



midwest renewable energy association

The Power Pack:

Developing Solar Customers in New Markets

Presentation by Nick Hylla

3/7/14 at Solar Powering Minnesota Conference

MREA Overview



- RE Education and Demonstration
- 25th Annual Energy Fair (June 20-22)
- Net Zero Campus (I think)
- Accredited Certificate Training
- Midwest Solar Training Network
- Grow Solar Partnership
- Solar Powering Illinois (April 8)
- Offices in Custer and Milwaukee, WI



Midwest Market Characteristics

- 3% of national installed capacity
- Of that, only 2% is residential
- Fastest growing market (%) in the US
- Relatively low utility rates but often good 'time of use' rates
- Diverse utility and policy landscape
- Dominated by rural and 'rural hub' communities
- Strong, traditional social networks
- Diverse small business landscape
- Low understanding of the practical applications of solar in residential and commercial space



Undeveloped Market: The PV Customer

Actual

- Has heard of solar
- Generally thinks it's a good idea (if a bit expensive)
- Misunderstands potential
- Confused by design/install process
- Does not have information about finance options

Desired

- Has realistic goals for solar for their home/business
- Maintains a healthy skepticism but trusts the technology
- Manages information about finance options
- Weighs options with multiple contractors



Undeveloped Market: The PV Contractor

Actual

- Costly customer acquisition
- Incentives are fundamental to business model
- Often chasing new business opportunities
- Caught in severe cycle of price competition
- Frustrated with margins, complexities, uncertainties

Desired

- Simple, transparent business model
- Protected from incentive uncertainty
- Knows the customer
- Manages data to understand market
- Collaborates with local industry stakeholders



The Power Pack



Power Pack Partners

- Local Contractors
- Community Partners
- Supply Chain Partners
- Local Lenders
- Community Colleges
- Outreach Partners



What Is The Power Pack?

- The Power Pack is a community education program designed to generate leads and facilitate customer qualification for competitive bidding by a pre-qualified group of local contractors.
- The Power Pack is a market development effort targeting specific communities in the Midwest to help move markets, support local contractors, and replicate successes regionally.
- *Power Pack Minnesota* is a partnership between the *Midwest Renewable Energy Association (MREA)* and *Hibbing Community College* targeting communities in *Minnesota Power* territory, including adjacent municipal and cooperative utilities. It is made possible with support from the *Minnesota Clean Energy Resource Teams (CERTS)* and the *National Science Foundation*.


What Are Power Hours?

- *MREA* educates customers at free, 1 hour, workshops called *Power Hours*. Participants learn about the about the benefits, the economics and financing options for solar PV systems.
- *Power Hours* ensure there are experts available to help guide participants through the process of installing solar.

How Does It Work?

- The Power Pack provides lower cost solar installation for customers, more leads and jobs for installers, more business for local companies and free site assessment in partnership with a local community college.
- The Power Pack ensures that installers are trained, experienced, professionally licensed, fully insured, and offer labor warranties for their work.
- The Power Pack showcases local contractors, customers, lenders, and local success stories to build community support and inspire others.

Power Pack Providers

- MN Licensed Electrical Contractor
 - MN office and primary service territory
 - Training Standard:
 - NABCEP, UL, or graduate of DOL apprentice/accredited training with 2 documented installations
 - 5-year labor warranty
 - 3 customer references
 - Cost competitive
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The Power Hour

- Delivered by MREA
- Hosted by community partner
- Free and open to public
- Providers requested to attend
- Content includes:
 - PV market trends and system basics
 - Performance expectations and cases
 - Basic system economics and finance
 - General system siting requirements
 - Navigating the design/install process
 - Take-home resources



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Workforce Training



Site Assessment Certificate Program

brought to you by the



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Power Pack Objectives

- Increase local solar literacy
 - Generate and qualify customers
 - Support local contractors
 - Encourage competition
 - Maintain standards
 - Build community support
 - Develop the local workforce
 - Facilitate model projects
 - Replicate success
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Power Pack Providers

- Request for Proposals from Interested MN Contractors due **April 18th**.
- Visit MREA booth or www.growsolar.org



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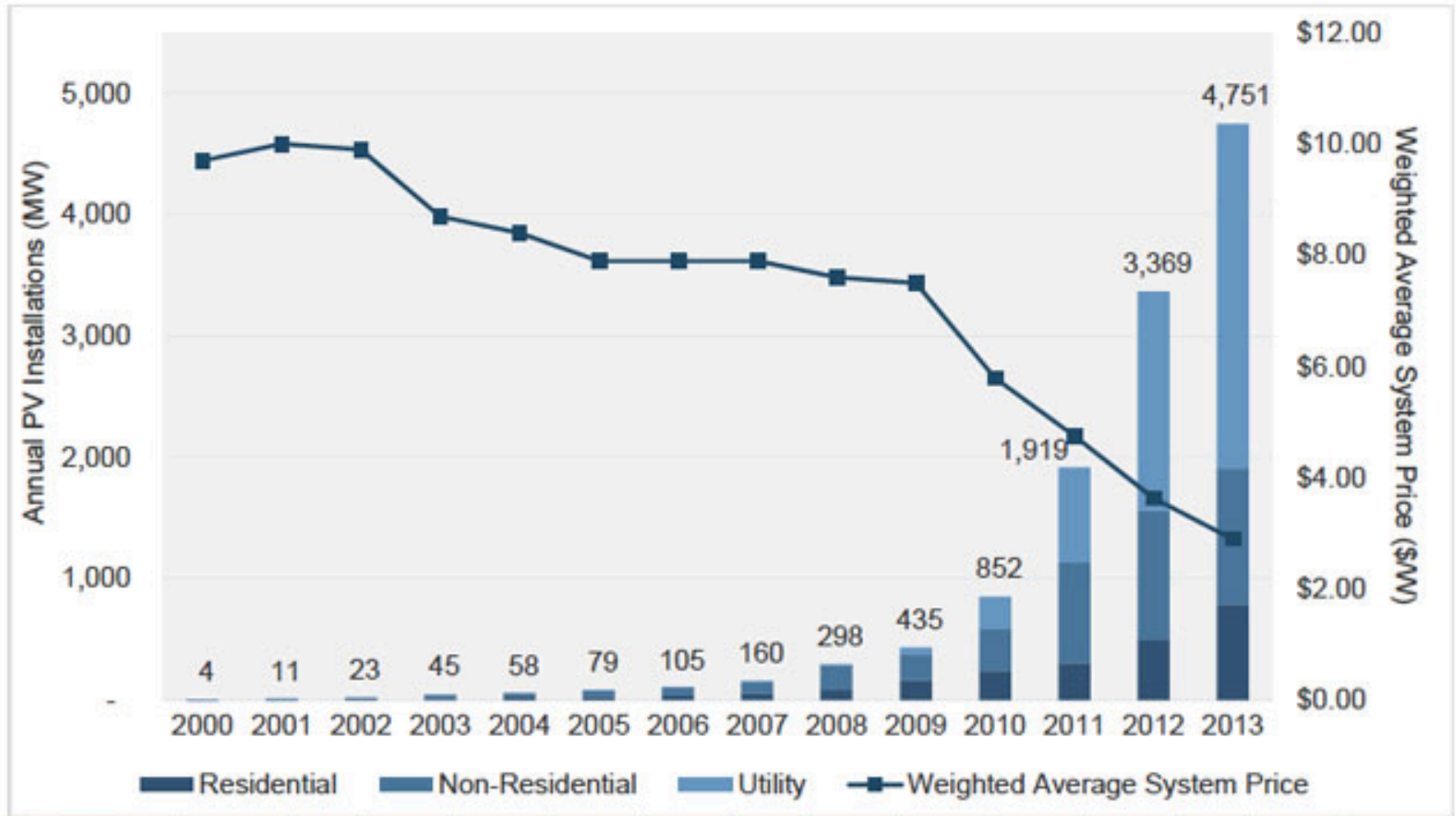
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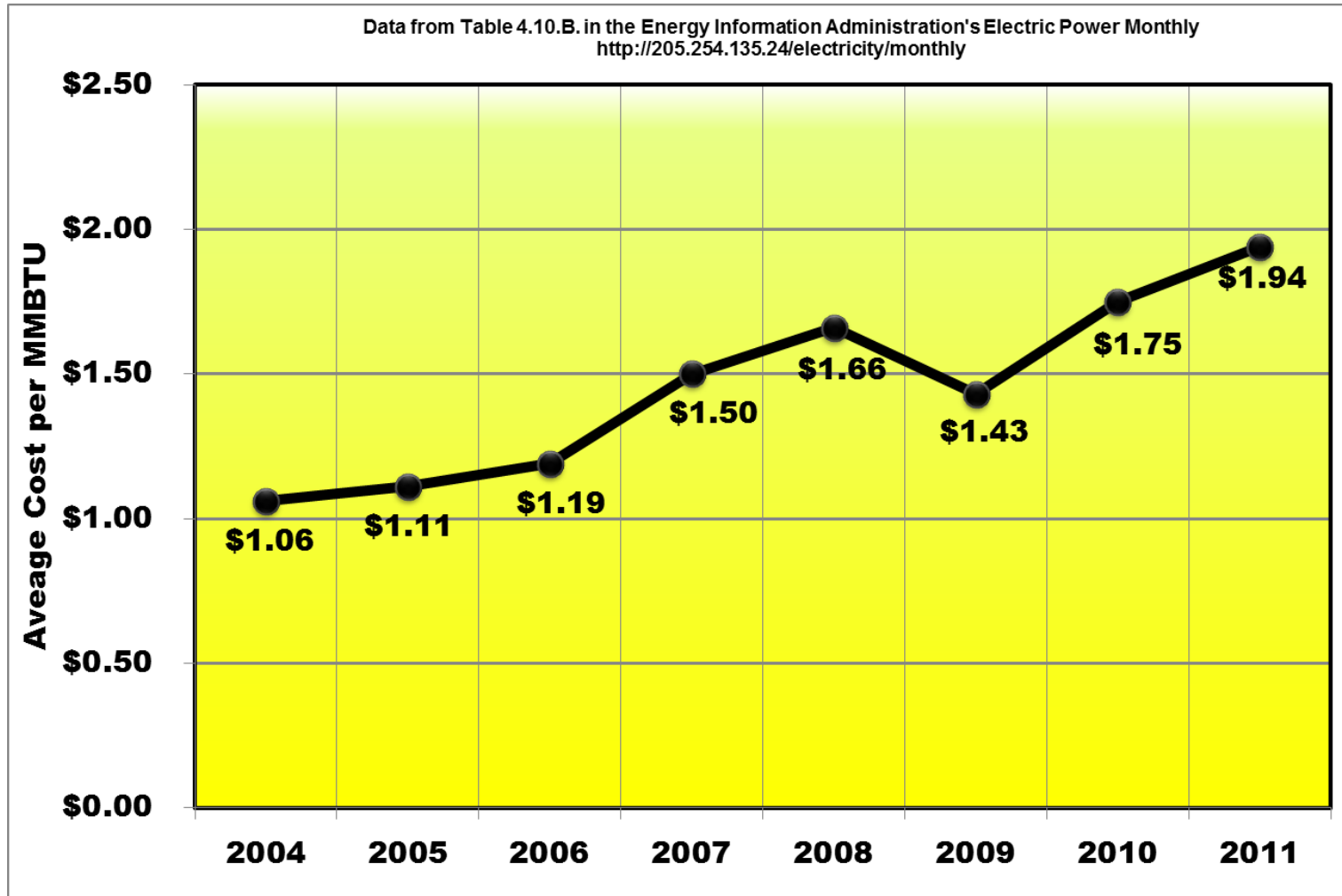
Why now?

Figure 2.1 U.S. PV Installations and Average System Price, 2000-2013



Sources: Solar Energy Industries Association. 2014. US Solar Market Insight: 2013 Year in Review

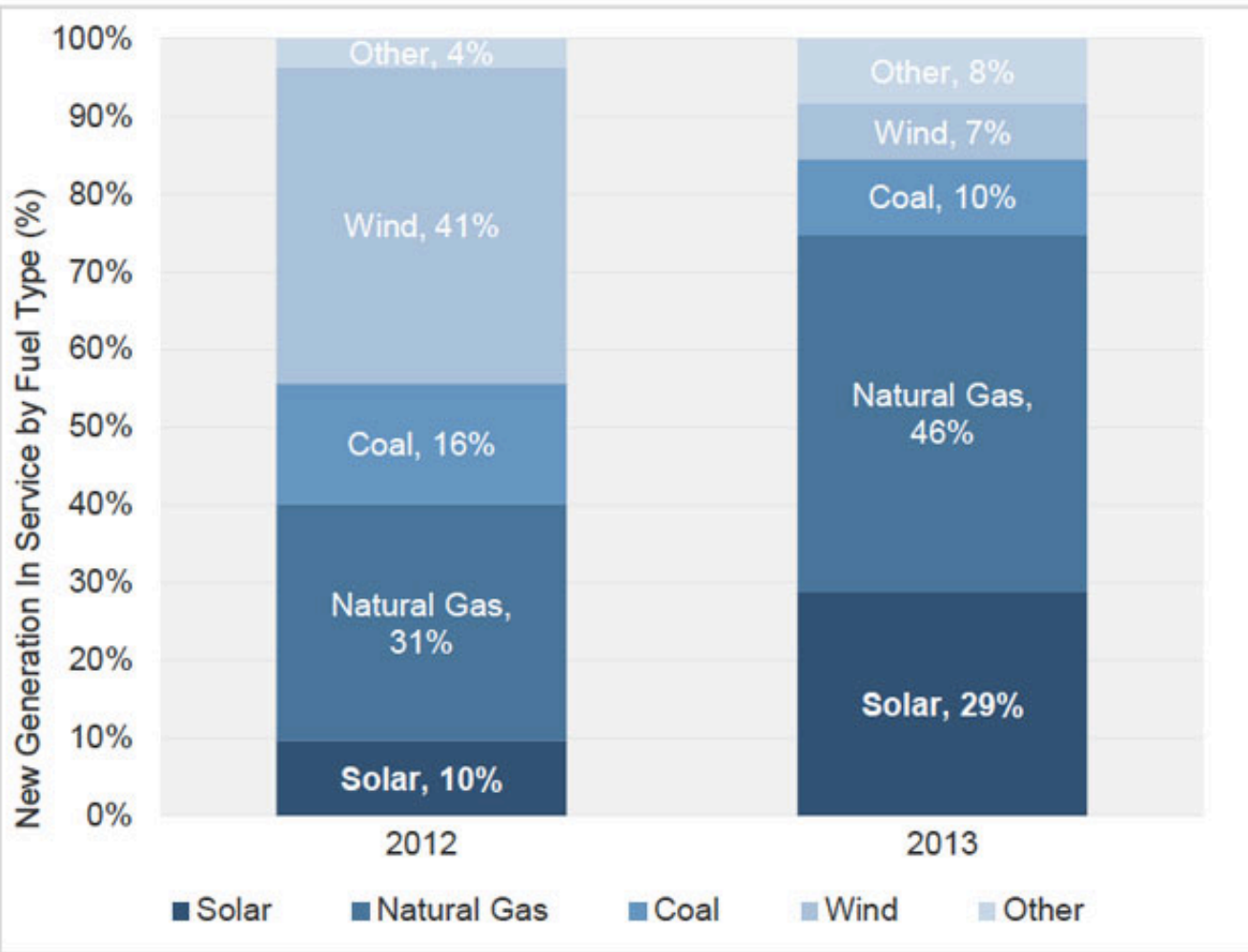
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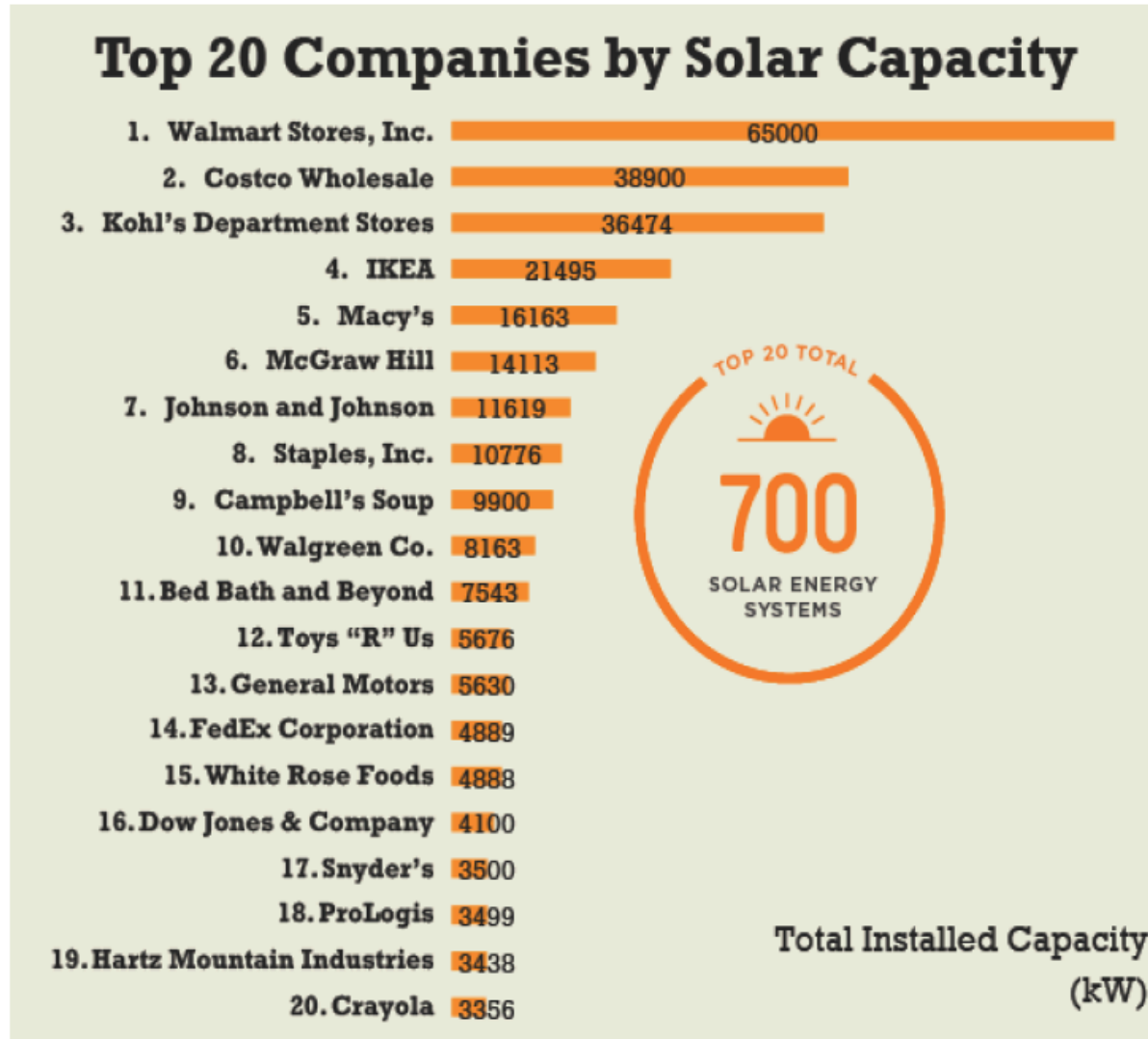
Sources: EIA Electric Power Monthly, Table 4.10B

Why now?

Figure 1.1 New U.S. Electricity Generation Capacity, 2012 vs. 2013



Why now?

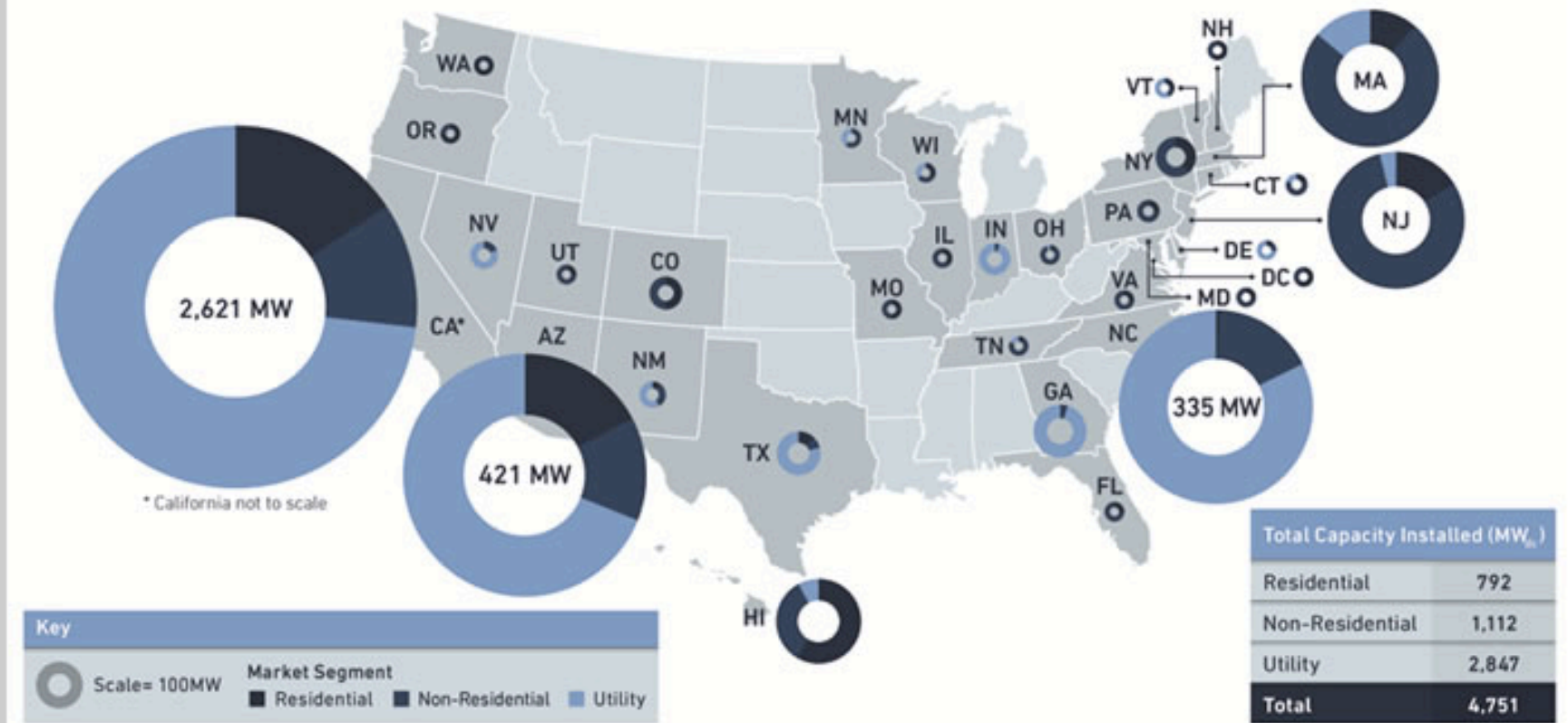


Sources: Solar Energy Industries Association. 2013. Solar Means Business.

Why now?

Figure 2.2 2013 U.S. PV Installation Map

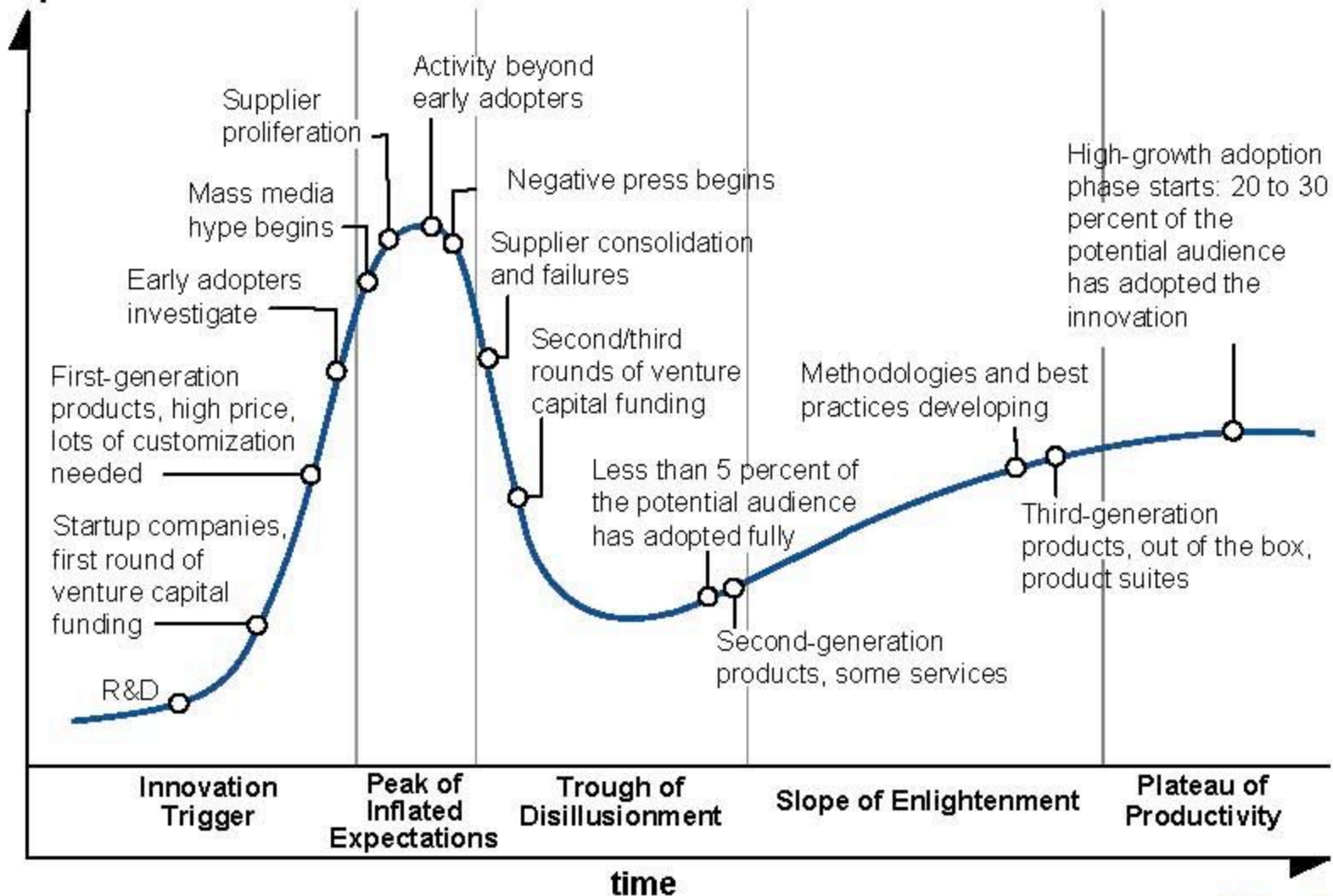
U.S. Solar Installations by State and Market Segment, 2013



Note: Complete dataset available in Full Report

Hype Cycle Indicators

expectations



Why Minnesota?

1. Dominated by a community-centered rural geography
2. Local manufacturing and solid support systems
3. PV currently an un-matched investment opportunity
4. Strong potential to positively influence neighboring states



The Long Game

- Build local market symmetry
- Grow community leadership density
- Prepare for a local energy future



Midwest Renewable Energy Association

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