

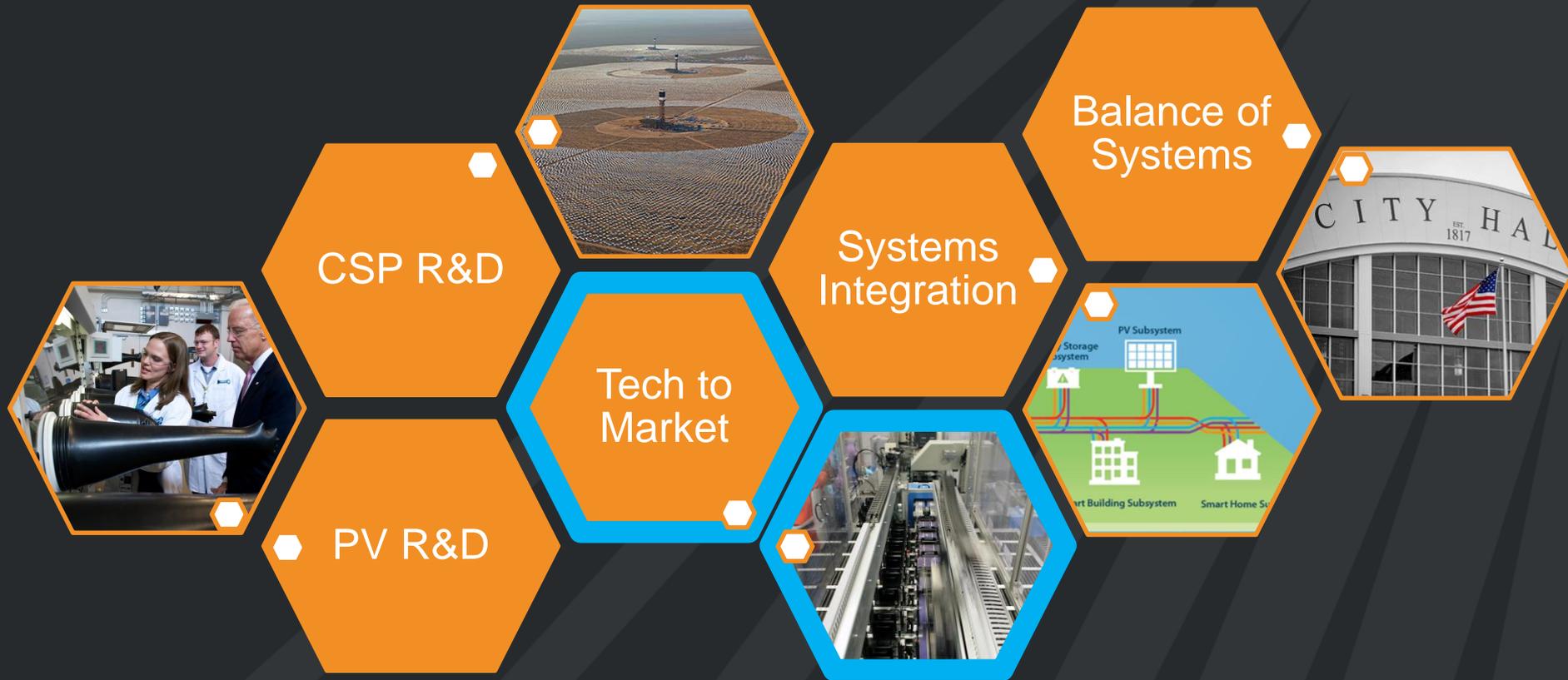


Technology to Market Programs

Lidija Sekaric

SunShot Grand Challenge Summit

The SunShot Portfolio



Tech to Market Portfolio



Commercialization
and business
innovation

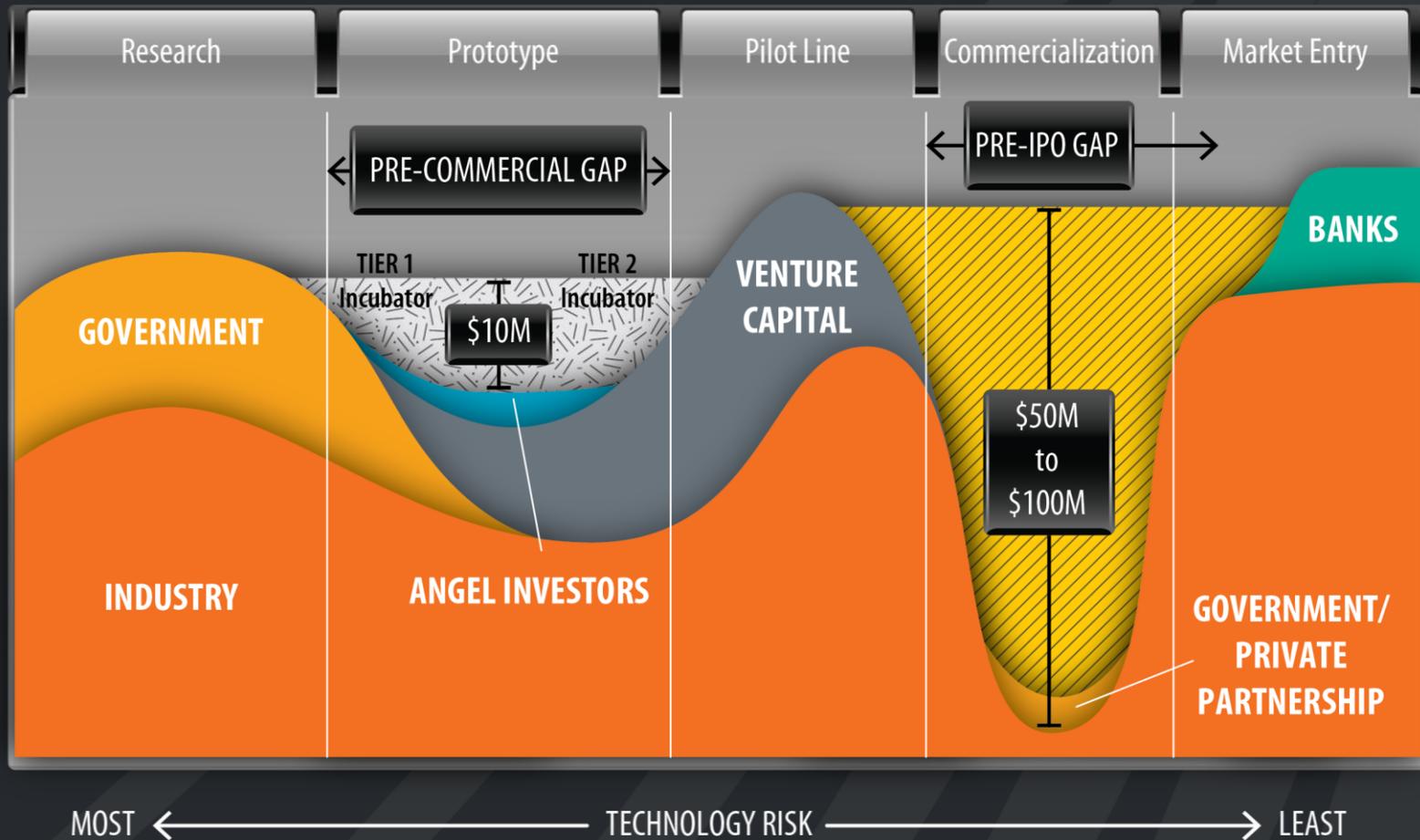


Strategic analysis:
- Cost
- Competitiveness
- Market

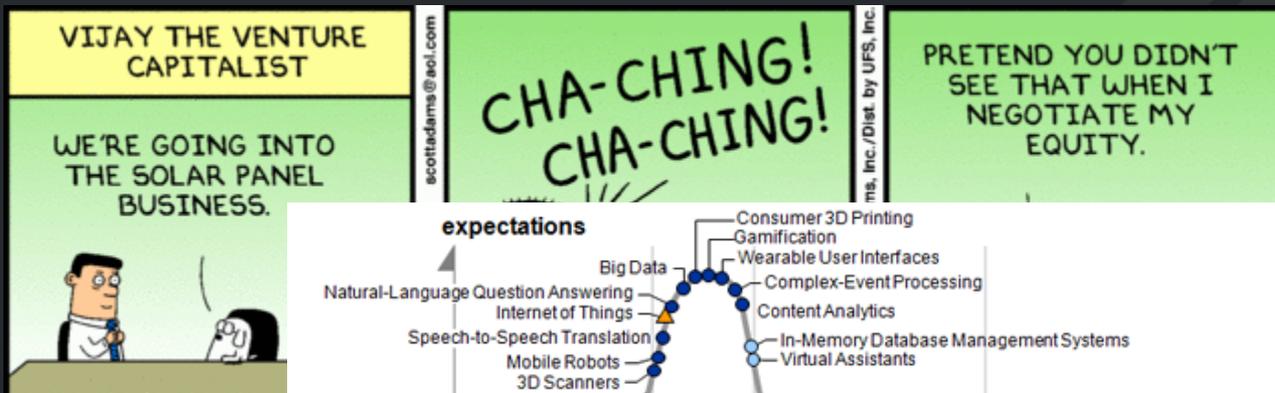
Manufacturing
innovation and
scale-up



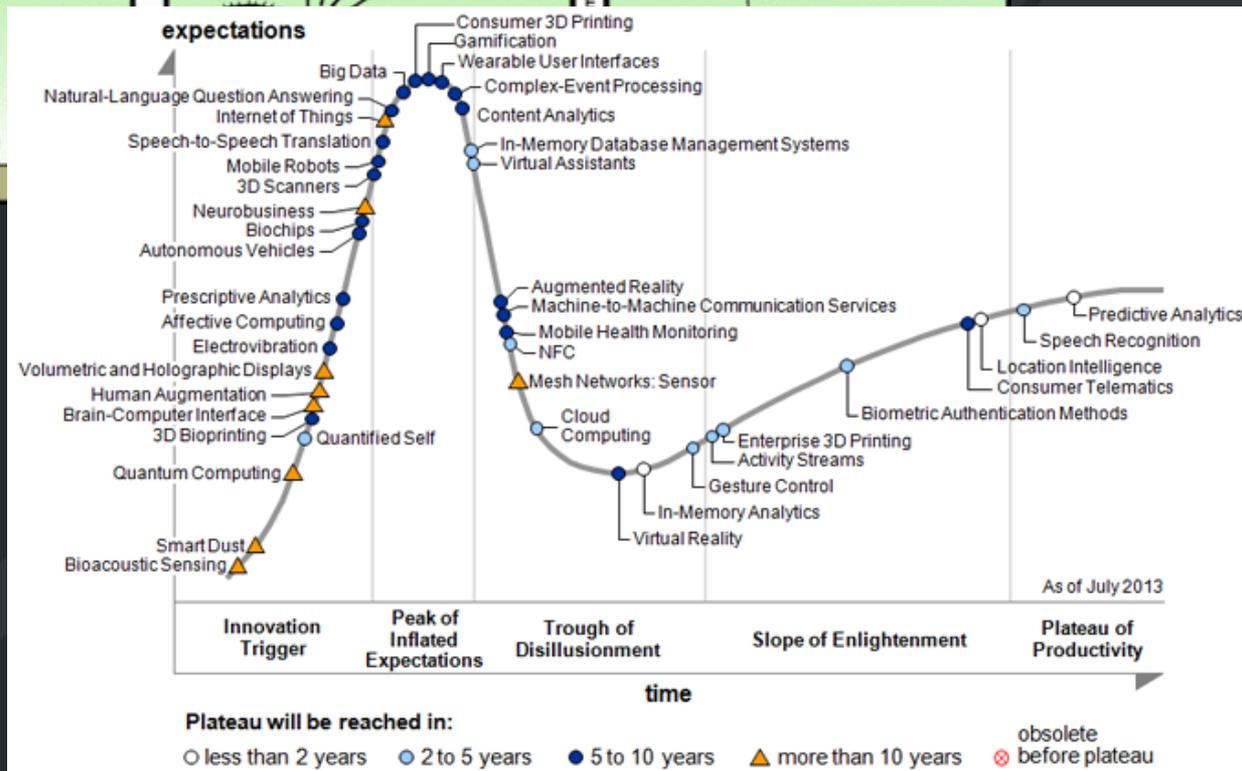
Bridging the gaps



Solar Technology Expectations Before 2008



Gartner Hype Cycle



Tech-to-Market FOAs by focus area

Technology Readiness Level

1 ← → 9



Commercialization

SBIR/STTR, \$9.2M FY12-14

Incubator 1-7, \$92M, FY07-12

Incubator 8, \$14M, FY13

**Technology-agnostic,
market-focused**

Manufacturing

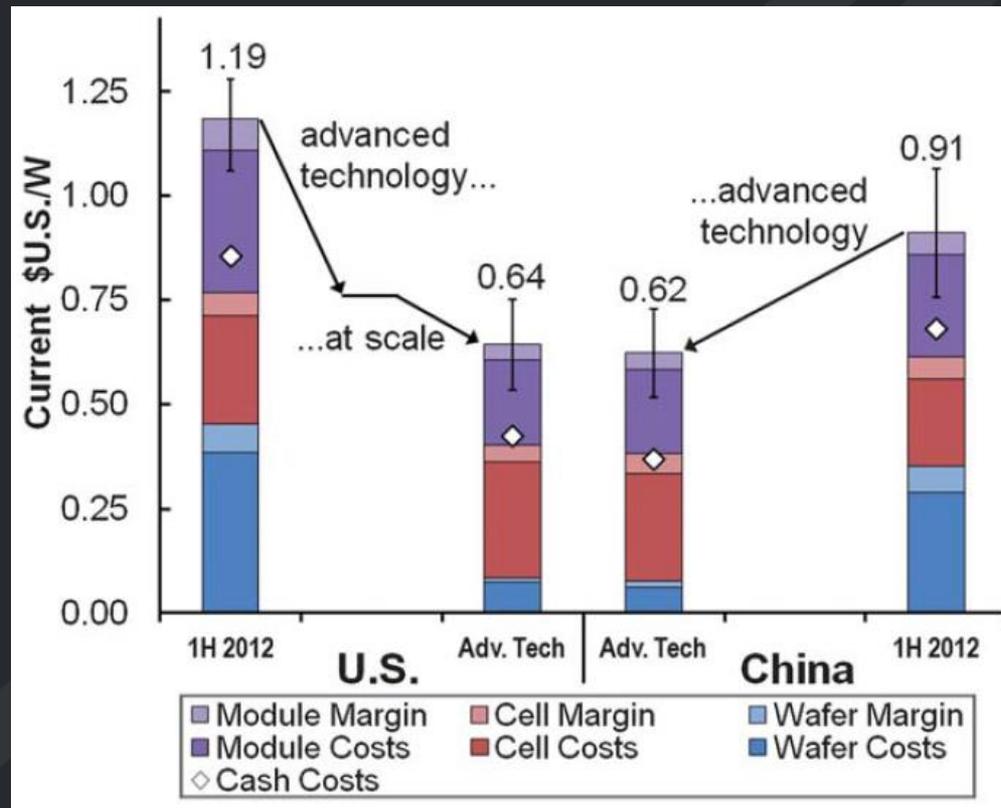
SolarMat 1, \$15M, FY13

SolarMat 2, \$25M, FY14

Market Analysis

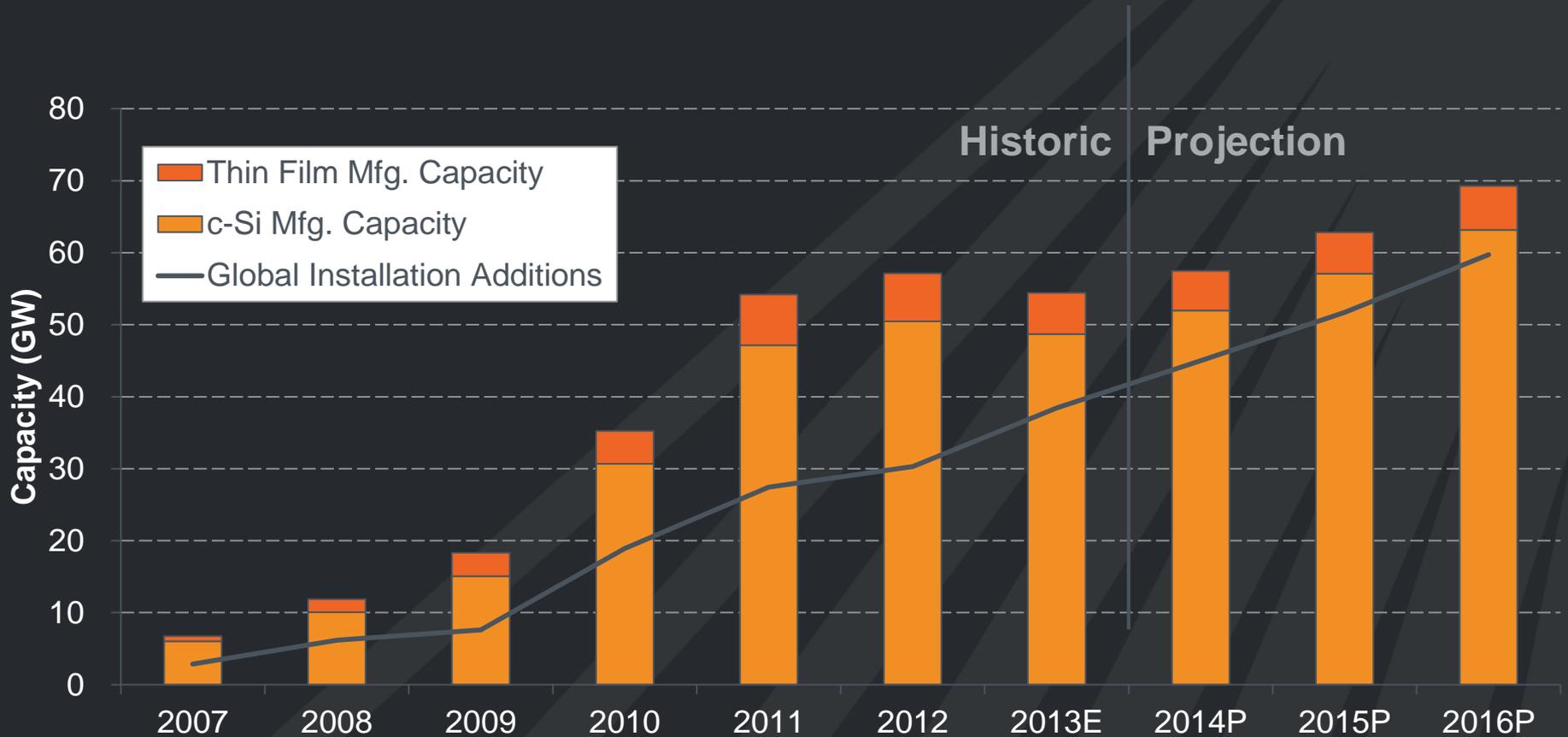
NREL LPDP Agreement, \$3M, FY13-16

Innovation + Scale



Goodrich et. al., "Assessing the drivers of regional trends in solar photovoltaic manufacturing," Energy Environ. Sci.

Global PV Manufacturing Capacity vs. Demand



Manufacturing



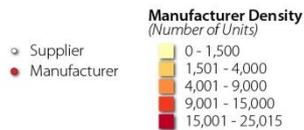
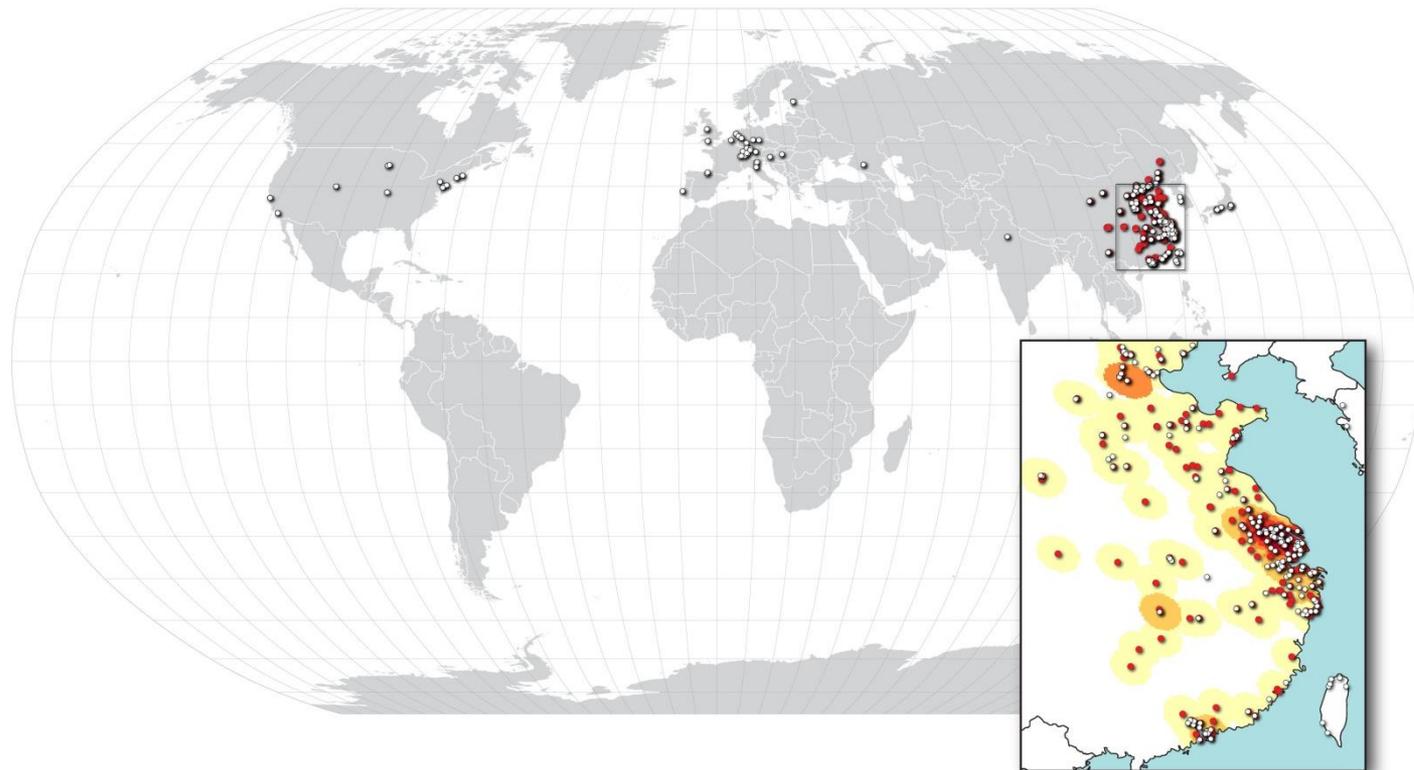
“Abandoning today's ‘commodity’ manufacturing can lock you out of tomorrow's emerging industry.”

- Andy Grove, co-founder, former CEO, Intel



Supply Chain

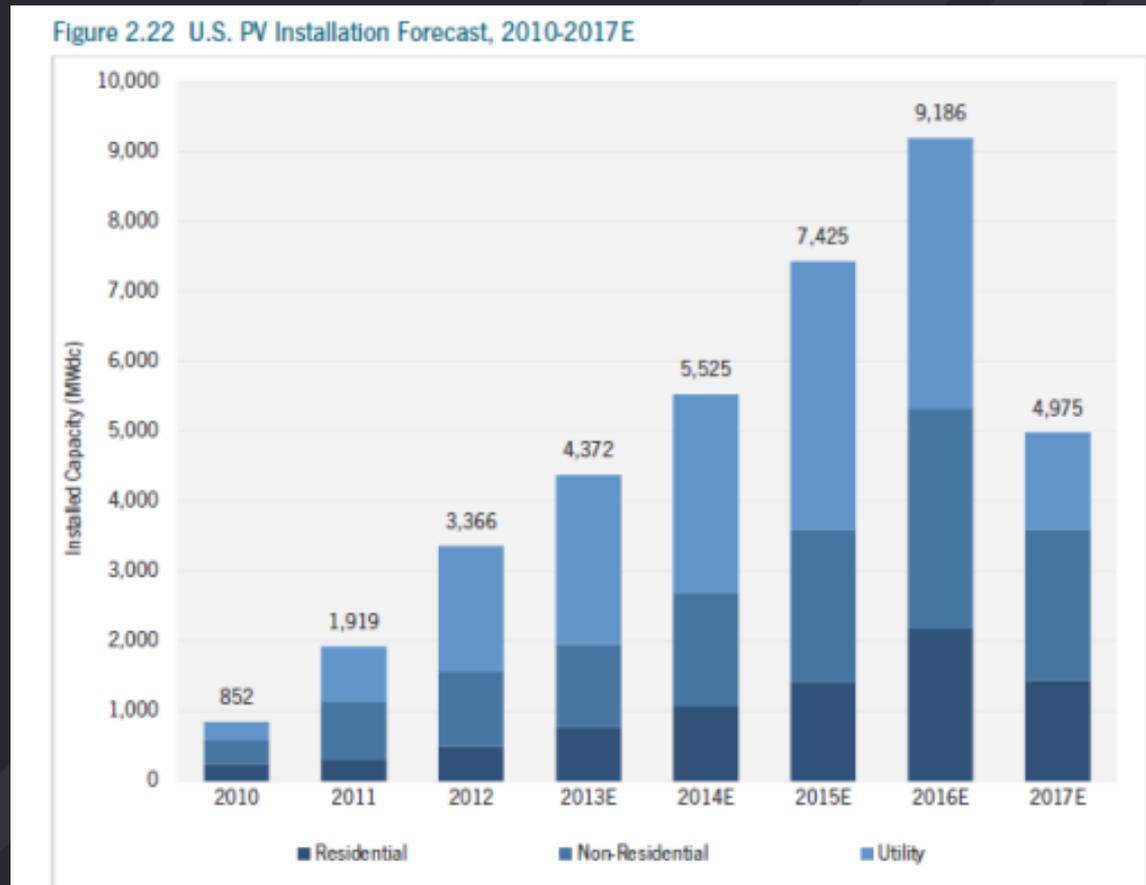
Photovoltaic Component Manufacturers of China and Global Suppliers



This map was produced by the
National Renewable Energy Laboratory
for the US Department of Energy.
Billy J. Roberts | September 30, 2013

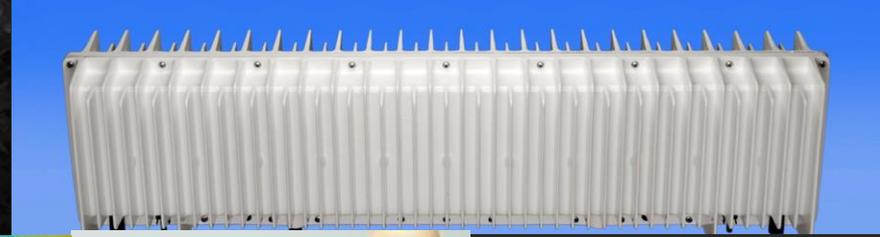
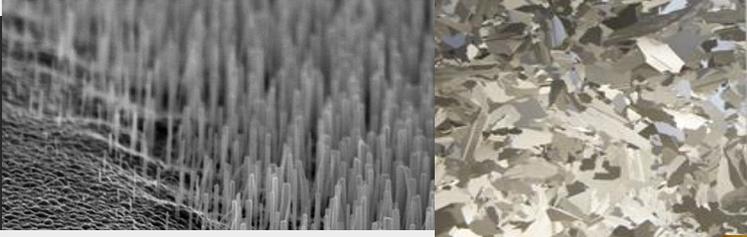
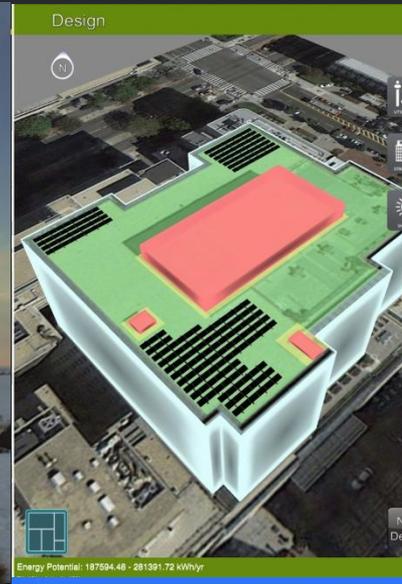
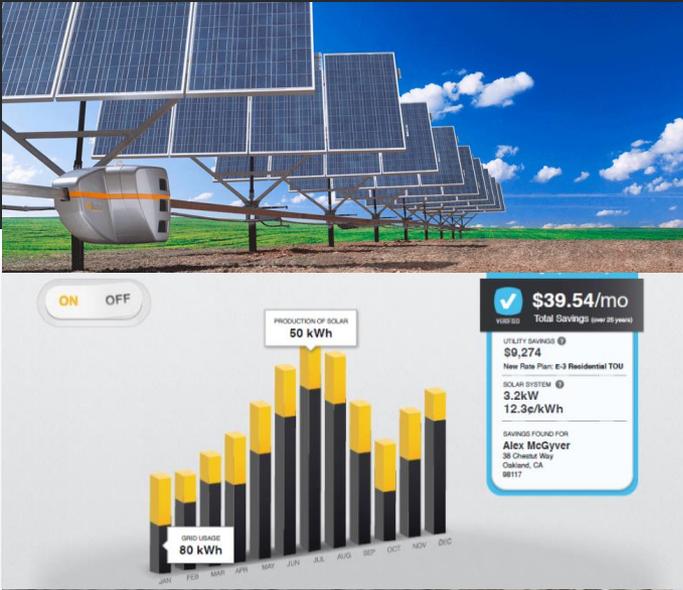


Solar, Post-2016 Projections (GTM/SEIA)



Landscape for solar deployment post-2016 will highly depend on how far costs have decreased by 2016.

Commercialization and Business Innovation



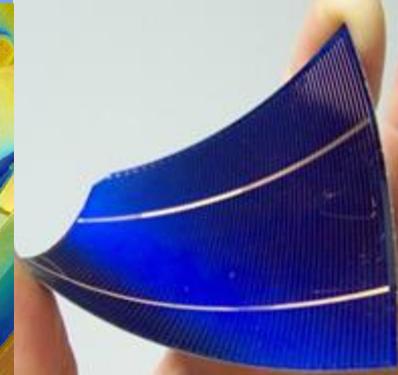
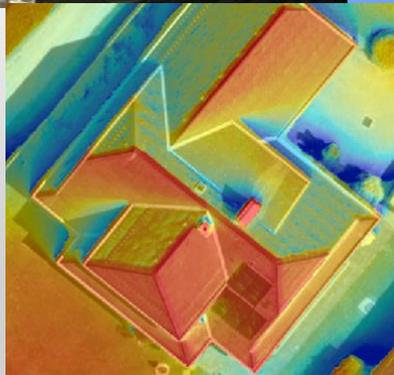
Permit Status

60%
complete

Steps For Approval

- Complete Permit Application
- Submit Required Documents
- Review By Building Department
- Verify Contractor Information
- Pay Permit Fees

60%



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innovation



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