

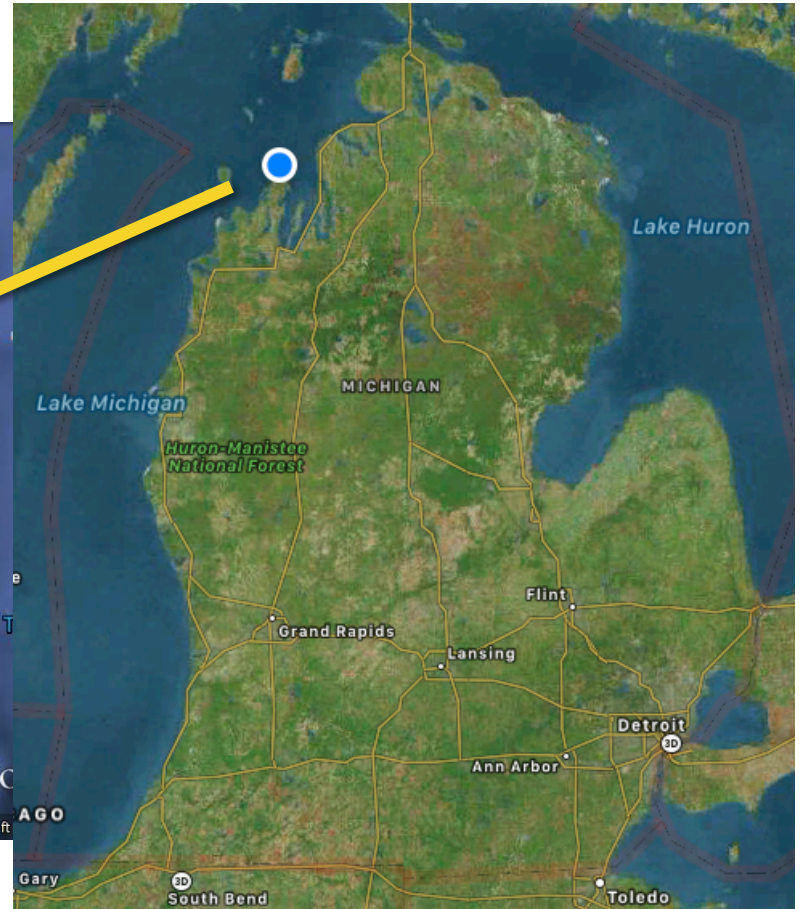
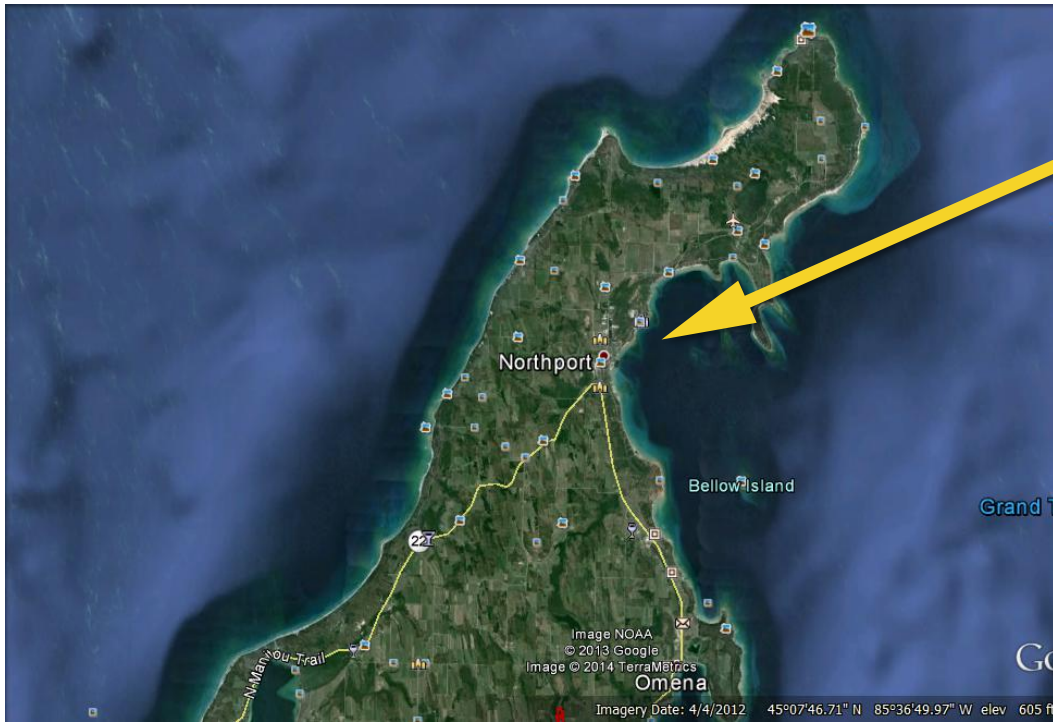
Northport Energy

Community Action for Clean Energy





Northport Energy





Northport Energy

Who We Are

Northport Village
Population 500

Leelanau County
Population 22,000

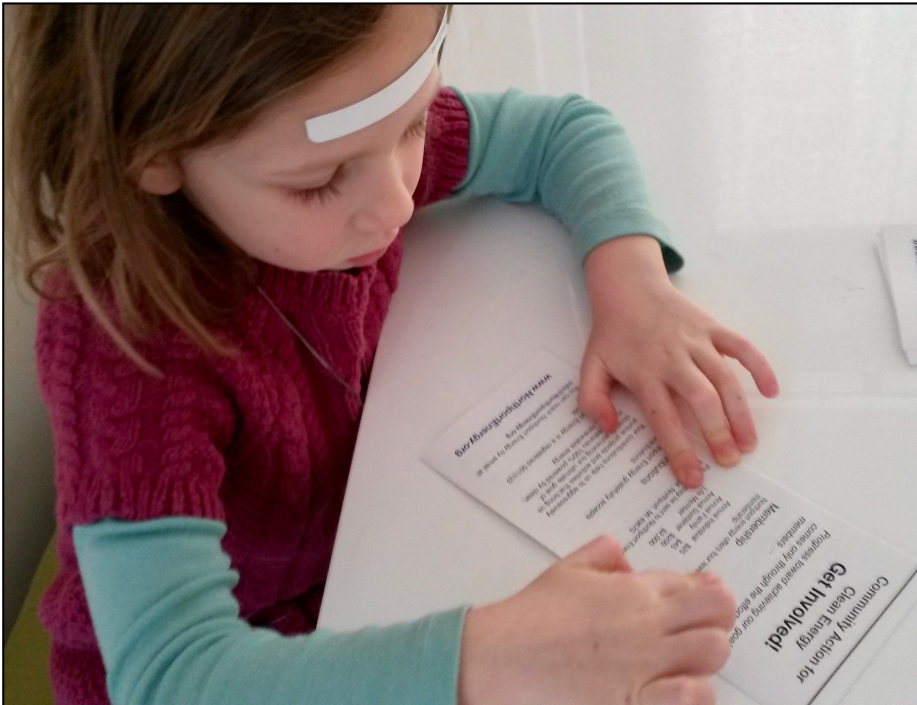




Northport Energy

Who We Are

We welcome volunteers of all ages!





Northport Energy

Who We Are

- 2008, started “men’s discussion group” to address energy and environment
- 2010, registered Northport Energy Action Taskforce as 501c-3 non profit
- 2011, Leelanau Community Energy (for-profit arm) formed
- 2016, name officially shortened to Northport Energy

Members from diverse backgrounds

- Farmers
- Engineers
- Economists
- Scientists
- Attorney’s
- Public administrators
- Teachers
- Energy experts
- Business, accounting & finance
- Construction
- Medical



Northport Energy

OUR GOAL

To transform the Leelanau Peninsula into a community 100 percent powered by efficient and sustainable energy sources.



Northport Energy

OUR MOTTO

***“Community Action for
Clean Energy”***



Northport Energy

WHAT WE DO

- Implement energy conservation and efficiency
- Conceive, support and promote community green projects
- Advise and advocate for progressive renewable energy policy
- Inform and educate individuals, households and communities



Northport Energy

Standing Committees

Marketing and Outreach Committee

The mission of the Marketing and Outreach Committee is to establish Northport Energy's identity as THE sustainable and renewable energy organization on the Leelanau Peninsula.

Projects Committee

The mission of the Projects Committee is to identify, propose and advance renewable energy projects with the goal of transforming the Leelanau Peninsula into a community 100 percent powered by efficient and sustainable energy sources.

Public Policy Committee

The mission of the Public Policy Committee is to identify and research existing and proposed policy issues on the federal, state, and local levels that impact renewable energy initiatives on the Leelanau Peninsula and recommend action plans to the Board of Directors.



Northport Energy

What We Do

We provide free project consulting, site analysis, and volunteer labor to bring renewable projects to fruition.





Northport Energy

What We Do

Working with the Northport School, Northport Energy supported and assisted in a Senior project that resulted in the installation of a ground mounted, solar tracking array at the school. We followed up that project by installing a series of signs at key renewable sites in the community to further our public education efforts.

- Assessment of school electric consumption & rates
- Solar site options
- Board approval process
- Planning and permitting
- Installation
- Monitoring of system at classrooms





Northport Energy

What We Do

Northport Energy assisted with the consulting and design of a 44 kW buy-all sell-all project at Trillium Farms, a Northport Energy member property.





Northport Energy

What We Do

Assisting the Village of Northport, Northport Energy provided free consulting, design and project management services to bring about the installation of Electric Vehicle chargers for the community.





Northport Energy

What We Do

Northport Energy provided free consulting, design and volunteer labor to bring about completion of the first 100% solar powered golf course in the United States.



2015 GREEN STAR AWARD: ALL IN ON SOLAR

Michigan nine-holer goes off the grid to win Green Star Award

October 19, 2015



Northport Energy

What We Do

Northport Energy has a presence at festivals, conferences and events each year to fulfill our goal of public education and engagement.





Northport Energy

What We Do



- Vestas 120 kW wind turbine
- 30 kW Solar Array
- Provides 40% waste water treatment plant electrical needs
- Net metering





Northport Energy

What We Do



Northport Energy assisted with the Traverse City, Habitat for Humanity “Depot Solar” project.

- 7.8 KW Solar
- Net metered
- All Electric Homes
- Super-insulation
- Solar included in mortgage - \$35/month
- Net zero energy



Northport Energy

What We Do

Northport Energy assisted with the design and installation of several local residential and agricultural solar systems.

With our assistance, owners are able to enjoy not only state tax incentives and utility rebates, but also, when eligible, REAP grants that drop the installed cost of these systems to as low as \$1.40 per watt.





Northport Energy

What We Do



- Home energy audits
- Education and demonstration
- Low income family programs
- Information on utility rebate programs, tax incentives and available grant programs



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Facts About Solar Energy

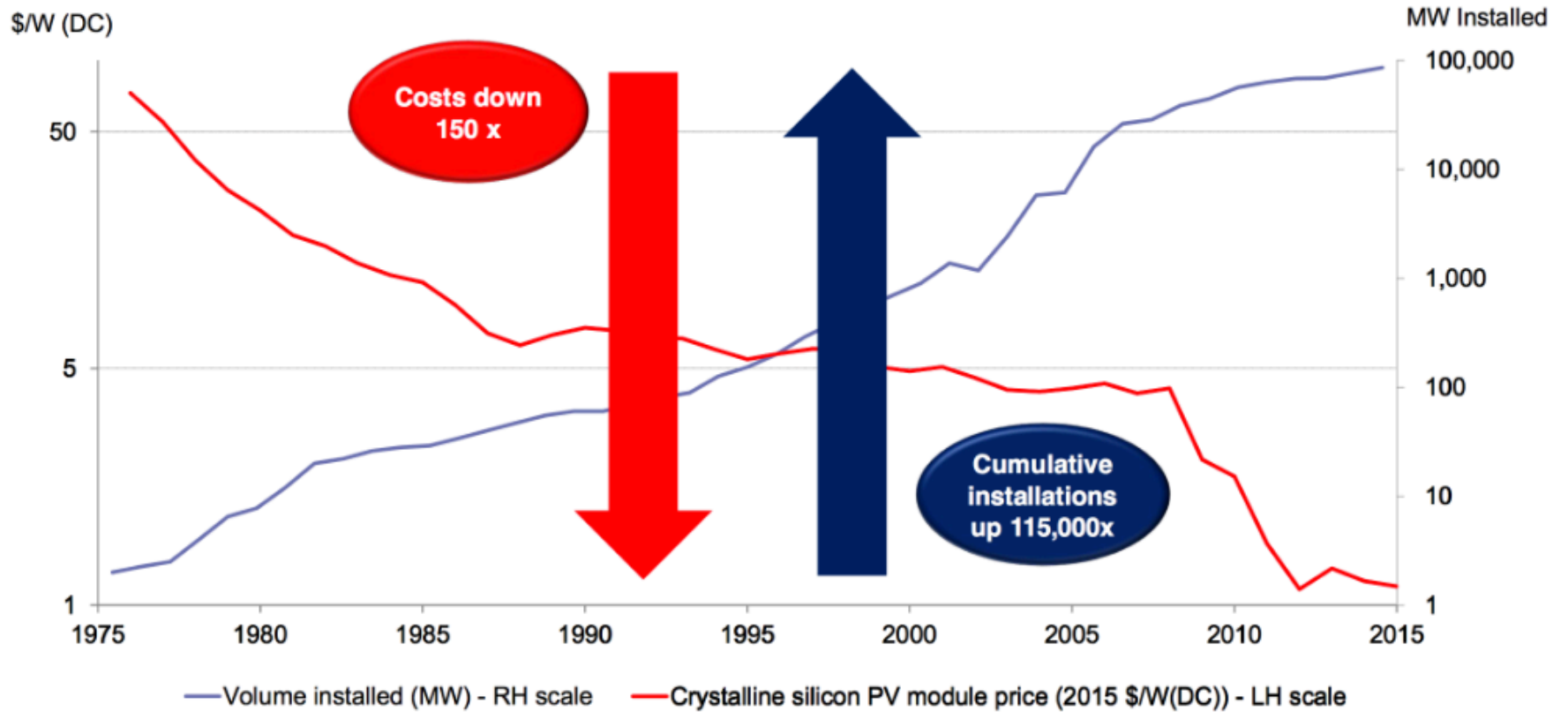
Three Myths About Solar

- There are not enough solar & wind energy resources
- Solar & wind energy cost too much
- The technology is not ready



Northport Energy

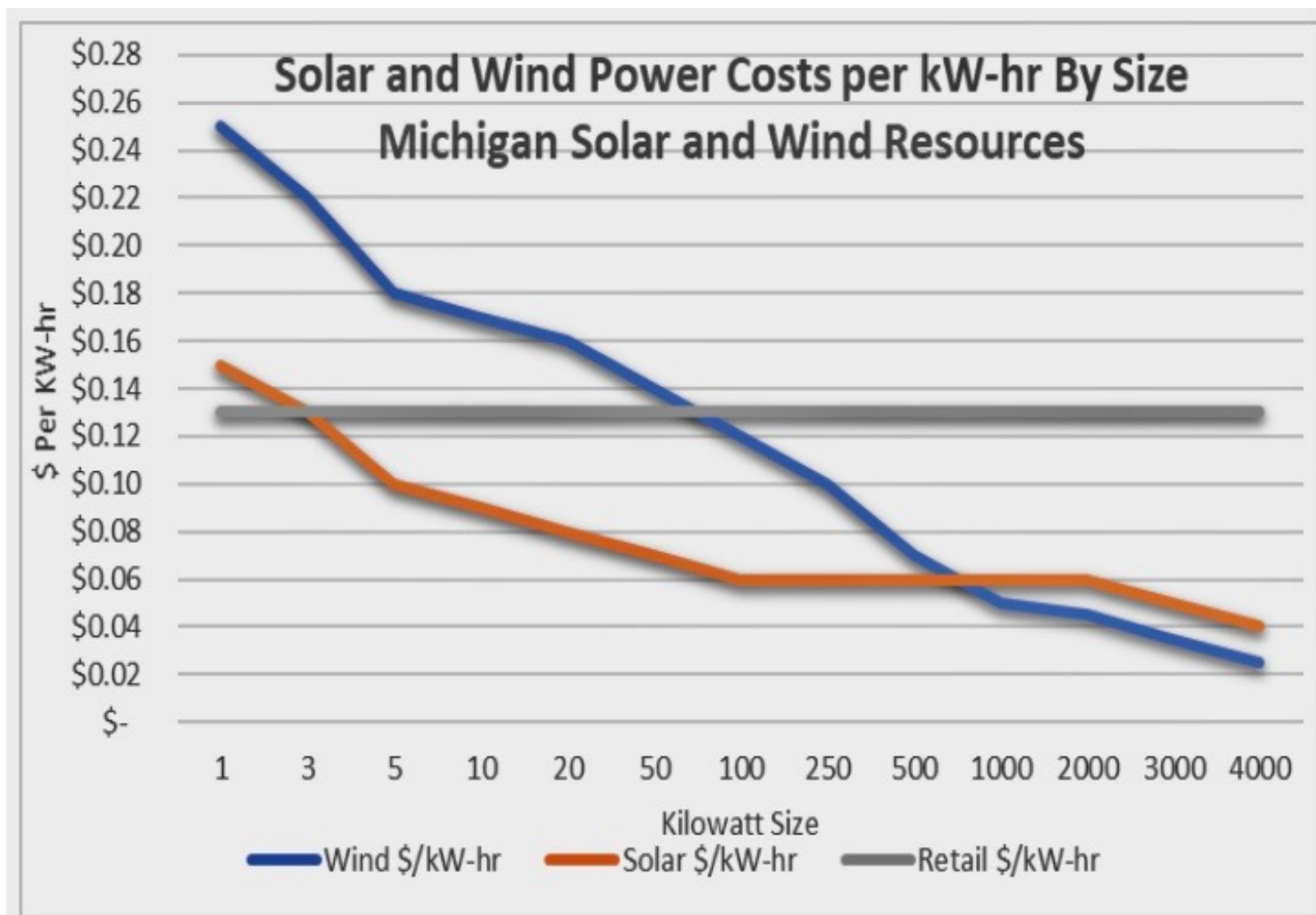
Facts About Solar Energy





Northport Energy

Facts About Solar Energy



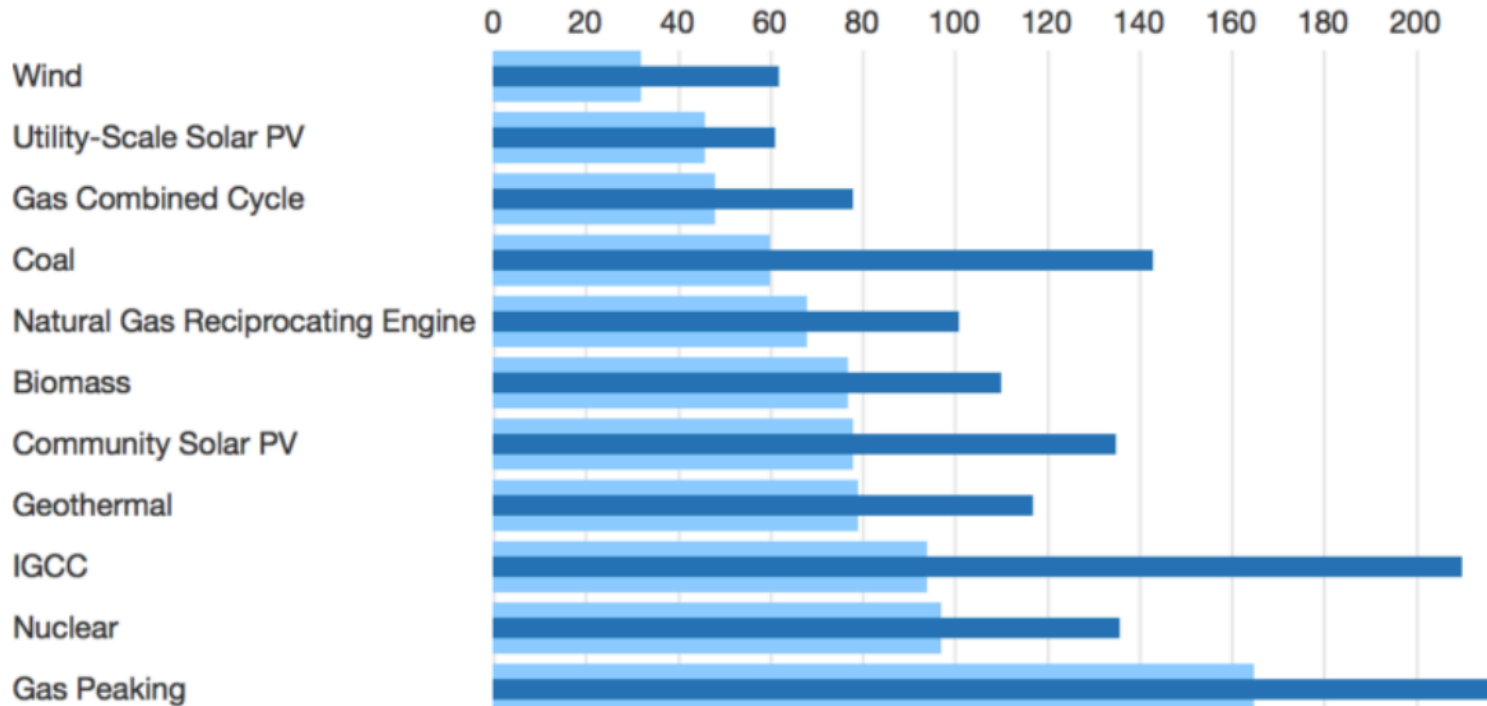


Northport Energy

Facts About Solar Energy

US Unsubsidized Levelized Cost of Energy (Figures by Lazard)

Light blue = low estimate. Dark blue = high estimate.





Northport Energy

Facts About Solar Energy

- Annual solar energy falling on the county: 1 trillion kW-hrs/year (over 10 times the energy generation of the state)
- Capturing a tiny fraction can provide 100% net annual energy supply
- Average home electric use can be covered by 500 sq. ft. of solar panels (8,500 kW-hrs/yr, approximately \$85/month or \$1,000/yr electric bill)
- For Leelanau Township, preliminary estimates are that a 92 acre solar array would generate roughly 100% of net annual electric supply
- A single large wind turbine will generate 2/3 of the Leelanau Township electric consumption



Northport Energy

***If you wish to go fast,
go alone.***

***If you wish to go far,
go together.***

African Proverb

Northport Energy

Community Action for Clean Energy



Thank You