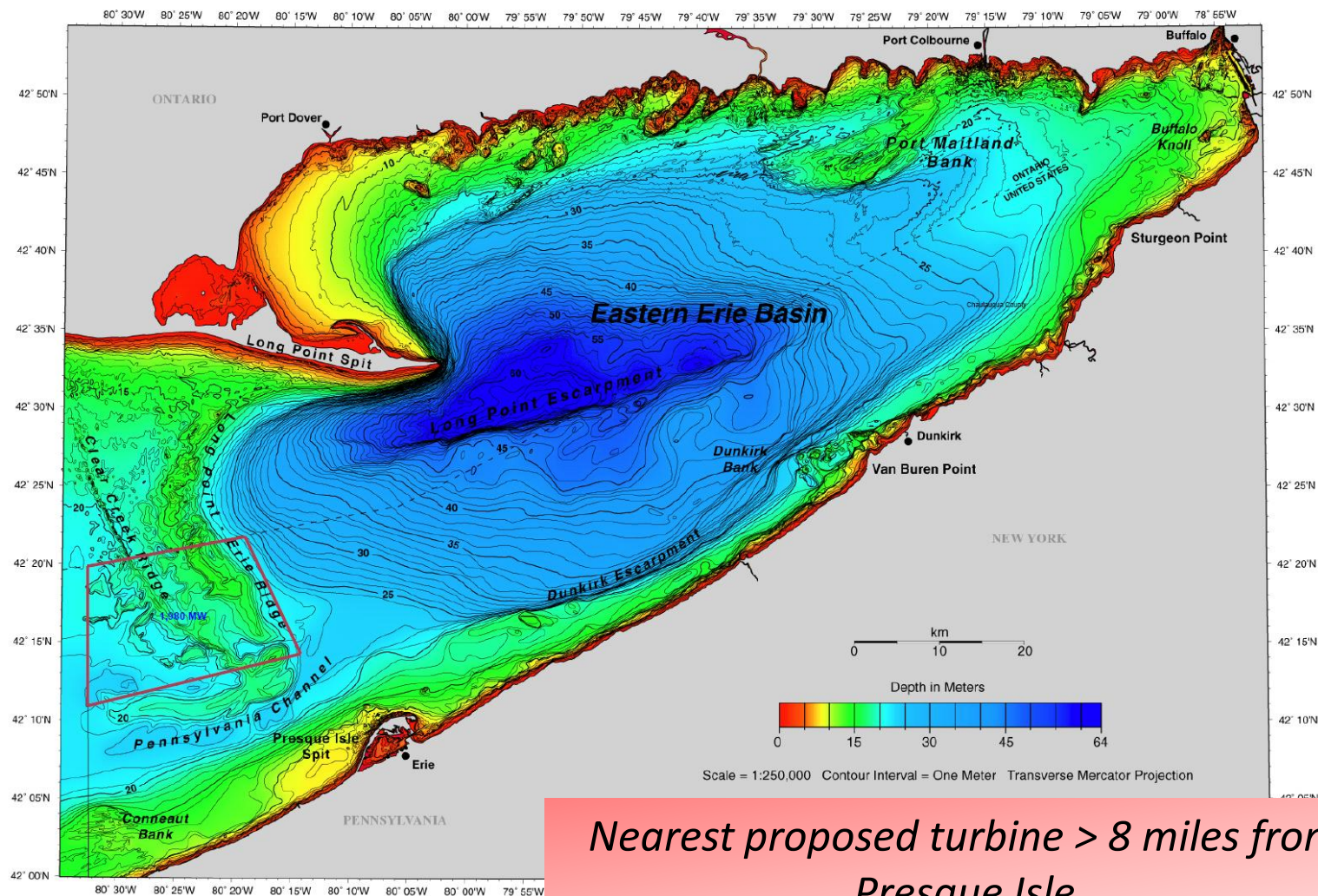
Power Engineering Magazine (Jan 2008)
2007 Best Renewables Project of the Year

*Only wind project on US shores of Great Lakes
Within 400' of Lake Erie shoreline
Built on Former Bethlehem Steel Mill site in Lackawanna, New York
Eight Clipper 2.5 MW turbines, 20 MW
Adding 6 more turbines in 2011*

Wind Energy Resource in Pennsylvania



Lake Erie Bathymetry



Source: BQ Energy

Nearest proposed turbine > 8 miles from Presque Isle

Siting Considerations

- Lake bottom
- Ice impacts
- Water depth
- Wind speeds
- Impacts to fishing
- Distance from shore and Presque Isle State Park
- Migratory bird routes
- Sand dredging activities
- Ship traffic



Horns Rev Offshore Wind Farm, Denmark. Source: Elsam

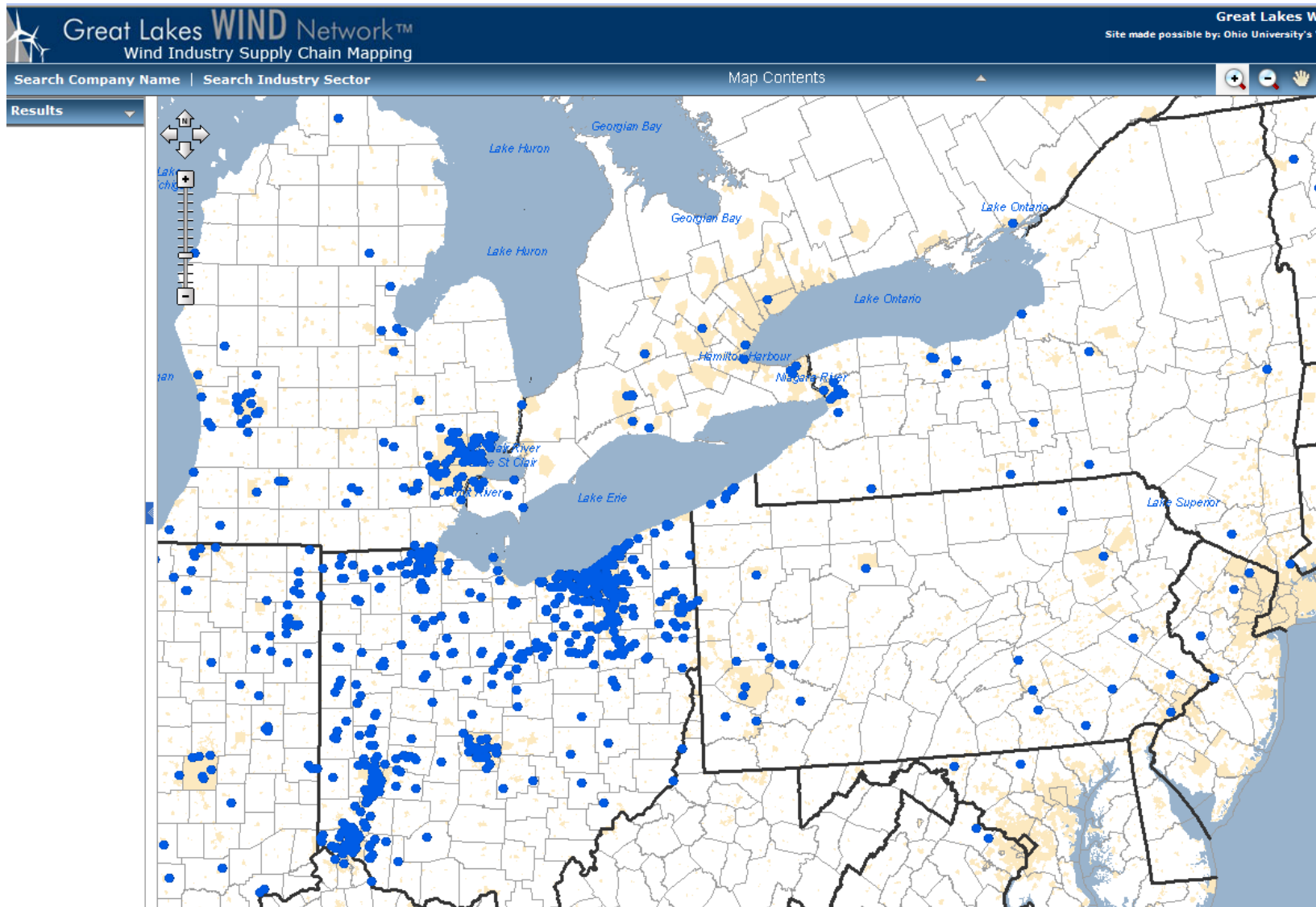
Evaluating these factors involves years of study, permitting and public engagement before anything is approved to be constructed

Benefits to Pennsylvania

- Electricity price stability to consumers
- Economic development:
 - Construction jobs, then retrofitting, repairs indefinitely
 - Operations jobs
 - Supply Chain manufacturing and transportation industries
 - Expanded utilization of Port of Erie
- Component manufacturing throughout Western PA
- Environmental benefits from renewable source
- Construction of installation and maintenance vessels at Port of Erie
- Local benefit from a portion of project revenues

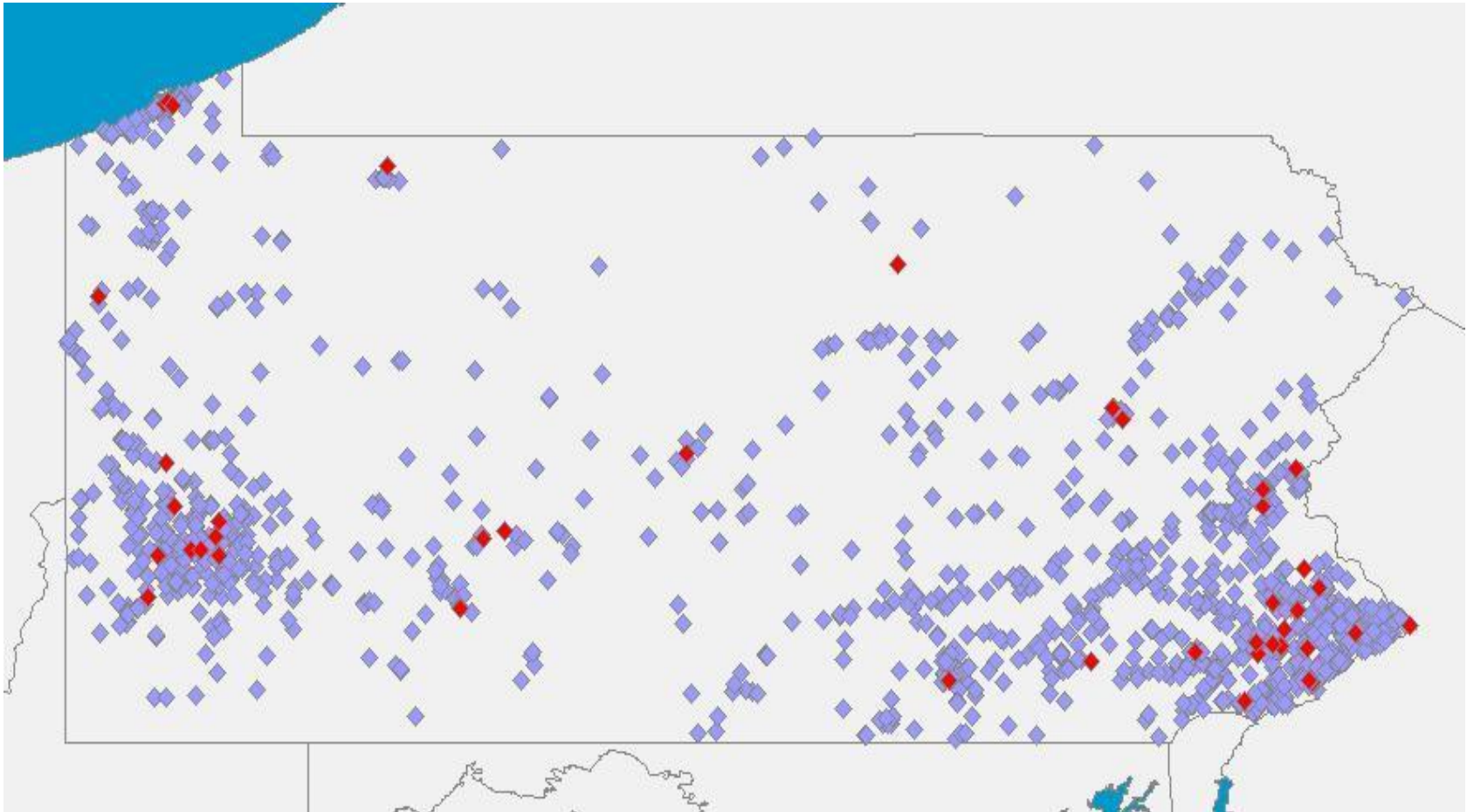
Economic benefits are driven by project scale and the developer's tenacity and commitment to local sourcing

Existing Wind Energy Supply Chain



Source: Great Lakes Wind Network

Primary focus: Wind Energy Supply Chain



Source: PA Department of Community and Economic Development

- ▲ Actual Wind Component Manufacturers
- ◆ Potential Existing Wind Component Manufacturers

The Potential: Offshore Wind Economic Impact in RI

Economic Development Study says “Total Value Added” to Rhode Island from 405 MW of offshore wind = \$750 million

Results of economic impact study of 20 MW and 385 MW Rhode Island offshore wind farms commissioned by Rhode Island Economic Development Corporation:

1. Total Value Added to Rhode Island = employee compensation + propriety income + other property type income + indirect business taxes
2. TVA includes direct, indirect and induced benefits
3. TVA to Rhode Island for 20 MW pilot project: \$92 million (NPV)
4. TVA to Rhode Island for 385 MW project: \$659 million (NPV)
5. Does not count qualitative benefits: further development of local business park, training of RI workforce.



Photos: Smulders Corp

Submerged Land Lease Legislation for Lake Erie

The Commonwealth can only negotiate and commit to submerged land leases of up to 25 acres.

Legislation is required for larger lease parcels in Lake Erie which are necessary to proceed with site studies which will cost millions of dollars.

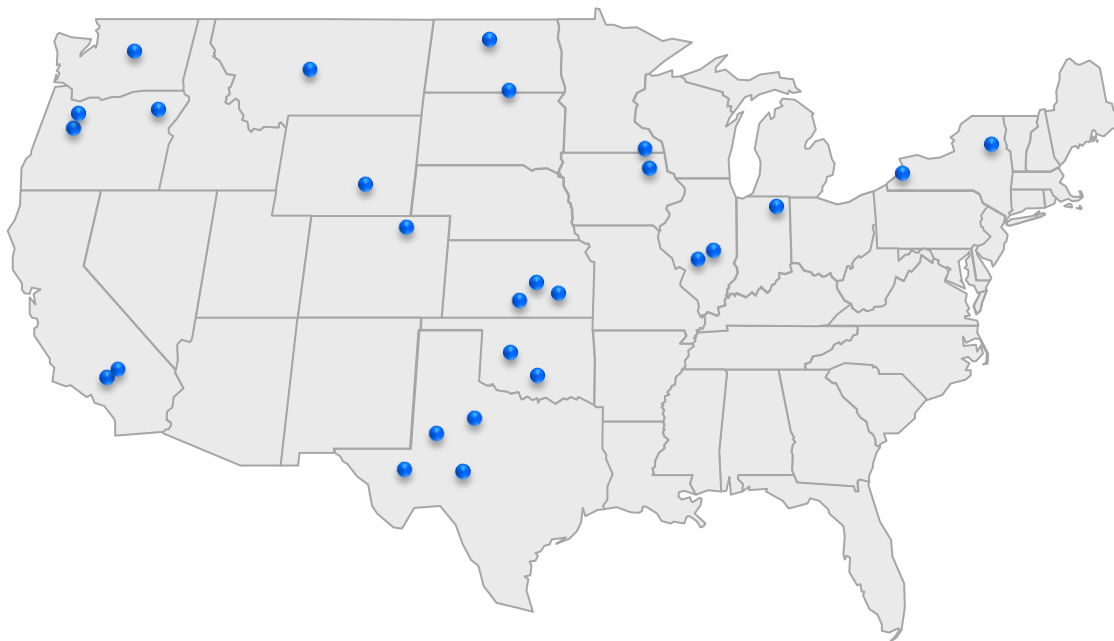


Appendix

Management Experience

Direct involvement in the realization of over \$8 billion of wind energy facilities

The Apex team has been directly involved in the development, procurement or financing of the following projects, representing over 4,438 MW of wind energy facilities now in commercial operations.



Name	State	Capacity
Wild Horse	WA	230 MW
Rattlesnake Road	OR	103 MW
Wheat Field	OR	100 MW
Elkhorn Valley	OR	103 MW
Whitewater	CA	62 MW
Cabazon	CA	41 MW
Judith Gap	MT	135 MW
Rock River	WY	50 MW
Cedar Creek	CO	300 MW
Trent Mesa	TX	150 MW
Desert Sky	TX	161 MW
Lone Star I & II	TX	400 MW
McKee	TX	50 MW
Velva	ND	12 MW
Tatanka	ND	180 MW
Flat Ridge	KS	100 MW
Meridian Way	KS	200 MW
Elk River	KS	150 MW
Red Hills	OK	123 MW
Blue Canyon I, II & V	OK	325 MW
Pioneer Prairie	IA	300 MW
Prairie Star	MN	100 MW
Rail Splitter	IL	100 MW
Twin Groves I & II	IL	400 MW
Meadow Lake	IN	200 MW
Steel Winds	NY	20 MW
Maple Ridge	NY	320 MW
Nerefco	NL	23 MW
Total		4,438 MW

Note: These wind energy facilities were developed or financed by the Apex management team while with their predecessor companies.

Selected Completed Projects



Cedar Creek, Colorado (2007)

300 MW wind energy capacity
\$500 million facility

- *Developed by Apex management team,*
- *Purchased by Babcock & Brown and BP Alternative Energy*



Elk River Windfarm, Kansas (2005)

150 MW wind energy capacity
\$200 million facility

- *Developed by Apex management team,*
- *Purchased by PPM Energy*



Judith Gap, Montana (2005)

135 MW wind energy capacity
\$230 million facility

- *Developed by Apex management team,*
- *Purchased by Invenergy*



Valero Energy, Texas (2009)

50 MW wind energy capacity
\$100 million facility

- *Developed by Apex management team,*
- *Purchased by Valero Energy*



Steel Winds, New York (2007)

20 MW wind energy capacity
\$34 million facility

- *Developed by Apex management team,*
- *Purchased by First Wind*
- *Power Engineering Magazine (Jan 2008) 2007 Best Renewables Project of the Year*
- *Only wind project on US shores of Great Lakes*