

# Minnesota Job Creation through Solar Energy



**SILICON ENERGY**  
**FEBRUARY 2013**

# Advanced Durability



# Silicon Energy



- **Established in 2007**
  - Mt. Iron, Minnesota manufacturing plant certified in Sept., 2011
  - First plant near Seattle, Washington
- **Mission: Commitment to Quality**
  - Manufacture world-class solar PV systems that advance durability, longevity, safety, aesthetics
- **Company Philosophy**
  - Support Local Economy, from purchasing to investment partnerships
  - Sustainable by Design, from material selection to manufacturing practices



# Solar Incentives and Jobs



- Every traditional energy source was driven by incentives. Solar is following the same path.
- Investment in solar means jobs, global business opportunities, and energy supply diversity.
- Solar has produced more jobs/MWh than any other energy industry.\*
- Local manufacturing doubles the number of local jobs.
- Local manufacturing should be incentivized 2-3 times the value of solar to promote local economic development.\*\*
- Large/Utility Scale = Fewer Jobs. Negates the benefits of solar as a distributed generation resource.

• “Assessment of Incentives and Employment Impacts of Solar Industry Deployment”, University of Tennessee Howard Baker Jr. Center for Public Policy May 2012

\*\*Karl Rabago – Austin Energy, Texas Utilities 2013

# Silicon Energy MN Timeline



Year	Milestone
2010	Minnesota Legislature passes Made in MN Solar Incentive
2010	As a result, Silicon Energy starts its plant construction in Minnesota
2010	Xcel begins allocating “made in MN” bonus
9/2011	SiE manufacturing plant begins initial production of Solar PV
2012	Xcel allocates fy 11, 12, and 13 made in MN - then stops processing made in MN applications due to administration of Solar*Rewards program
2012	To date, Silicon Energy projects allocated only 9% of total “made in MN” incentive allocations.

# The Future



- The Made in Minnesota Solar program needs to be reauthorized.
- Our experience in Minnesota recommends:
  - A statewide program.
  - Administered by the Department of Energy Resources.
  - Emphasis on incentives to residential customers (91% of previous Made in MN incentives went to commercial).
  - Performance Based Incentive, stable, long-term program.
  - Simplified and transparent administration.
  - Incentives used for Minnesota manufacturing, not large utility scale projects with foreign made solar.
  - Work with utilities, municipals, and cooperatives to design a program that benefits all stakeholders.



# SiE Cascade Series Examples





# Innovation and Performance



# Local Manufacturing Impact



- NAICS\* input-output Econometric Model
  - ✦ \$1 million solar installations
  - ✦ 13.5 direct jobs (half in installation)
  - ✦ 24.5 additional indirect jobs
  - ✦ Total Output: \$4.25 million
  - ✦ Labor Income: \$1.21 million

\* North American Industries Classification System for Green jobs

# Minnesota Solar Jobs



- Long Term Stability in the Incentive Program
- Promote Innovation – sales outside of MN
- Volume drives manufacturing and installation efficiency
- Promote leveraging of federal subsidies for solar
- Transparent reporting and status of incentive programs
- Incentives should focus on residential and small commercial systems to maximize economic development, MN jobs and tax revenues