

# International Solar Energy Survey Reveals Consumer Optimism and Misperceptions #solsticeapplied

# June 18, 2012

- 4th annual survey expanded to include consumers in U.S., China, India and Japan
- · Nearly half of respondents understand that solar market growth will create jobs
- Respondents in China and India support more aggressive solar energy adoption than current national goals
- Cost of panels drops below \$1 per watt and grid parity seen by the end of the year

SANTA CLARA, Calif., June 18, 2012 - In celebration of the summer solstice on June 20, the day the sun shines for the longest period of time all year in the northern hemisphere, Applied Materials, Inc. today announced the results of its fourth annual solar energy survey, which measures consumers' understanding and awareness of this renewable energy source.

Applied Materials, the market leader in solar photovoltaic (PV) manufacturing equipment, conducted the 2012 survey among consumers in four countries in the northern hemisphere with high growth potential for solar power - China, India, Japan and the United States. The survey found consumers in these markets are optimistic about the future of solar power. At the same time, many had a mixed understanding of the current cost and adoption rates of solar technology, highlighting what is arguably the greatest challenge to solar energy use - lack of consumer awareness.

Applied Materials conducts the annual summer solstice survey each year as part of its commitment to help drive down the total cost per watt of solar technology and ultimately make solar a more meaningful contributor to the global energy mix.

"Solar power makes sense for our planet and for our children, and we need to recognize that the solution to our energy needs is already in our hands," said Dr. Charlie Gay, president of Applied Materials' Solar division. "By 2050 the world population is expected to plateau at nine billion people, and by that time it will be imperative we have a sustainable energy source in place that has the potential to solve our energy challenges for perpetuity. Since the planning horizon for utilities extends over time periods of 30 to 40 years, the opportunity to influence the world's long-term energy supply is now."

# **Consumers' Estimates of Solar Power Costs**

Last year at this time, industry data suggested that by 2020, 98 percent of the world's population would have achieved grid parity, or solar energy power that is cost-competitive with traditional energy prices, but data now suggests this milestone will be achieved by the end of 2012. Fifty-five percent of all respondents recognize this shift and believe solar energy is less expensive than traditional energy sources, such as coal. Respondents in India were most likely (68%) to believe solar power was less expensive. Conversely, respondents in Japan were most likely (51%) to believe solar power was more expensive compared to traditional energy sources. Of the 35 percent of international consumers who believe solar power to be more expensive, 39 percent believe it will become equal to or less expensive than traditional power within nine years.

"Solar panels now cost less than \$1 per watt, which means more than 100 countries have achieved grid parity," said Dr. Gay. "We have witnessed an explosion in global solar PV installations in the past year due to the dramatic and accelerated rate of cost reductions in the supply chain. This has resulted in significant decreases in end-market costs, and a continued focus on technology innovation will further drive down the total cost of solar electric power plants."

# **Global Optimism for Solar Job Opportunities**

Nearly half (46%) of all respondents believe the growth of the solar market would create jobs. The United States is most optimistic with nearly six in 10 consumers (58%) expressing this view. China and India are nearly equal in second place in their estimation of job growth, at 49 and 48 percent respectively. Consumers in Japan are the most cautious, with four in 10 believing that it will have no impact on the job market. Twenty-five percent of people surveyed internationally think that it will reduce the number of jobs.

"More than fifty percent of the jobs in the global solar power industry are found after the solar panel leaves the factory, such as construction teams, installers, sales people, designers, engineers, electricians, etc.," said Cathy Boone, senior director for Energy Policy and Market Development at Applied Materials. "Any country, city or community has the potential to directly benefit from the growth in the solar power industry with on-the-ground jobs if they are willing to make a commitment to replacing fossil fuels with solar."

# Consumers in India and China Want to Accelerate Solar Adoption

Nearly six in 10 (58%) consumers in China believe that the projected rate of solar energy adoption to15 GW by 2015 is too slow of an adoption rate. And when respondents in India were asked about the government's Ministry of New and Renewable Energy's goal of increasing the contribution of renewable energy to six percent of India's total energy mix by 2022, more than half (51%) voiced concern that the rate of adoption was too slow.

As both countries face rapidly rising energy needs due to a growing population with increasing energy demand, people are realizing that solar power can play a major role in supplying much needed energy and jobs, while simultaneously reducing greenhouse gas emissions.

### Solar Education Still Needed

Respondents were most likely to believe the United States (26%) followed by Japan (22%) had installed the greatest number of solar panels, while only 17 percent correctly identified Germany as the leader in solar panel installations. Japanese consumers were far more likely (35%) to correctly identify Germany as the leader compared to respondents from other countries (U.S. 9%; China 15%; India 9%). The top countries in order of cumulative solar installations as of 2011 are Germany, Italy, Japan, Spain, the U.S. and China\*.

Applied Materials is committed to accelerating the adoption of solar technology globally and proudly invests in renewable energy educational programs fostering environmental stewardship to inspire the next generation of innovators. These programs include the <u>Clean Tech Competition</u> for high-school students in Northern California and Xi'an, China, as well as the United States and China 2013 <u>Solar Decathlon</u> competitions that challenge teams from colleges and universities worldwide to design and build innovative solar-powered homes that are attractive, affordable and energy efficient. For more information on Applied Materials' environmental stewardship, visit: <u>http://www.appliedmaterials.com/about/cr/community/investments</u>.

For more information about the 4<sup>th</sup> annual Applied Materials Summer Solstice survey, visit <u>http://blog.appliedmaterials.com/solstice2012</u> and follow the conversation on Twitter using the hashtag #solsticeapplied.

### Methodology

Ketchum Global Research & Analytics and Ipsos conducted the Applied Materials Summer Solstice survey online between May 25 and June 5, 2012, in the U.S. and May 29 through June 7, 2012, in India, China and Japan on behalf of Applied Materials. Ipsos used a mixed sample approach to conduct 1,000 interviews within each country. Weighting was then employed to balance demographics to ensure that the sample's composition reflects that of the adult online population in Japan, China and India. For the U.S., the sample is based to U.S. census and no weighting was applied. A survey with an unweighted probability sample of this size and a 100% response rate would have an estimated margin of error of +/- 3.1 percentage points - 19 times out of 20 of what the results would have been had the entire population of adults in each of the countries responded. All sample surveys and polls may be subject to other sources of error, including but not limited to coverage error and measurement error.

### **About Applied Materials**

Applied Materials, Inc. (Nasdaq: AMAT) is the global leader in providing innovative equipment, services and software to enable the manufacture of advanced semiconductor, flat panel display and solar photovoltaic products. Our technologies help make innovations like smartphones, flat screen TVs and solar panels more affordable and accessible to consumers and businesses around the world. At Applied Materials, we turn today's innovations into the industries of tomorrow. Learn more at <u>www.appliedmaterials.com</u>.

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\*Source: IHS iSuppli

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