



- Facts and information from Northport Energy -

# Why Solar? Why Now?

## **Solar is now the cheapest and most abundant energy source in the world**

In December 2016, the cost of building and installing new solar electricity generation dropped to \$1.65 per watt, narrowly beating out its renewable counterpart wind (\$1.66/Watt) and all its fossil fuel competitors.

## **Solar is cheap and affordable**

The price of a solar panel in 1975 was approximately 62 times more than it is today – \$101.5/watt versus \$1.65/watt

The lowest wholesale solar price bid from a solar project developer (unsubsidized) is 2.42¢/kWh. That's cheaper than what new natural gas, coal, or nuclear power can provide practically anywhere in the world.

## **The world gets it**

Global solar power capacity grew 100x between 2002 and 2015.

## **The US gets it**

99% of new electricity generation capacity added in the US in Q1 2016 came from renewable energy sources, 64% from solar. US solar energy industry added more jobs in 2015 than all the jobs added by the US oil, gas extraction and pipeline industries combined.

## **Over a million solar systems have been installed in the U.S. alone**

In early 2016, the millionth solar system was installed in the U.S., notching a milestone that took 40 years for the photovoltaic industry to reach. However, the more notable story that came with this achievement is the forecasted timeline for the next million installations, which is expected to happen in the next two years.

## **The breakeven point with solar continues to shorten**

The cost of solar has plummeted while the cost of grid electricity has continued to gradually rise, and the “break-even point” with solar has become more and more attractive. In 2017, most homeowners are seeing payback periods between five and eight years and 20-year savings estimates upwards of \$20,000. Some homeowners are seeing break-even points as low as three to four years in states where utility prices are high like Massachusetts and New York.

## **Solar is available if even your property is not solar friendly**

More and more utilities across the county are offering “community solar” projects where you can purchase solar power in a community owned central array where your portion of production is applied to your electricity bill.

## Why Solar? Why Now? (continued)

### Solar is one of the cleanest, most sustainable energy sources

Coal plants are the largest producers of carbon emissions, which contribute to global warming. Oil hurts the planet too. Each year in America alone, over one million gallons of petroleum spill into waterways, oceans, and groundwater. That's why solar power is so important—it can reduce pollution and harm to the environment.

A household rooftop solar panel system can reduce pollution by 100 tons of CO<sub>2</sub> carbon dioxide in its lifetime—and this includes the energy it took to manufacture the solar panels. Solar panels can improve future air quality for humans as well as the millions of birds, fish, and mammals that are negatively affected by pollution each year.

### You don't have to buy your solar panels outright

Some companies offer programs where you can rent or finance your solar system.

### Solar works in Michigan

While Arizona and California are the sunniest states in America (no wonder they're also leading producers and consumers of solar energy) every square meter of our planet receives around 1,366 watts of direct solar radiation.

Thousands of solar owners in Michigan can testify that solar works here too. With something less than maximal solar radiation, our systems take a little longer to pay off – typically between 7 and 12 years. This still allows more than a decade of pure profit when our system life spans are running 25 years and longer.

And solar investors support Michigan: \$96 million was invested in solar through April of 2017. Statewide solar installations in 2016-17 totaled 35 MW, more than doubling from the past year (15 MW).



### Who is Northport Energy?

Northport Energy was founded in 2008 by local citizens who shared common interests and concerns relating to energy conservation and energy efficiency. Today, we are a diverse group of your friends and neighbors coming together to advocate for renewable energy.

What we do:

- Implement energy conservation and efficiency
- Conceive and advocate for community green projects
- Inform and educate individuals, households and communities
- Perform energy efficiency consultation and home energy audits

[www.NorthportEnergy.org](http://www.NorthportEnergy.org)