

KACO SUN

Magazine for Solar Professionals • Summer 2011

KACO inverters
made in the **USA**



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KACO inverters made in the USA

Grand opening of KACO's Canadian manufacturing facility

U.S. Airways Center goes solar with KACO inverters

Solar Social Media - A chat with Tor Valenza aka "Solar Fred"

Dear friends of KACO USA,

The solar industry in North America is changing. The implementation of a "Feed-In Tariff" in Ontario, Canada has created a fast growing PV market as a balance to the US solar electric market. Here in San Francisco we are certain this is a great moment for Canada and for all of us in North America. You can read more about the opening of our **new London, Ontario PV inverter factory** in this issue of the KACO Sun.

At the same time, we have started full-scale assembly capability of the entire blueplanet 02xi series in our **US production facility in San Jose, California**. You'll find more information about it in this issue as well.

One product that is drawing a lot of attention with KACO's distribution partners in the United States is the blueplanet 02x series of inverters from 1.5kW to 5kW. The inverters offer the best \$/W pricing in North America, because they do not include the integrated DC/AC disconnect box that has made the 02xi series so popular but also expensive. Because of its low cost, the 02x series is being aimed at markets in US States where the PV incentives have recently been cut.

In order to offer the best service to our customers also in North America, the KACO new energy Inc, team is continuing to grow. Our sales team has doubled this year and KACO has welcomed new team members in marketing, service and technical departments. We believe that this is the foundation which will enable us to see even greater market share in 2011 and 2012.

KACO will be at the Intersolar North America and Solar Power International trade shows where we will showcase our expanding XP inverter series and the already popular 00xi transformerless inverters with the TIGO maximization system. **KACO plans to be one of the only inverter manufacturers in America that sells fully integrated inverter DC – DC maximization systems!** This will move the solar industry even further once wide spread adoption of this technological development is complete.

We've opened up our online training for everyone and our YouTube presence is expanding every week. Please take a moment and **follow us on Twitter and visit our blog "The Sunny Lounge."** KACO is more than your inverter partner, we're also your solar industry information partner!

In summary, KACO is well positioned and our products are designed specifically with the US installers in mind in the dynamic and growing American market place.

Sincere regards,



Peter Flachsmann
CEO
KACO new energy, Inc.



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KACO inverters made in the USA

KACO new energy began producing the popular blueplanet brand inverters at the Sanmina San Jose, CA facility.

The 1502xi and 2502xi models were already available in the fourth quarter of 2010 and both the 3502xi and the 5002xi are available now as well. The motivation of our company to produce in San Jose is two-fold. California remains one of the strongest and most promising markets for photovoltaics. This central location – close to major national distribution – will make this production development strategically beneficial for the solar market of the US. KACO expects to announce significant price reductions to their partners. The new nameplate for the blueplanet inverter will make clear that the products are assembled in the USA.

KACO's **Svea Jeske (SJ)** sat down with **Vince Lucia, VP of Operations at KACO new energy (VL)** and **Michael Kovacs (MK), Senior Director Worldwide Marketing and Public Relations of Sanmina-SCI** to get more insight on the company that is assembling KACO new energy's USA inverters.

Interview with Vince Lucia, VP of Operations at KACO new energy

Vince Lucia, KACO's VP of Operations offers some more insight on the US production.

SJ: Why did KACO decide to start assembling products in the US and why did KACO pick San Jose as the location?

VL: Being one of the most significant PV inverter manufacturers in the world – and the only inverter manufacturer that has established for several years a net zero emissions manufacturing policy – we also decided to reduce the cost and waste of transport. This was one of the main reasons for the Sanmina cooperation along with having German quality made in the USA. The USA is said to be the biggest market in PV, so why not position ourselves in this way in order to support our customers and the increase in demand? We had several choices in location throughout the USA and we chose San Jose because it is in our own backyard and it makes no sense to waste time in traveling around to a facility out of state. The savings in labor would result in cost of traveling – not to mention the carbon footprint in travel and transport to the largest solar market, California.

SJ: Which KACO products are being assembled in San Jose and what's the production capacity outlook for 2011?

VL: We will begin with our 02xi series inverters and move towards the 00xi series inverters by summer 2011. We hope to produce around 15,000 units. The facility is designed to produce 22,000 units p.a. or about 110 mW p.a.

SJ: How does KACO ensure to maintain the excellent quality standard that customers are used to?

VL: Sanmina has been producing several of our power boards for many years in Germany. Because of the high quality standards we place, Sanmina was able to keep their quality above our threshold and so this is a perfect marriage. The overall design and quality of the product has proven itself and Sanmina SCI is one of the most reputable contract manufacturers in the world.

SJ: How do US customers benefit from this development?

VL: Customers benefit knowing the product has not traveled all over the world to get to its final destination, meaning shorter more controlled lead times. **Lastly, German quality made in the USA, what more can one ask for?**

SJ: What do you think this development means for KACO new energy's future in the USA in general?

VL: Again, this is one step closer to our goal for the few who may have doubts about who we are and where we position ourselves in the US market. KACO has been designing and building power conversion devices for over 60 years, and setting up shop locally is a commitment that we plan to be around for quite some time.

Interview with Michael Kovacs, Senior Director Worldwide Marketing and Public Relations at Sanmina-SCI

SJ: Can you tell me a little bit about Sanmina-SCI? What does the company do?

MK: What we make, makes a difference.

Sanmina-SCI makes some of the most complex and valuable electronic and mechanical products in the world. Sanmina-SCI not only focuses on engineering and fabricating complex components but also on providing complete end-to-end supply chain solutions to Original Equipment Manufacturers (OEMs) such as KACO new energy.

Sanmina-SCI operates 70 manufacturing facilities in 18 countries on four continents enabling our customers to compete in today's global marketplace. Sanmina-SCI is the premier and most advanced global supply chain solution partner to accomplish your vision.

At Sanmina-SCI we strive to exceed KACO's expectations in quality, delivery, reliability and services as we build a productive relationship based on exceptional customer satisfaction.

As a leading electronics and mechanical manufacturing solutions company, we have emerged as the design and manufacturing "company of choice" for all our customers.

Our vision is to be the leading producer of high quality/high performance, reliable key technology components including multi-layer printed circuit boards (PCBs), backplane assemblies, enclosures, cable assemblies, memory modules, optical modules and PCB assemblies.

SJ: KACO new energy inverters are known for their excellent quality standards and high reliability. Sanmina-SCI actually has a reputation

for delivering only the highest quality as well. How does Sanmina-SCI maintain this high quality level at all times?

MK: Indeed, Sanmina-SCI is focused on delivering excellence in performance, flexibility and technology to exceed KACO's expectations in quality, delivery and service. Our customers create vision and ideas that drive innovation, productivity and commerce. These ideas define our customer (like KACO) and bringing them to market with the highest level quality fulfills and rewards them.

We literally "raise your ideas" as if they were our own. In the case of reliable energy inverters, what we make for KACO, makes a difference in the WORLD.

Quality

Quality is paramount in every market segment and is a key focus at Sanmina-SCI. Through quality registrations and certifications, strict internal standards and consistent facility audits, Sanmina-SCI has established one of the industry's safest environments for manufacturing electronic devices. As part of our commitment to quality, we bring the following safeguards to Customer:

- Plant Registration and Certifications – Each of our facilities are registered and accredited to ISO standards for the design and manufacture of electronic products.
- Harmonized Quality System – Our strict internal Quality Management Plan ensures ongoing compliance is achieved. We employ a common set of quality procedures throughout the corporation, ensuring consistency in performance and quality at all of our locations around the world.
- Quality Metrics – We track a number of metrics to evaluate the effectiveness of

our Quality Management System, such as process yields, customer complaints, Customer Satisfaction Index, on-time delivery, inventory turns, RMA, MRB and scrap. Metrics are reported weekly, monthly and quarterly in-house and to the corporate office for review and necessary action.

Quality requires we look at our business from Customer's perspective, not ours. Sanmina-SCI's 3K operational excellence program ensures we meet your quality and cost requirements.

Lean Manufacturing

At Sanmina-SCI, we facilitate lean manufacturing by eliminating waste to improve quality and time-to-market for Customer, as well as reduce costs by constant process improvements and critical path lead-time analysis across our entire organization. Sanmina-SCI focuses on the deployment of Lean principles that include the quest for zero defects, waste minimization, continuous improvement, and building and maintaining effective lean activities. Our Lean Manufacturing program leverages our expertise in quality and technology to manage tight delivery deadlines and optimize supply chain management performance to meet Customer's manufacturing needs.





Grand Opening Success

KACO new energy opens new manufacturing facility in Ontario, Canada May 6, 2011



KACO new energy, one of the world's largest inverter manufacturers – with over 3 GW of PV inverters sold to date – has opened its first full scale manufacturing facility in North America.

The new KACO factory has over 30,000 sq ft of manufacturing and warehouse space. Plans are to ensure 2GW of production capacity. The company will have the capacity to produce around 1GW of PV inverters for Canada in 2011. The staff has grown to almost 20 full-time employees and plans to employ over 100 full-time employees.

The rapidly growing market in Ontario is the impetus that has sparked the drive at KACO to build an environmentally friendly facility that can provide top quality blueplanet brand inverters to the distributors, project developers, installers and end users of photovoltaics in Canada. KACO new energy GmbH President Ralf Hofmann says "We at KACO are excited to be a part of the London community and to contribute to the growing Solar Market in Canada. We are looking forward to providing our top quality reliable blueplanet inverters to the market for years to come. We're glad to know that our work here is providing jobs to local people and that our products will provide clean energy for the Ontario province."

London Mayor Joe Fontana said on stage during the ribbon cutting ceremony that: "It's wonderful to know that companies like KACO have taken the initiative to establish their roots in London. It's important as the burgeoning solar market develops that innovative

companies like KACO make their mark here. It's one of the most valuable assets that our province has acquired since the implantation of the Feed-In Tariff. We are thrilled to call KACO our neighbors."

KACO USA CEO Peter Flachsmann told attendees at the open house: "We're proud to offer the province of Ontario the addition of the KACO new energy facility in London. We will bring high quality solar manufacturing, engineering, sales and marketing jobs and we'll work as hard as we are able to provide top-of-the-line KACO inverters as we have around the world for decades. We are happy to say that KACO is officially a member of the Ontario community and we look forward to sharing our carbon neutral manufacturing process with the business community of London."

KACO new energy staff has worked together to install a 100kW photovoltaic system on the roof of the facility. The plan is to offset 100% of our electricity consumption by the end of the summer through the electric production from our system and energy conservation measures. The KACO XP 100U-H6 with Schüco Solar modules were used to build the system. A proprietary racking system built by German Energy Alternative was used to mount the system to the roof.

Watch a summary of the event on our KACO youtube channel:

<http://www.youtube.com/user/KACOnewenergyInc>

Email us for more images:

marketing@kaco-newenergy.com

Strengths of our Father... ...Gifts of our Mother

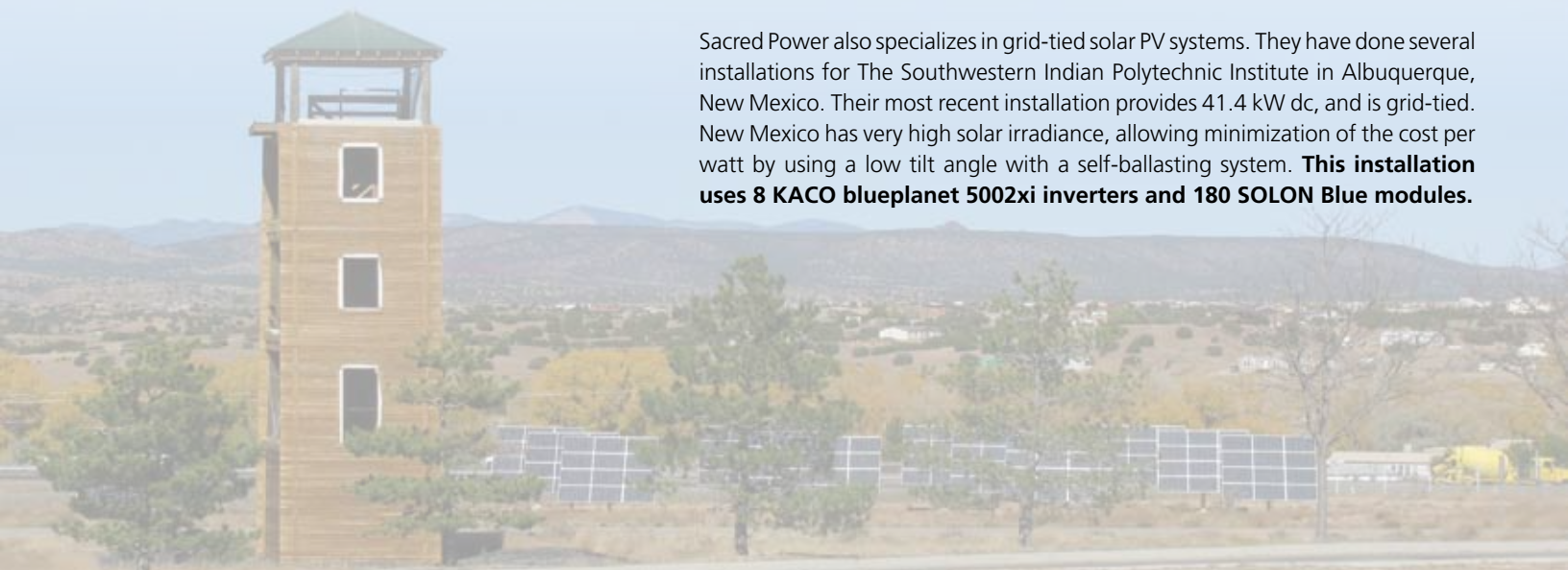
Native American solar company "Sacred Power Corp." is using the strengths of our Father (the Sun) to protect the gifts of our Mother (the Earth)



Sacred Power Corporation is a Native American owned, renewable energy installer located in Albuquerque, NM. They specialize in government contracts. The company uses Native American imagery in their corporate philosophy: **Using the strengths of our Father (the Sun) to protect the gifts of our Mother (the Earth)**. Sacred Power's flagship installation is a unique 8 kW dc system, patented under the name SP800 Skid, which is assembled at Sacred Power headquarters, and then delivered, fully functional, to remote sites such as Native American reservations. Once there, the SP800 Skid can be wired to a house that has never had electricity. A generator automatically provides top-off charges to a battery bank in case of cloudy weather. Typical household installations include overhead lighting, one electrical outlet, and an energy-efficient refrigerator. The addition of a refrigerator has a huge impact on household life. The SP800 Skid is most enthusiastically welcomed by younger members. To this generation, electricity means video games! Tailored versions of the SP800 Skid were created to power seismic instruments for the US Geologic Survey, and deployed in the Caribbean and Pacific Ocean. They were among the first instruments reporting the 2011 Japanese earthquake.



Sacred Power also specializes in grid-tied solar PV systems. They have done several installations for The Southwestern Indian Polytechnic Institute in Albuquerque, New Mexico. Their most recent installation provides 41.4 kW dc, and is grid-tied. New Mexico has very high solar irradiance, allowing minimization of the cost per watt by using a low tilt angle with a self-ballasting system. **This installation uses 8 KACO blueplanet 5002xi inverters and 180 SOLON Blue modules.**



Best System Research for Snowy Climates

KACO supports Canadian OSOTF project which recommends best practices for system design in snowy climates

“When looking for a partner to support leading research at SEARC, KACO new energy was first in line and always supportive. It’s great to see a company recognize the importance of research in this field and to actively support it.”

Rob Andrews, M.Sc (Engineering) Candidate, 2011 Researcher, Queen’s Applied Sustainability Group, 60 Union St. Kingston ON. The solar photovoltaic industry in Ontario and around the world is growing at an unprecedented rate, creating the jobs that underpin a green economy and a sustainable power grid. With this growth comes an increased demand from industry for high-quality research in solar systems’ design and optimization in realistic (and sometimes extreme) Canadian outdoor environments. To answer this need, a partnership has formed the Open Solar Outdoors Test Field (OSOTF). The OSOTF was originally developed with a strong partnership between the Applied Sustainability Research Group, run by Dr. Joshua Pearce at Queen’s University, and the Sustainable Energy Applied Research Centre (SEARC) at St. Lawrence College, headed by Adegboyega (Babs) Babasola. This collaboration has grown rapidly to include multiple industry partners and the OSOTF has been redesigned to provide critical data and research for the team.

The OSOTF is a fully grid-connected test system, which continuously monitors the output of 95 photovoltaic modules and correlates their performance to a long list of highly accurate meteorological readings. The PV system is running with three KACO blueplanet 5002xi inverters. The teamwork

has resulted in one of the largest systems in the world for this detailed level of analysis, and can provide valuable information on the actual performance of photovoltaic modules in real-world conditions. Unlike many other projects, the OSOTF is organized under open source principles. All data and analysis when completed will be made freely available to the entire photovoltaic community and the general public.

The first project for the OSOTF forms Rob Andrew’s graduate thesis at Queen’s, which quantifies the losses due to snowfall of a solar photovoltaic system, generalizes these losses to any location with weather data and recommends best practices for system design in snowy climates. The results of this study will be available at the end of the summer. Future projects at the OSOTF will investigate novel systems layouts, low-level concentration, and the effects of spectral composition on solar cell performance. Additionally, the system will be used for technology and module comparisons and validations, as well as multiple specialized research programs in the future.

Rob Andrews told us that “essentially, the system is designed to be an outdoors testing field for enabling innovation in PV system design and operations. The first project the system is being used for is a snow study, where we are attempting to quantify the losses due to snowfall of a PV system, and to recommend best practices for system design in a snowy climate (which exist in around 3/4 of the areas that PV is installed, to some degree). Future projects will be looking at new system’s layouts which

could increase electrical output by 20-30%, and detailing the spectral composition of daylight to allow designers to not only look at how much light there is, but how "useful" it is as well. **These are just a few of the projects that are underway at the test site, and all of it is powered by KACO new energy!**"

This system has been made possible by the Natural Sciences and Engineering Research Council of Canada and generous contributions and collaborations from: Advanced Solar Investments Ltd., AYA Instruments, Dupont Canada, eIQ Energy, Heliene Inc., KACO new energy Inc., Nanofilm, Photovoltaic Performance Labs Inc., Schueco Canada, Silfab Ontario, Sustainable Energy Technologies Ltd., Universidad Privada Boliviana, and Uni-Solar Ovonic LLC.

The development of this cutting edge test facility is a testament to the commitment of the photovoltaic industry to continuous innovation, and will be a valuable tool for ensuring the development of a sustainable power system worldwide.

For more details, please visit:

<http://www.appropedia.org/OSOTF>
View real time images at
<http://snowstudy.ati.sl.on.ca/> and
<http://snowstudyballast.ati.sl.on.ca/>



PV in any size

blueplanet PV systems

DC System Size

1kW

5kW

10kW

240 V

1.8 kW

3.0 kW

4.2 kW

6.0 kW

7.4 kW

9.1 kW

12.0 kW

15.4 kW

18.2 kW



208 V

1.8 kW

3.0 kW

4.2 kW

6.0 kW

7.4 kW

9.1 kW

12.6 kW

18.0 kW

22.1 kW



480 V

12.0 kW



1502xi



2502xi



3502xi



5002xi



6400xi



7600xi



XP10U-H4



XP42U-H2

25 kW

50 kW

100 kW

200 kW

24.0 kW	27.4 kW	36.0 kW	48.0 kW	50.4 kW	60.0 kW	100.8 kW	120.0 kW	240.0 kW
XP50U-H4	7600xi	XP10U-H4	XP10U-H4	XP42U-H2	XP42U-H2	XP100U-H2	XP100U-H2	XP100U-H2
24.0 kW	36.0 kW	48.0 kW	60.0 kW	100.8 kW	120.0 kW	240.0 kW	240.0 kW	
XP50U-H4	XP10U-H4	XP10U-H4	XP50U-H4	XP100U-H4	XP100U-H4	XP100U-H4	XP100U-H4	XP100U-H4

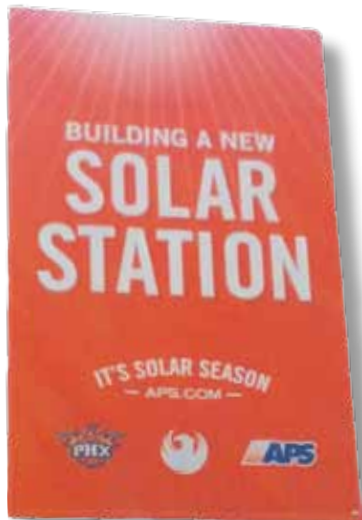


XP50U-H4

XP100U-H2

XP100U-H4

U.S. Airways Center and the Phoenix Suns go solar with KACO inverters



SKY Renewable Energy has contracted with APS to install a 227kW solar array on the 5th floor of the U.S. Airways Center parking garage **powered by KACO's XP100 inverters** and Kyocera KD2346x-LPB modules. To demonstrate their ongoing commitment to promote and implement environmentally friendly initiatives that have a positive impact, **the City of**

Phoenix and the Phoenix Suns are working with APS who will own this solar installation.

"The City of Phoenix and the Phoenix Suns wanted to go green and APS made it happen," said SKY Renewable Energy Vice President, Scott Young.

The U.S. Airways Center's attached, five-story, 800 space parking structure provides the most convenient parking available to suite holders, premium seat owners and the general public. Located in downtown Phoenix, U.S. Airways Center is the home to the

Phoenix Suns of the NBA, Phoenix Mercury of the WNBA, and the Arizona Rattlers of the AFL.

This is the first solar project for the famous U.S. Airways Center. All of the energy captured by the solar array will go back to the grid.

About SKY Renewable Energy

SKY Renewable Energy has over 60 years of combined construction management experience, with a focus most recently in construction management at risk delivery process. SKY is headquartered in Phoenix, AZ, For more information, call 602-507-4788 or visit www.skyrenewableenergy.com.



Meet KACO's technical trainers

If you are interested in a technical product training, please contact your preferred distributor for dates. Find our distribution partners on pages 18 and 19 of this magazine.



Bill Davis

KACO's technical trainer Bill Davis is a true leader in the field of technical product trainings. During his career he successfully developed and delivered computer network trainings for Hewlett Packard as well as technical product trainings and seminars for SMA. He knows the technology in and out and has a lot of experience in the field of technical management, training development and execution.



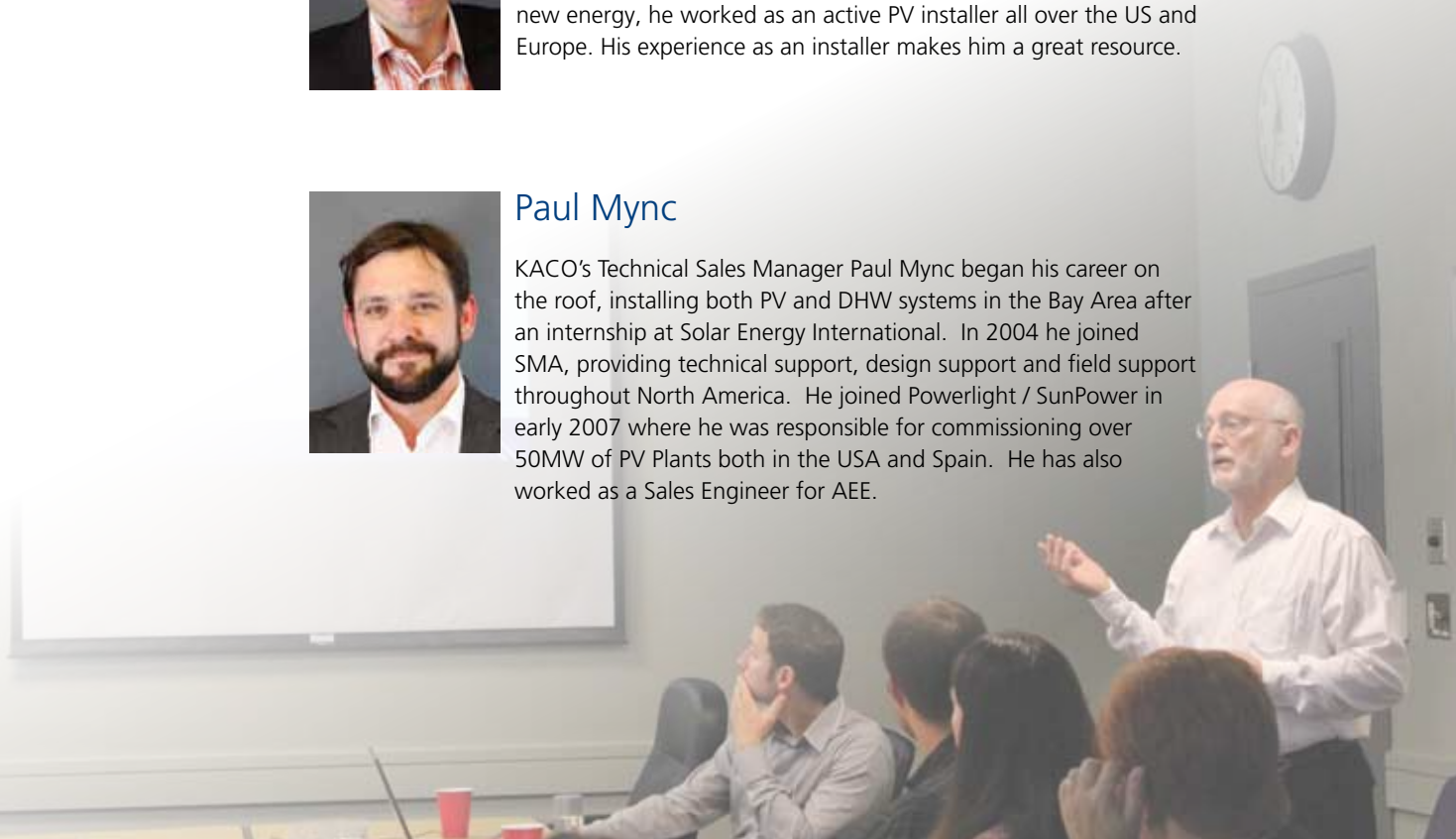
Ralf Schulze

Ralf Schulze has been KACO's Technical Manager for many years. He has trained audiences at solar industry trade shows, conferences and corporate events around the country. Prior to his position at KACO new energy, he worked as an active PV installer all over the US and Europe. His experience as an installer makes him a great resource.



Paul Mync

KACO's Technical Sales Manager Paul Mync began his career on the roof, installing both PV and DHW systems in the Bay Area after an internship at Solar Energy International. In 2004 he joined SMA, providing technical support, design support and field support throughout North America. He joined Powerlight / SunPower in early 2007 where he was responsible for commissioning over 50MW of PV Plants both in the USA and Spain. He has also worked as a Sales Engineer for AEE.



The Features and Benefits of the KACO blueplanet XP100U inverter solution



Performance

- High efficiency: 96% CEC efficiency - generate fast return on investment
- Variable speed fans: No unnecessary cooling - decrease internal power consumption & increase uptime
- Floating Point DSP: Reduce total harmonic distortion and provide more accurate AC power control
- Variable structure PWM: Reduce IGBT switching losses by up to 20% when compared to other PV inverters
- Complex MPPT algorithm: Dynamic MPPT accuracy during severe weather fluctuations
- Full digital control: Total transparency of inverter functions - faster reaction time and increased uptime

Ease of installation

- Easy handling: Use a fork lift or crane the XP100-U fits through most standard double doors
- Integrated DC recombiner: Configure inverter with 4 x 100A, 3 x 125A, 2 x 200A or 1 x 400A fused DC inputs
- Pre-set parameters: Save time and labor cost - one step configuration with TFT color touch screen
- Internal 24V power supply: Avoid extra cost of external power supplies for monitoring & accessories
- Polycarbonate safety shields: Protect installation crews from high current / high voltage bus bars & connectors
- Reverse polarity protection: Avoid potential damage to inverter caused by mis-wiring during installation

Reliability


- History: KACO has been manufacturing power electronics for more than 60 years
- Experience: More than 3 GW of inverters worth more than \$1 billion installed world wide
- Redundant power supplies: Increase reliability and uptime - no single point of failure for fans and control boards
- Power capacitors: Film capacitors are designed for the 20 years life of the inverter
- Split architecture design: Power electronics are protected in a separate chamber
- NEMA 3R enclosure: Includes stainless steel option for coastal installations
- Surge protection (SPD): Remotely monitored SPDs on all AC & DC inputs for better preventative maintenance
- Modular IGBT stack: Power devices, gate drives, and other critical components are integrated into easy to swap building block for fast maintenance and increased reliability

Monitoring

- easyLink data interface: S0, RS232, RS485, Ethernet and multiple analog & digital inputs are included
- 8GB SD card: Every inverter shipped with easy to access SD card that can store up to 10 years of data
- Graphical User Interface (GUI): Streamline inverter commissioning and access inverter data via color touch screen
- Free real-time monitoring: Built-in webserver provides easy access to performance statistics and PV system data
- Maintenance Tool: Remote control of software updates, inverter disconnects, parameter settings, fan speeds
- Integrated trace function: Remote, historical system diagnostics

Warranty - KACO is one of the few established inverter companies older than the warranties they offer

- Extended warranty options: Affordable 10, 15 and 20 year options available up to 90 days after purchase
- Operation and maintenance: Top of the line O&M contract available for up to 20 years

		Satcon PowerGate Plus 100 kW	Schneider GT100	AE PVPowered PVP100kW	Power-One PVI-Central-100-US-480
Electrical					
AC rated output	100 kW	100 kW	100 kW	100 kW	2 x 50 kW
CEC Efficiency	96%	96%	96%	96%	95%
MPP tracking range	300-600 V (300)	315-600 V (285)	300-480 V (250)	295-595 V (205)	330-600 V (270)
Fused inputs	1-4	1-6	optional	1-9	1-4
Mechanical					
Dimension (HxWxD)	73 x 68 x 37 in.	80 x 57 x 30 in.	73 x 67 x 46 in.	92 x 62 x 35 in.	65 x 49 x 33 in.
Weight	2425 lbs.	2350 lbs	3000 lbs	3000 lbs	2203 lbs.
Enclosure rating	NEMA 3R	NEMA 3R	NEMA 3R	NEMA 4	NEMA 1
Cooling method	variable speed fans	single speed fan	forced convection	variable speed fans	requires external fan
Manual Disconnects	AC/DC	AC/DC	AC/DC	AC/DC	AC/DC
Additional					
Standard comm. ports	RS485/Ethernet/S0	Ethernet	none	Ethernet	RS485
Remote software updates	Yes	No	No	No	No
Max. safe installation altitude	6600 ft.	6000 ft.	6600 ft.	6000 ft.	3000 ft.
Company inbusiness	> 60 years	> 25 years	> 175 years	> 30 years	> 38 years



Social Media in the solar industry

Everybody is talking about social media! What is it really and what are the benefits?

KACO's **Svea Jeske** met with **Tor Valenza aka "Solar Fred"** to talk about social media marketing in the solar industry.

SJ: How do you define "Social Media Marketing"? What do you believe its purpose is?

TV: There are a lot of definitions of that term. Here's the one that I believe covers about everything: "Social media marketing is a customer-focused marketing strategy that shares useful and/or entertaining content, engages customers, and enables and inspires customers to contribute and share their own content or comments." For example, Blogs, Twitter, Facebook, YouTube, these are the most effective social media tools out there. All of them allow you to offer useful and/or entertaining information. At the same time, your readers/viewers/followers can push a button and share your info with all of their friends. They can also comment or contribute their own creative responses to your information.

Why is this important? Because one-way advertising via print ads, television, and radio are pretty much a lumbering dinosaur. It's still necessary to some extent, but it's a less important tool. Our society is so bombarded with advertisements that we dismiss them and ignore them. So, who do we trust to recommend products and services? Our friends who are sharing their perspectives about what they're using and/or buying on Twitter, Facebook, Yelp!, etc. Consequently, brands now must become the "friend" of a consumer. Consumers want to "like" the products that they're using. Therefore, as I say often on my RenewableEnergyWorld.com blog, solar brands must "stand out and educate." Using the above social media tools, they must grab attention and be as helpful as possible, as responsive as possible, and have an authentic brand personality that inspires people to share info about the brand—and their products. That's the purpose of social media: To become the go-to "best brand friend" for solar or cell phones or computers, or even inverters. The same concept applies to the B-to-B world too.

SJ: I agree. Through the Twitter account KACO became even better connected and well known in the solar industry, which is a wonderful development to be part of. If a solar installer came to you and said "I'm considering social media to market my company." – What would you tell him? Is this a good idea?

TV: As a solar marketing consultant and as a genuine solar advocate, I would tell them that every solar company today needs some kind of solar social media strategy. Essentially, social media is the modern version of "word-of-mouth advertising," and because solar is such a large and long-term purchase, consumers and businesses need to trust the company that is installing this huge investment.

You build trust personally through the quote process, of course, but wouldn't it be great if customers already trusted you before they contacted you? That would make the sales process easier. And how do they trust you? Because they've been searching the web for a solar installer in your area, and

because you've blogged about solar in your city, they found you and your great blog through Google. Or they saw a friend's post on Facebook who said that they just went solar and that it was so easy and affordable with your company. That's much more powerful than a cold advertisement that says a slogan and provides a web site or phone number.

SJ: I think that's an important point. Companies are more approachable through social media. It is possible to build trust, credibility and a connection long before the actual sales process starts. To sum it up, what do you think are the major benefits of social media for solar companies?

TV: The major benefits are, again, building trust for this long sales process that can last 6 months to a year or longer. People don't understand solar and they're frightened that it's expensive and unreliable. Yet, they want to like it because it's clean, free energy. So, the more good, useful, and even entertaining information that you can provide on your web site or other platforms like Facebook, the fewer barriers you'll have to moving forward with the sale. Doesn't everyone want faster sales?

The second benefit is that your marketing materials, whether a blog post, or video, or funny Tweet, are shareable. Think about it. If you put an ad in a print magazine or newspaper, people may see your ad once while they're reading an article, and if they're interested in sharing that ad, they have to literally rip it out and give that ad to a single friend. With great solar information on a blog post, it only takes a few clicks, and they've shared that information with 400 friends on Facebook or LinkedIn, and perhaps thousands or more on Twitter. How powerful is that?

SJ: It's incredible to see how the ways of publishing information changed. Today everybody can publish text, videos and images to a very broad audience. That's true empowerment, I think. Tor, you are a marketing expert in the solar industry and you've been very actively involved in the "online solar community" for



years now. How did the “solar social media” world change over the past few years? Did it grow and evolve?

TV: Absolutely, solar social media changes daily, along with the entire social media marketing for every product. It used to consist of mainly your web site being optimized for being effectively searchable by Google (Search Engine Optimization), blogs and perhaps Youtube.

Today, Facebook and Twitter are essential, as well as e-newsletters. There are also tools out there that are constantly being developed and upgraded to manage all of your social media. Programs like Hootsuite allow you to read, contribute, and respond to posts from Twitter, Facebook, etc. from a single interface. They can also tell you



who are “Influencers;” that is, who you should try to engage, because one Tweet from them can spread your useful solar information far and wide. Remember: Your future customer may not be your Twitter pal, but one of his 10,000 followers.

There are also more online tools for creating good content and contests, as well as tools to make it easier for readers to share and contribute content. Unfortunately, very few solar companies are taking advantage of these new tools. To be honest, there are so many of them, I can’t even take advantage of them because it takes time to try them out, and there are so many to try out. So, when I find something that works, I stick with it until I need something more and go exploring.

SJ: You described very nicely how messages go viral in the online world. The beauty is that you reach a very diverse audience with your messages as well, which in my opinion is absolutely important for our industry. The more people get educated about solar, the better! And if they get to know your company on the way, well, that’s what you want, right? You run your own company “Unthink Solar.” What is your company offering exactly? Why did you pick the name “Unthink Solar”?

TV: At this point, UnThink Solar is a boutique solar social media and communications consulting company. We take a look at what you’re doing for marketing and communications, and recommend solar social media strategies to enhance what you’re doing. We also do branding; helping solar companies to find their unique voice or brand “personality.” Knowing who you are and how you present yourself is extremely important for social media strategies. I personally execute some of these strategies, but for larger campaigns that require web design services or guerilla marketing events, I partner with other companies.

UnThink Solar came out of a RenewableEnergyWorld blog post where I was telling my readers that solar needed to break out of their set-in-stone, boring solar marketing and communications ideas. They had to back up and forget, or “unthink” these old habits and start new solar social media habits, as well as to “be bold for solar.” In other words, take new marketing risks, stand out, and educate their customers.

SJ: Where can people get to know you? (Twitter, REWorld etc...)

TV: I guess the best way to engage with me is either on Twitter or commenting on RenewableEnergyWorld.com. In fact, as you know, you and I “met” on Twitter after exchanging good solar info. You also commented on my blog posts, and eventually that led to us meeting in person and developing a strong network and a friendship. So, right there, that’s one example of the power of solar social media.

SJ: You’re right. The way we met and became friends is a true social media success story and the best example that it works quite well. Thank you very much for your time and insight, Tor!

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