



Growing Solar – and Solar Jobs – in Minnesota

November 19, 2008 – The solar industry is poised to continue its stunning growth, nationally and internationally, at rates exceeding 40% per year. It will expand by several multiples in the next decade. A temporary window of opportunity exists for Minnesota to take a national leadership position in both the manufacturing and installation of solar technologies – and in associated industry and commerce.

An analysis by the American Solar Energy Society of state programs and their effectiveness in producing a solar market – and creating jobs – lists these three keys to success:

- **Creation of a robust solar incentive program.** Transitioning to a performance-based incentive program based on market forces to attain energy goals will reward high quality installations and encourage private investment.
- **Establishment and promotion of a suite of incentives for businesses.** In order to compete with other states nationwide, an attractive economic development package for renewable energy manufacturers, including solar, should be available to businesses.
- **Political leadership.** State government solar champions can include either legislators or governors – or both.

The Renewable Energy (RE) and Energy Efficiency (EE) industries are growing rapidly; solar is leading the way, growing faster than all other energy sectors – and it has the potential to become the largest.

Evidence of the growth and opportunity includes:

- The global solar industry's revenue has grown by 40% per year since 2000.
- Minnesota's solar related industries are growing rapidly, some at 40% per year or more, and several new solar businesses have emerged statewide in 2008.
- Solar rebate applications in Minnesota have outpaced the Minnesota Solar Electric Rebate Program, reserving all funds in the first 3 months of Fiscal Year 2009.
- The U.S. Department of Energy forecasts that solar photovoltaic power will reach grid parity with conventional electricity by 2015; industry analysts and many solar manufacturers predict this may happen sooner, depending on incentives for solar.
- Minnesota's solar resource is superior to Germany's, which has one fourth the U.S. population but more RE jobs, and as the world leader in solar industries, Germany now has more solar jobs than the German auto industry. The success of the German solar industry is largely due to government leadership and incentives.

“As a Minnesota manufacturer of solar thermal collectors sold nationwide, we've seen some solar markets take off, while others have yet to get off the ground. States that wisely complement federal incentives set themselves up for explosive growth.”

– Randy Hagen, Co-Owner, Solar Skies Manufacturing

While Minnesota is a recognized leader in renewable energy development, it is behind other states in the competition to attract solar jobs. Elsewhere:

- In the past 6 months, 27 new solar manufacturing plants or expansions have been announced in 14 states, expected to result in 11,000 jobs to start.
- Many states have solar incentives superior to Minnesota's, resulting in the accelerated adoption of solar technologies, including solar electric and solar thermal. Currently, many of Minnesota's solar industry manufacturers maintain that most of their business activity is out of state in markets that have stronger solar policies.

Successful strategies to grow solar elsewhere have included:

- A feed-in tariff, also known as a distributed advanced renewable tariff or standard offer program (47 countries including Germany, Spain, Australia; Ontario; California. Several Midwest states are considering as well.)
- A solar carveout within an RES/RPS; can include solar thermal (OH, CO, MO + 12 other states and DC)
- An income tax credit (14 states)
- A net metering limit of at least 1 megawatt (17 states + DC)

Business incentives include:

- Property tax relief
- Tax increment financing
- Attractive leases
- Relocation assistance
- Corporate tax incentives

“Minnesota's energy challenges are not going away; this is an exciting time of endless possibilities, but we need to invest now if we want to be a player.”

– Tracy Anderson, Director, 3M Renewable Energy Division

Colorado, an Example of Solar Success in Progress:

Lawmakers have created a sunny business environment for RE businesses to locate in Colorado. It doubled the RES to 20% by 2015 with the electorate voting in favor of a 4% solar set-aside. The state recently adopted a 2 megawatt net metering law for its investor owned utilities.

Results: 500 jobs at AVA Solar; 300 workers at Ascent Solar Technologies; the SolarTAC 74-acre headquarters on the new 1,762 acres Campus for Renewable Energy; 2500 new jobs at Vestas; and Conoco-Phillips plans 7,000 new jobs in its international learning and alternative energy/advanced research center.

With the right policies, Minnesota – like Colorado – can expand its current solar industry and attract additional high quality sustainable-jobs to the state. In doing so, Minnesota will facilitate the mainstream adoption of solar and tackle two of the state's most pressing goals: addressing climate change, and creating high skilled, high quality jobs.

The window available for taking a leadership role is brief. Under the new administration in Washington, activity in every segment of the RE and EE industries can be expected to ramp up extraordinarily quickly – in every corner of the nation. The time for Minnesota to act is **now**.

The Minnesota Renewable Energy Society (MRES) is a member-run, 501(c)3 non-profit organization founded in Minneapolis in 1978 to promote the use of, and advocacy for, renewable energies in Minnesota – through education and demonstration of practical applications, with a particular emphasis on solar energy technologies. For more information, go to: www.mnRenewables.org