The Solar Edge

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In this Issue

David Eaglesham, First Solar's Chief Technology Officer, speaks at summit panel.

First Solar Participates in 5th World Future Energy Summit

Contributed by Sarah Junior, Marketing Communications, Mainz

The 5th World Future Energy Summit (WFES) took place in Abu Dhabi from January 16-19, with First Solar in full participation. Hosted by Masdar and established under the patronage of HH General Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, this year the Summit's theme was Powering Sustainable Innovation, with a focus on solar energy. With First Solar participating at the Gold Sponsorship level, the event was an excellent opportunity to create brand visibility and to meet with potential customers in the Middle East region, important business partners, key stakeholders from the industry, and international policy makers.

The importance of this summit was underlined by high-profile political guests such as the Premier of China, Wen Jiabao, and the Prime Minister of Korea, Kim Hwang-sik, and Ban Ki-Moon, Secretary General of the United Nations who launched the International Year of Sustainable Energy for All. Ban Ki-Moon set three objectives for his initiative to be achieved by 2030: Ensure universal access to modern energy services; double the rate of improvement in energy efficiency; and double the share of renewable energy in the global energy mix.

Being one of the world's leading solar companies First Solar President, Jim Brown, was invited to speak at the Business Leaders Forum on day two of the event, discussing the future of the solar industry and how businesses can drive sustainable energy globally. Among executives from other solar companies such as Trina, GE, and Schneider Electric, this panel provided a platform for First Solar to highlight the potential of our industry-leading photovoltaic (PV) technology, and the newly announced world record achievement of 14.4 percent module efficiency. In line with First Solar's mission, to create a world powered by clean affordable solar electricity, Jim explained that solar PV is a mature, competitive, and affordable energy solution that is already a viable component of the energy mix.

On day three of the summit, David Eaglesham, our Chief Technology Officer, was invited to speak at a panel discussion focused on PV technologies. He presented Innovations in Thin Film PV, and talked about upcoming challenges such as PV grid-integration, efficiency improvements, and cost reductions.

Overall, attending the World Future Energy Summit gave First Solar greater visibility in the Middle East region, where solar energy is still in its beginning, as a vital contributor to meet the rising energy needs of a growing population.

Green Spotlight:

Interactive Online Training on First Solar's Positive Environmental Profile

Contributed by Laura Jenkins, Sustainability, New York

Are you comfortable talking about the environmental benefits of renewable energy? Have you ever received questions from key stakeholders on the use of cadmium telluride (CdTe) in our modules, or wanted to explain our module recycling program but have not felt completely confident in providing a good answer?

First Solar's sustainability team has addressed this need by the development of an interactive online training course. Released in early February, this course is designed specifically to empower, inspire, and enable you to speak positively, factually, and confidently about First Solar's CdTe technology, and about our company's extensive environmental and climate change benefits.

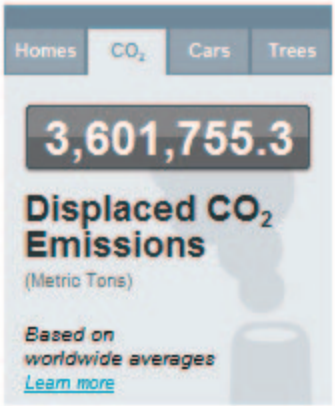
Comprised of six, 10-15 minute lessons, including chances to test your knowledge as you go, this course will provide you with necessary facts and insights into the environmental benefits of renewable energy, and how First Solar approaches our Core Value of Environmental Responsibility. The interactive format will keep you engaged while providing you with opportunities to practice answers to real-life questions using true-to-life conversations with a variety of different stakeholders as examples.

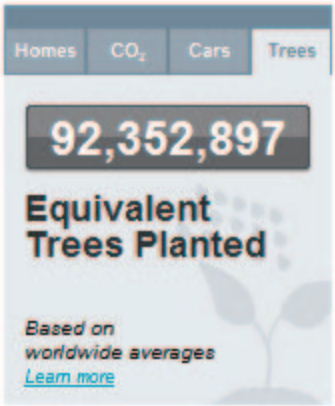
Available to all associates, the course is mandatory for our externally-facing associates who routinely promote our environmental benefits, and answer questions on the safety of our CdTe technology to a range of external stakeholders. These include customers, partners, political leaders, and communities to name a few.

However, all associates are strongly encouraged to take advantage of the course so that everyone can be powerful, confident ambassadors for First Solar and its mission.

First Solar Interactive Carbon Counter Launched

On November 17, 2011, First Solar launched an exciting and important new feature on its website illustrating the positive environmental benefits of First Solar modules' carbon displacement, expressed in easily relatable terms; homes powered, cars removed, and trees planted. The counter provides cumulative carbon displacement information since the company began commercial production, demonstrating the long-term positive environmental impacts of solar energy.





First Solar Associate Profile:

Michelle Leetham, Chief Officer and Counsel, Legal

Contributed by Paula Polchert, Global Internal Communications, Tempe

Michelle joined First Solar in November of 2011 as Chief Ethics and Compliance Officer and Chief Litigation Counsel. In this role, Michelle serves as the company's subject matter expert in the areas of ethics and compliance, with primary responsibility for leading internal ethics investigations and responding to external inquiries as well as helping First Solar expand its compliance framework and training for associates. She also manages global litigation, and develops preventative compliance strategies to avoid litigation in commercial disputes, product liability, and product safety.

"Our business leaders and associates have a strong desire to do the right thing," said Michelle. "Part of my job is to give our people the tools they need to do that."

How did she get into all of this? Well, she almost didn't. Michelle's father was a lawyer, yet she initially never intended to follow in her father's footsteps. After earning her BA in Rhetoric from University of California, Berkeley, she started working for what is now the San Francisco Business Times selling advertising space. From there she edited copy and became a successful staff writer. However, Michelle began to realize that for her to widen her career opportunities, she needed to go back to school. Luckily for First Solar, she opted for a law degree instead of an MBA.

Michelle then worked in-house for 17 years at Bechtel, one of the top ten construction companies in the world, most recently as Vice President and Manager of Litigation & Employment. There she and her team managed Becthel's global portfolio of lawsuits and arbitrations and provided advice and counsel on any issue that related to employees. Foreshadowing her current position at First Solar, she also guided the development of their first Code of Conduct. "The minute I arrived at First Solar, I sensed a very strong ethical tone coming from the top," Michelle said, making her position a perfect fit all around.

When not pouring over compliance and litigation issues, Michelle is an avid sports fan, faithfully rooting for her California Golden Bears basketball and football teams, and of course, the San Francisco Giants and 49ers. To stay at the top of her personal game, Michelle enjoys spinning and yoga classes, as well as tennis and vigorous hiking at least once a week around the Orinda, Berkeley, and Lafayette areas. And In an effort to give back to the legal community, Michelle also appears once a week as a guest lecturer at UC Berkeley's law school, teaching mediation classes that involve role-playing as well as discussion. "Students are so hungry for a real-world perspective," said Michelle. "My goal is to get them to a point where they can go out and successfully represent their own clients."

Following in a parent's footsteps may not have been intentional for Michelle, but the next generation of her family is following their strong work ethic—Michelle's daughter Stephanie is currently a senior at Northwestern University, double majoring in history and psychology and minoring in Spanish.

Michelle at a Glance

Joined the company:
November, 2011

Home base:
San Francisco, CA

Area of expertise:
Legal compliance, litigation, and alternative dispute resolution (ADR)

Favorite thing about her job:
Working at a nimble company where things can get done quickly.

Education:
BA and JD, both from UC Berkeley

Michelle (R) with husband Jim and daughter Stephanie hiking near Yosemite National Park.

Announcements

First Solar Celebrates IPO Anniversary and 5GW Milestone

On November 17, 2006, First Solar placed its initial public offering (IPO) on the NASDAQ, opening the Company to the world. By the end of 2006 we had tripled our 2005 production to top out at 60 megawatts (MW) for the year. We brought in $135 million in net sales, marking our first year of profitability. 2006 marked the beginning of what would be a steady, persistent path of growth and innovation.

Forward five years, and we measure our output in gigawatts (GW), and our net sales in billions. By November 2011, our cumulative production reached 5GW, enough electricity to power 2.5 million homes annually, displacing 3.3 million metric tons of CO_2—the equivalent of removing 650,000 cars from the road annually, or planting 84 million trees.

Our EPC project pipeline, non-existent in 2006, has grown to 2.7GW. 2011 also saw the breaking of the $1 per watt Balance of Systems cost barrier as well as the breaking of a world record for cadmium telluride (CdTe) cell efficiency, with First Solar coming in at 17.3 percent in-lab.

With dedicated associates and strong leadership, Chairman and Interim CEO Mike Ahearn believes that First Solar is well-positioned to become “a company for the long-term that will have a legacy, and will be an important 21st century contributor as solar power becomes a major part of the global energy infrastructure.” In this spirit, First Solar will continue to build its own roads, moving forward on exciting paths toward its mission of enabling a world powered by clean, affordable solar electricity.

The First Solar Development Engineering team proudly displays our 17.3 percent efficiency record, setting a new high for CdTe PV.

Continued progress in lowering BoS costs has helped make projects like 290MW Agua Caliente possible and profitable.

First Solar Becomes Official Cycling Team Sponsor

On January 30, 2012, Team Chipotle, the Continental professional cycling development squad owned and managed by Slipstream Sports, became Team Chipotle-First Solar with the addition of First Solar as a co-title sponsor.

"Our sponsorship of the Chipotle-First Solar team is part of our broader commitment to a cleaner, healthier environment. Cycling is an emission-free sport with global appeal that promotes hard work, competition, and excellence, values we share," said Ted Meyer, First Solar's Vice President of Global Corporate Communications. "We are proud to support a team that is dedicated to cultivating the next generation of global cycling champions and look forward to a great relationship with the world's top development squad."

The development program has been grooming the next generation of cycling champions since its inception. Today, Team Chipotle-First Solar is the most successful development team in the United States and works as a feeder team for pro team Garmin-Barracuda.

"Partnering with First Solar from a business perspective is very exciting," said Matt Johnson, President of Slipstream Sports. "They are a huge global company, and the team is competing in locations where some of their most important projects are underway, so we will be bringing their message straight to the communities and markets most important to them."

The Team Chipotle-First Solar cycling jersey.

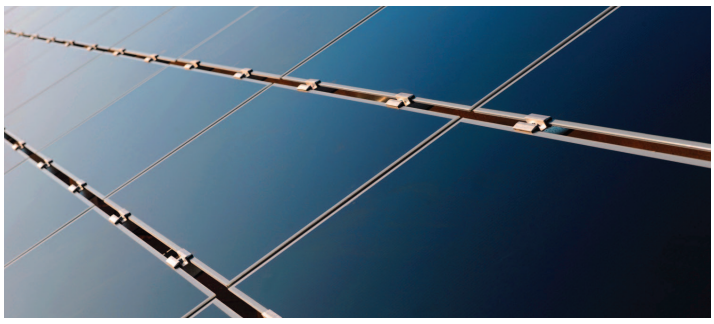
First Solar to Build, Operate, and Maintain NRG's 66MW Alpine Solar Project

On November 3, 2011, NRG Energy, Inc. and First Solar announced an agreement for First Solar to provide engineering, procurement and construction (EPC) services for NRG's 66 megawatt (AC) Alpine solar project in Lancaster, Calif. First Solar will also provide operations and maintenance (O&M) services. Electricity from the Alpine project will be sold under a 20-year power purchase agreement with Pacific Gas and Electric Company, helping California meet its ambitious renewable energy goals.

Construction is expected to be completed in Q3 2012, creating an estimated 250 jobs over the course of construction. The project will use First Solar's advanced thin film photovoltaic (PV) modules.

"First Solar is excited to be working again with NRG," said Jim Lamon, First Solar Senior Vice President for EPC and O&M. "Our experience developing and building out our 2.7 gigawatt North American pipeline of utility-scale PV projects enables us to get our customers' projects rapidly completed and connected to the grid."

The electricity generated by Alpine will be enough to serve a yearly average of nearly 25,000 homes, and more than double that number at maximum capacity during peak hours of the day. The project is expected to offset approximately 1.5 million metric tons of greenhouse gases over 20 years, the equivalent of taking over 15,000 cars off the road annually.



Alpine will use First Solar's advanced thin film PV modules.

MidAmerican Completes Acquisition of Topaz Solar Farm

On January 31, 2012, MidAmerican Renewables, LLC, a subsidiary of MidAmerican Energy Holdings Company, announced it had completed its acquisition of the Topaz Solar Farm from First Solar. The 550 megawatt photovoltaic (PV) power plant being built in San Luis Obispo County, California, will have the capacity to generate enough renewable energy to power approximately 160,000 average California homes.

"There is a growing desire to utilize renewable energy," said Bill Fehrman, president of MidAmerican Renewables. "Solar plays a crucial role in meeting renewable energy targets and portfolios. The closing of the Topaz project acquisition makes it the second solar project in our renewables business, and we look forward to evaluating and acquiring additional opportunities."

The Topaz project will be built, operated and maintained by First Solar. Construction began in December 2011 and is expected to be complete by early 2015. The project will create approximately 400 construction jobs and 15 ongoing operations and maintenance jobs.

"We are pleased to be moving forward with MidAmerican Renewables on the Topaz project–one of the two largest PV projects in the world, which are both being built by First Solar," said Frank De Rosa, First Solar Senior Vice President for Business Development–Americas. "First Solar is the leading developer of utility-scale PV projects, and MidAmerican Renewables' investment in these renewable resources is a significant endorsement."

Pacific Gas and Electric Company will purchase the electricity from the Topaz project under a 25-year power purchase agreement, helping California meet its mandate to generate 33 percent of its power from renewable sources by 2020. Electricity generated from the Topaz project will displace approximately 377,000 metric tons of carbon dioxide per year–the equivalent of taking approximately 73,000 cars off the road.

Artist's rendering of the Topaz Solar Farm.

Powered Up! New Mexico's Roadrunner Project Dedicated

On October 7, 2011, NRG Solar, a subsidiary of NRG Energy, El Paso Electric, and First Solar welcomed New Mexico's top officials at their 20 megawatt Roadrunner Solar Generating Facility to mark the start of energy production from the state's second-largest photovoltaic (PV) project. The facility is located on a 210-acre, privately owned parcel of industrial-zoned land near Santa Teresa, about ten miles from El Paso, Texas.

The Roadrunner project created more than 200 jobs during its construction over the past nine months, and now is generating electricity to supply thousands of homes with clean, renewable power. First Solar provided engineering, construction and procurement services for the project using its advanced thin film photovoltaic solar modules, and will also be the operations and maintenance contractor for the facility.

"First Solar applauds NRG and El Paso Electric's commitment to renewable energy," said Matt Merfert, First Solar Engineering, Procurement, and Construction Project Manager. "We are pleased that the Roadrunner project will be able to provide clean, affordable solar electricity to New Mexico residents for years to come."

The Roadrunner facility will use a single-axis tracking system, which pivots PV solar modules to follow the sun throughout the day, increasing electricity production compared with a fixed tilt installation. Cost-competitive, renewable power generated by the Roadrunner facility will be sold to El Paso Electric under a 20-year power purchase agreement.

Patrick Garcia, First Solar Operations and Maintenance field technician for the Roadrunner project, signs the commemorative module.

Sarnia and Copper Mountain Projects Take Multiple Honors in 2011

At POWER-GEN International in Las Vegas, Nevada on December 12, 2011, Power Engineering magazine's editors recognized the Projects of the Year Award finalists and announced three winners and six honorable mentions. For 2011, the pick for Best Renewable Energy Project-Honorable Mention went to First Solar's Sarnia 80 megawatt (MW) solar project, owned by Enbridge Inc. in Sarnia, Ontario, Canada.

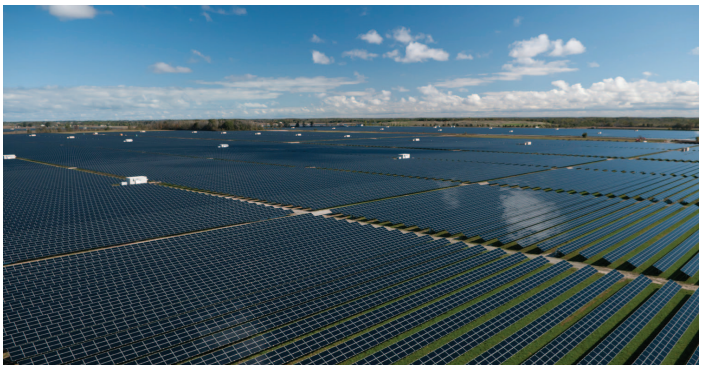
The project was developed by First Solar's Canada Project Development team, and is operated by First Solar's Operations and Maintenance team.

"Our EPC teams were thrilled to design, build, and operate the Sarnia plant," said Keith Symmers, EPC Project Director for Sarnia. "Given significant site and weather constraints faced during the design and construction phases, we're pleased that Enbridge and First Solar were recognized by Power Engineering magazine for these efforts."

But the honors didn't end there for First Solar projects. Each year, POWER magazine selects the most noteworthy renewable power plants worldwide to be designated Top Plants. Winning plants are profiled in the December issue, and awards are presented the following May at the ELECTRIC POWER Conference & Exhibition.

This year, First Solar took two top spots with the 80MW Sarnia plant, and 48MW Copper Mountain plant, located in Boulder City, Nevada.

Congratulations to all our First Solar teams that made contributions to both projects' well-earned honors and success!



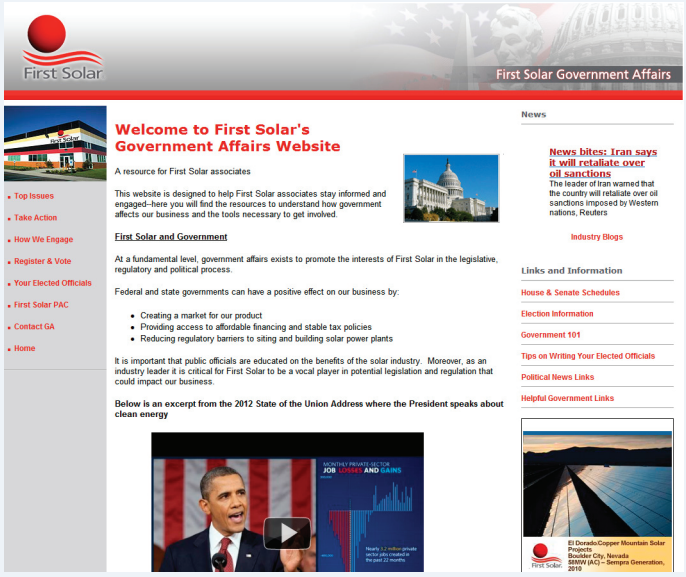
The award-winning Sarnia (L) and Copper Mountain solar plants.

First Solar Launches New Government Affairs Website

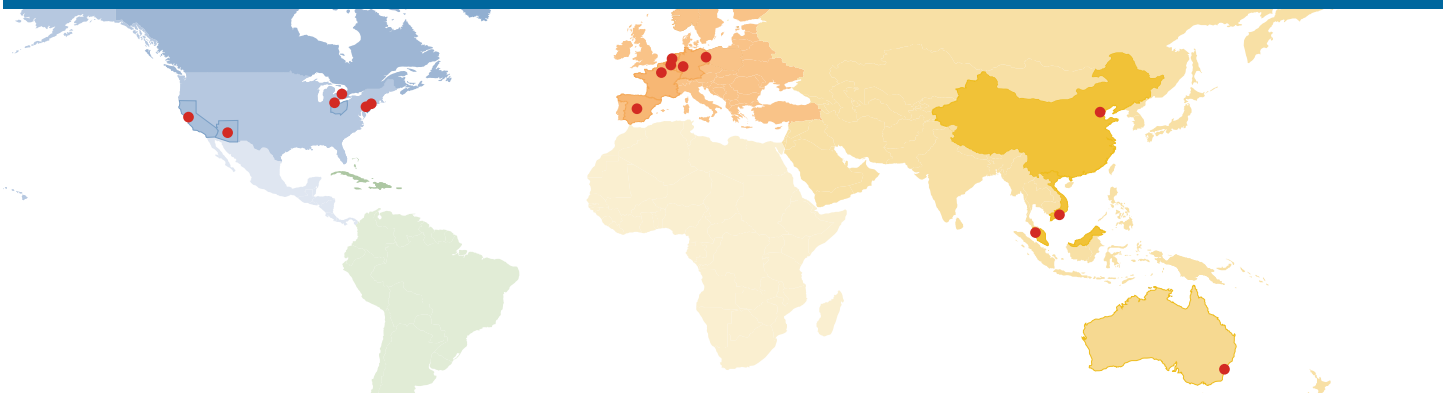
On December 6, 2011, First Solar's U. S. Government Affairs website was launched on POWER. On this new site, associates can keep track of First Solar's top legislative issues as well as learn how the First Solar Government Affairs team engages policymakers.

In addition to using the site to increase awareness about issues of importance to First Solar, associates can also learn more about their own elected officials through a dynamic look-up function, and find localized information on voter registration, early voting, absentee voting, plus polling locations.

The U.S. Government Affairs website is located in the Knowledge Center on POWER.



News from Around First Solar



Frankfurt (Oder)

First Solar Supports Education on Associates with Disabilities

Contributed by Karina Hildebrandt, Government Affairs, Berlin

As part of the December 2011 Week for People with Disabilities, initiated by the Federal Employment Centre, Frankfurt (Oder), First Solar organized a meeting to provide education about the integration of disabled employees into working life, and to show their range of participation. Being one of the largest employers in the State of Brandenburg, First Solar's goal is to create sustainable, local jobs, and wants to make a key contribution to the promotion of equal opportunities and tolerance. Jochen Freyer, head of the Federal Employment Centre, emphasized the importance of corporate social commitment because in Brandenburg, there are still 1500 disabled people looking for work.

First Solar Frankfurt (Oder) employs a workforce made up of more than six percent disabled employees, among them 24 deaf and hearing impaired. In an effort to counteract the difficulties disabled people find in locating work, First Solar continues to cooperate with the Federal Employment Centre and operational programs.

First Solar associate Sven Hofman overcomes his physical challenges every day within the Frankfurt (Oder) Quality Department.

San Francisco

Oakland and San Francisco Offices Merge

Contributed by Alan Bernheimer, Public Relations, San Francisco

On January 30, 2012, the original Oakland and San Francisco, California First Solar offices merged, relocating to their new home in downtown San Francisco.

First Solar established its Oakland office in August 2009 after its acquisition of the former OptiSolar utility-scale solar project development pipeline, and the hiring of the former company's project development team. In July 2010, First Solar acquired NextLight Renewable Power, LLC, a San Francisco based utility-scale solar project developer. The two teams were together in work efforts, but still maintained separate offices. The merging of the two has been much anticipated by all involved.

"It's great to have the majority of the Project and Business Development team under one roof at last , along with a lot of the support functions like EPC Project Engineering and Project Finance—to name just two," said Alan Bernheimer, Public Relations Director–Americas.

Before choosing the new office, First Solar did an extensive analysis of available, suitable space in the Bay Area, looking at factors such as employee preferences, commute patterns, proximity to customers and key policy makers, plus cost, recruitment, and retention. After all these considerations, downtown San Francisco was determined to be the most desirable location.

United Kingdom

First Solar Attends Solar Power UK

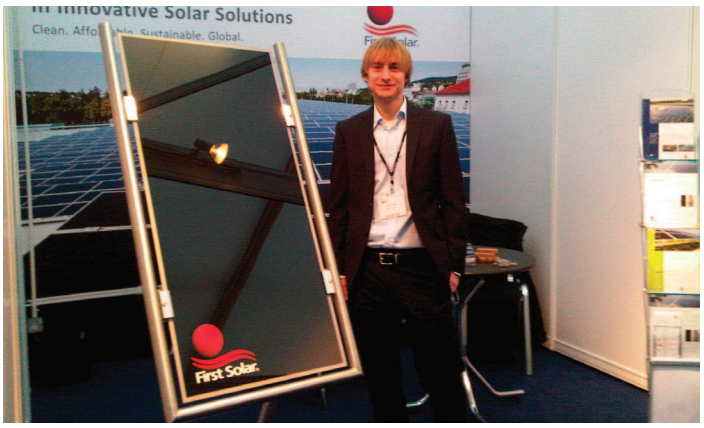
Contributed by Sarah Junior, Marketing Communications, Mainz

This year, for the first time, First Solar participated at Solar Power UK from October 26-28, 2011 at the International Convention Centre in Birmingham, a world-class conference venue.

With over 140 exhibitors, this year's event was one of the biggest in the relatively young UK solar market. Visitors were mainly MCS-certified installers, many of them having just recently entered the solar business. Long-time customers, juwi, Conergy, and Colexon, were also in attendance.

Ulrich Becker, First Solar Director of Sales and Marketing, Mainz, spoke at one of the main conference sessions, Technology In-depth: PV Module Technology Developments, Pricing, and Capacity. In addition, First Solar engineer Nick Strevel participated at the main workshop session organized by Solar Power UK with a presentation specifically on thin film technology. First Solar had approximately 20 participants joining our workshop, where the focus was on installations of thin film modules on rooftops presented by Ulrich Becker, Nick Strevel, and Leandro Netz.

There were productive discussions between the participants and our presenters, and a keen interest in our technology. Overall, visibility as a return on our investment in the event was excellent, raising awareness about thin film in general and informing installers about First Solar technology.



First Solar associate Leandro Netz, Technical Customer Service, proudly displays a First Solar module.

Tempe

First Solar Sponsors Phoenix Open Golf Tournament

Contributed by Melanie Friedman, Corporate Communications, Tempe

From January 30 to February 5, 2012, First Solar acted as the "Official Solar Provider" for the Waste Management Phoenix Open 2012 Tournament held at the TPC Scottsdale, providing photovoltaic (PV) solar arrays to help power the event, including the Waste Management Corporate tent on Hole 18.

"We were excited to have First Solar as part of the Waste Management Phoenix Open, furthering the tournament's sustainability efforts," said Alex Clark, 2012 Waste Management Phoenix Open Tournament Chairman. "With First Solar powering the event, including the Waste Management Corporate tent, with green renewable energy, we moved one step closer to becoming the 'Greenest' show on Grass."

The Waste Management Phoenix Open is the best-attended golf tournament in the world and has gained legendary status for being the most unique stop on the PGA TOUR. The 2012 edition marked the 77th playing of the event (one of the five oldest events on the PGA TOUR) and the third as the Waste Management Phoenix Open.

"First Solar believes in supporting the communities where we live and work and was proud to sponsor this year's Waste Management Phoenix Open and be part of its innovative sustainability initiatives," said Ted Meyer, First Solar Vice President of Communications. "Fans at the TPC Scottsdale had an opportunity to see the same First Solar technology that is deployed at the APS Paloma Power Plant in Gila Bend, and the Agua Caliente project in Yuma County, which will be the largest solar PV power plant in the world when it's completed."

Waste Management is recognized as a global leader in sustainability practices, sharing a similar environmental philosophy to that of First Solar, both truly making a difference for future generations.

First Solar's array at the 18th green.

Mesa

First Solar Tempe and Mesa Team Up with House of Refuge™

Contributed by Paula Polchert, Global Internal Communications, Tempe

On a crisp, clear desert morning, December 9, 2011, 49 First Solar volunteers converged on two houses in Mesa, Arizona. They were there to do some rehabbing of the former military properties for House of Refuge, a local non-profit providing safe housing and a social hand-up to local homeless families, working to get them back in the communities' mainstream.

The project was arranged through Rebuilding Together, a nationwide organization focused on bringing material donators like Lowe's and Home Depot together with charitable organizations like House of Refuge, with volunteer workers from businesses like First Solar. Everyone wins, especially the families in need.

From tearing up stubborn vinyl flooring circa 1974, blowing attic insulation, ripping out and replacing kitchen and bathroom fixtures, to painting, painting, painting, everyone pitched in 100 percent for the cause and got quite a workout in the process.

"I was so impressed by the motivation of your volunteers," said House of Refuge Executive Director, Nancy Marion. "It's not often that we get such a huge group with so many worker bees. This is such an amazing gift to the families that will be enjoying these beautiful homes in time for Christmas. It would have not been possible without First Solar."

Though the families will benefit by having warm and safe places to live, our First Solar associates benefited as well. "Working in the office is great, but pulling together as a team on a project like this is completely different," said Erick Owen, Finance, Tempe. "You get to meet new people, and get to know on a deeper level people you already work with. It's a really good feeling."

First Solar applauds the efforts of House of Refuge and of Rebuilding Together, and looks forward to the next project… and the next.

(L) Todd Spangler Plant Manager-Mesa, and Kevin Bedinghaus Facilities Plant Manager-Mesa, pry up that last stubborn tile.

(L) Ross Biesemeyer Power Plant Maintenance-Tempe, and David McCloney Operations Engineer-Mesa, haul away an old kitchen cabinet.

Tempe

Big Brothers Big Sisters Tours Paloma Project

Contributed by Melanie Friedman, Corporate Communications, Tempe

On December 3, 2011, First Solar and APS teamed up to provide a tour of the 17 megawatt Paloma solar power plant for more than a dozen Big Brothers Big Sisters children. The kids and their mentors, a few of whom are First Solar associates, boarded a double decker bus and headed out to the desert to see solar generation up close.

Announced complete on October 27, 2011, and located on about 200 acres near Gila Bend, Arizona, Paloma is the culmination of a successful partnership between APS, Gila Bend, and First Solar. Paloma consists of 275,000 thin film photovoltaic modules mounted on fixed-tilt steel supports, and marks the first time APS has used thin film technology for one of its solar plants and the first time APS has worked with First Solar. During the creation of the plant, Paloma contributed 300 construction jobs, while providing power for 4,200 APS customers.

"First Solar is committed to supporting the communities where we live and work," said Melanie Friedman, who works in the communications department at First Solar's headquarters in Tempe. "This was a great opportunity to educate local kids about the benefits of renewable energy."

Once on site, Lawrence Whittet, EPC, led the group in a safety moment. After the tour, the kids were encouraged to ask questions about the project. Some wondered if solar panels work at night or if they can be used to power backpacks. As associates from APS and First Solar responded to questions, it was clear how excited the children were to learn more.

Associates who are currently involved in the Big Brothers Big Sisters program meet their matches a few times a month at the child's school. If you would like to find out more about the program and how to participate, go to http://www.bbbs.org to find the chapter in your area.

First Solar associate David Erhart, Marketing Communications, with his "little brother," Isaias Duran.

Big Brothers Big Sisters participants hike through the arrays at Paloma under the cool cover of cloudy skies.

Tempe

First Solar Tempe's Fourth Annual Toy Drive Rounds-Up Treasures for Arizona Kids

Contributed by Wendy Curran, Customer Service, Tempe

For four years running, associates at Tempe Headquarters have gotten together to "adopt" children who are in need for Christmas through Arizona Children's Association. Every event has been a huge success, with December 2011 being no exception.

This year, the associates adopted 82 kids from 35 families, giving away 605 gifts total, including toys, school supplies, and bikes. The gifts are geared toward age, gender, and a "needs" list for each particular child so that associates can make each donation really count. And every year, First Solar seems to amaze even the program organizer, First Solar's Wendy Curran.

"Each year I call to tell the Arizona Children's Association that I will be showing up in a few days with a U-Haul full of toys and bikes, and every year they continue to be surprised when I actually show up with a U-Haul full of toys and bikes," she said, laughing.

Wendy also sees the toy drive as a healthy way to gain perspective. "As we go through these changing times at First Solar, it helps to look around and realize what a huge difference just a few people can make in the lives of so many. It makes me very proud to be a colleague here."

Tempe looks forward to next year's toy drive being even more successful.

First Solar Hits 14.4% Efficiency, NREL Confirms New World Record

Contributed by David Eaglesham, Development Engineering, Perrysburg

On January 17, 2011, First Solar announced it set a new world record for cadmium telluride (CdTe) photovoltaic solar module efficiency, achieving 14.4 percent total area efficiency. The U.S. Department of Energy's National Renewable Energy Lab (NREL) confirmed the record, which eclipsed the prior record of 13.4 percent, which also was set by First Solar.

The record performance, announced on the same day at the World Future Energy Summit in Abu Dhabi by First Solar Chief Technology Officer Dave Eaglesham, comes just six months after First Solar leapfrogged the world record for CdTe solar cell efficiency with a mark of 17.3 percent. Both the cell and module record-setters were constructed using commercial-scale manufacturing equipment and materials at the Company's Perrysburg, Ohio factory. Cell efficiency measures the proportion of light converted to energy in a single solar cell, whereas total area module efficiency measures light conversion across a production-size, multi-cell solar module, providing a more realistic assessment of real-world performance than cell or aperture-area efficiency.

"This considerable achievement supports our module efficiency roadmap and demonstrates our ability to convert our record-cell technology into ongoing module-level improvements," said Dave Eaglesham, First Solar's Chief Technology Officer. "These records also underscore the tremendous ongoing potential of CdTe compared to silicon-based technologies."

First Solar updated its module efficiency roadmap in December 2011 to the increased goal of 14.5-15 percent average efficiency for its production modules by the end of 2015, and the process improvements developed for the record-setting cell and module continue to be implemented as part of that roadmap. The average efficiency of First Solar modules increased from 11.4 percent in 2010 to 11.7 percent in 2011, and is expected to reach 12.7 percent in the fourth quarter of 2012.

"Our continuous investment in R&D has enabled the steady progress of our technology, punctuated by landmark achievements such as this," said Mike Ahearn, Chairman and interim CEO of First Solar. "Our consistent progress gives us confidence in our ability to achieve our roadmap goals, drive down costs, and develop sustainable markets."

Perrysburg Development Engineering associates Lauren Doherty, left, and Yuepeng Deng proudly display First Solar's new CdTe world record.

Have a News Story?

Submit your photos, articles, and ideas to newsletter@firstsolar.com
Paula Polchert, Editor

This issue and back issues of The Solar Edge are available on POWER.

First Solar Inc. is an Equal Opportunity Employer (EOE) that values and respects the importance of a diverse and inclusive workforce. It is the policy of the company to recruit, hire, train and promote persons in all job titles without regard to race, color, religion, sex, age, national origin, veteran status, disability, sexual orientation, or gender identity. We recognize that diversity and inclusion is a driving force in the success of our company.

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Kulim, Malaysia
Mesa, Arizona, USA
Perrysburg, Ohio, USA

North America
Bridgewater, New Jersey, USA
New York, New York, USA
Ontario, Canada
Sacramento, California, USA
San Francisco, California, USA
Washington, D.C., USA

Europe
Berlin, Germany
Brussels, Belgium
Madrid, Spain
Mainz, Germany
Paris, France

Asia/Pacific
Beijing, China
Sydney, Australia