

K A C O



new energy.

National / International News
Cypress Mandela Training Center
KACO's *new energy*
Calendar of Events
KACO Training Center
Product Overview

Spring/Summer 2009

SUN

real change,
new energy.



Dear KACO friends,

In our current edition of the KACO Sun, KACO Solar, Inc. would like to offer a forecast on the further development of the PV market in the US in 2009.

"Yes We Can!" – On the evening of November 4, 2008, the voters of the United States of America had not only decided on a new president, but also on a new political direction. This wind of change also brings new impetus for climate protection, which already has been an important issue during Obama's electoral campaigns. So it came as no surprise that immediately after his success, he announced a 50 billion dollar state guarantee program for renewable energies.

In addition, the Federal Investment Tax Credit for PV plants has been extended. The new ITC now provides for 30% unlimited tax deductions for PV plants in private households (up until now, the deduction limit had been fixed at 2,000 dollars). For a 5 kW PV plant, therefore, homeowners are now granted additional tax benefits of up to 13,000 dollars. Additionally, utilities all over the United States are now eligible to take advantage of a 30% solar system tax credit! The possibilities for growth in the PV sector are colossal.

As of 1 January 2009, industry insiders expect a strong growth for plants between 1 kW and 5 kW. With our new blueplanet series 02xi (up to 5 kW) KACO Solar, Inc. is extremely well placed to meet this demand.

The result is overwhelming: According to the Wall Street Journal, 27 new large projects with a total volume of 5.4 gigawatts (!) are at the planning stage.

As a result, KACO Solar, Inc. has been able to sell the first project to a utility provider. Together with our strategic partner, Nettles Solar LLC, we have just completed the largest pole-mounted solar power plant in southern Florida with a total capacity of 1 00 kW for the Florida Keys Electric Co-Op.

With sunny greetings from California,



Peter Flachsmann



100 kW PV plant in Florida, Peter Flachsmann
(CEO KACO Solar Inc.)

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K A C O



new energy.

real change, new energy.

The KACO Corporate Identity Shift

You know us and you love us. KACO Solar Inc. We're not going anywhere but we're whitewashing our siding and you'll find our new look very attractive. From our logo to our training and everything in between it's a new **KACO Solar**. You'll see straight away that our new tag line *new energy* encompasses the breadth of our dedication to becoming an integral part of the new energy economy.

KACO is a staple in the world of photovoltaic inverters and we're excited that as we've been fortunate in the markets throughout the world that we'll be able to offer our exciting new products under a new look and name. KACO will still be known throughout the industry as KACO Solar. But, you'll start to notice our *new energy* tagline throughout our newsletters, press releases and tradeshow materials by May of 2009.

The KACO website is the next to experience this overhaul and we are excited to say that our service will improve as well as the look of the website. We have now integrated our training program and customer service options seamlessly into the new website.

Enjoy and have a sunny day.

K A C O



new energy.



The team with CEO Peter Flachsmann and John Nettles



The largest pole-mounted solar power plant in Florida – of course with solar inverters made by KACO.



Peter Flachsmann and John Nettles

FLORIDA, Here we come...

When combining the words “photovoltaics” and “USA,” people may first think about California. But don’t forget that New Jersey, among other states, has already taken a run for a very ambitious PV program, and that the country as a whole has huge

solar potential to tap everywhere. Maine, for example, is at the same latitude as Germany, which has the world’s most successful PV Program. The Southern US States have one and a half times the sunshine of all of Europe, and are as close to the equator as the

northern African states of Morocco, Algeria, Tunisia and Libya! In short, the country has sun enough to spare. Therefore, we are particularly proud to sound the bell for the new Solar Age in Florida together with John Nettles. See you later, Alligator!

CYPRESS MANDELA TRAINING CENTER

**Cypress students move on past
jails and into the program.**

by Clinton Porter

Interview conducted by Clinton Porter and Svea Jeske, April 15th, 2009.

KACO makes every effort to be an active participant in our local communities. In the fall of 2008 KACO was introduced to the Cypress Mandela Training Center. The Cypress Mandela Training Center is a 501 (c) 3 that offers continuing education assistance to individuals for free. The Center provides construction training and in the past six months has implemented a green building program with a heavy focus on energy efficiency and solar system installation training. KACO has donated a working 1501xi inverter to expand their program and to provide their trainees the opportunity to work hands on with solar energy.

We arrived early on Tuesday morning to participate in a round table discussion on the future of the solar training program at the Cypress Mandela Training Center organized and hosted by founding director Arthur Shanks. In attendance were Sue Kateley of CALSEIA, Gary Gerber of Sun Light and Power, among other influential policy makers, and electric industry association players like NECA and the IBEW. In addition the staff directors of Laney College and the Oakland Green Job Training Board were present to offer their expertise on developing course curriculum.

After a lively discussion of the future of solar standards and the fate of the Center's solar training program KACO was given the opportunity to tour the 25,000 sq. foot Cypress facility. Overwhelming in it's size and scope the Center is

to date the most ambitious example of solar training for under privileged members of the San Francisco community. The Center is currently in it's first leg of it's training program and through the direct involvement of companies like KACO and Sun Light and Power is quickly gaining momentum. We were given the opportunity to speak to the trainees after the meeting and received an enthusiastic thank you for our donation. The trainees have expressed growing interest in the concepts of green building and solar electricity and KACO is thrilled to be a part of this dynamic training opportunity.

The Center has trained literally thousands of people since it's inception in 1993. Back in those times Mr. Shanks was a monitor at the infamous "supermax" prison facility Pelican Bay. It was around that time that he says he came to the realization that getting folks educated and trained for a trade before they fell down the path of incarceration made the most sense. He maintained his involvement at Pelican Bay during the creation of the Cypress Mandela program. His involvement with the criminal justice system at Pelican Bay is evident in his caring yet strict approach at the center.

Director Arthur Shanks sat down with us after our meeting and tour to talk more about the development and goals of the Center. An enchanting man that appears ageless, Mr. Shanks gave us the impression that he has inexhaustible dedication to the further development of his pet project. He worked single handedly to develop the program and is now assisted by eight employees. The solar program is currently

**Oakland is the most diverse city
in the world. What better place
to offer this type of program?**



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Center's rules for engagement. Each participant must complete a Math and English entrance exam, random drug screenings, and may not miss more than three days throughout the 16 week cycle. The schedule for attendees is Monday through Friday from 7:30 – 3:30 PM. It is apparent from the raucous "YES SIR" exclaimed by all trainees when we were introduced to the group after our meeting, the Center is a no frills excursion into discipline and recovery. Mr. Shanks ensures that his trainees are well taught and well cared for throughout their training and well after.

designed to focus on grid tied solar installation but Mr. Shanks states plainly that his mission is to incorporate all forms of solar electricity and solar thermal training by the end of 2009.

All of the training at the Cypress Mandela Training Center is hands on. In the main symposium room of the Center there are actual displays of every type of construction equipment and now a solar electric system is on hand to install and re-install for every training exercise. The Center's trainees are given the option to understand construction from every angle and now even from the green perspective.

There are approximately 48 people that enter each of the Center's three 16 week annual training courses. There are about 46 that finish each of the cycles. Mr. Shanks attributes the success rate of the program to the dedication of each of the individuals that attend and the strict nature of the

Love, respect and honor is the basis for our team building.

His dedication and hard work have won him and the Center the acclaim of organizations throughout the nation and as far away as Washington, D.C. Mr. Shanks was most proud of the recent visit by President Obama's Energy Czar Carol Browner. Mrs. Browner has shown her support for the proactive outreach of the Center and their dedication to expand on the President's energy goals by offering low income and under privileged members of American society the chance to participate in the green economy. She was on site just a few weeks before our visit to the Center.

Mr. Shanks expressed his love of the simplicity of the green lifestyle and hopes to impress this same zeal onto his students as they pass through his program and back into the workforce. KACO is happy to help and hopes that after reading this so will you! Take a moment to contact the Center today if you are in a position to donate money, time or product to help further this amazing place and this remarkable man.

SOCIAL COMMITMENT

Prizes and Awards

Having continued its social commitment throughout the year 2008, KACO has been awarded the prize for medium-sized enterprises "LEA" by the German CARITAS and the Department of Trade and Industry of Baden-Württemberg. "LEA" stands for the German words for "Performance, Commitment and Recognition" of companies investing in social tasks. For the second time the presentation of prizes took place on July 2nd, 2008 with a festive ceremony at the Haus der Wirtschaft in Stuttgart. In his greeting speech to the audience, Mr. Pfister, Minister for Economic Affairs, pointed out that the LEA prize is the most important Federal contest in the field of Corporate Citizenship and Corporate Social Responsibility. Our endeavours for a liveable future are far-reaching, indeed: the Governor of the Province Napo sent us a metal plate as a greeting and recognition of our commitment for the protection of the rain forest of Huasquil. Providing evidence of our social commitment, it now adorns the reception area of our Factory I, signaling to our visitors the importance of Corporate Social Responsibility here at KACO.



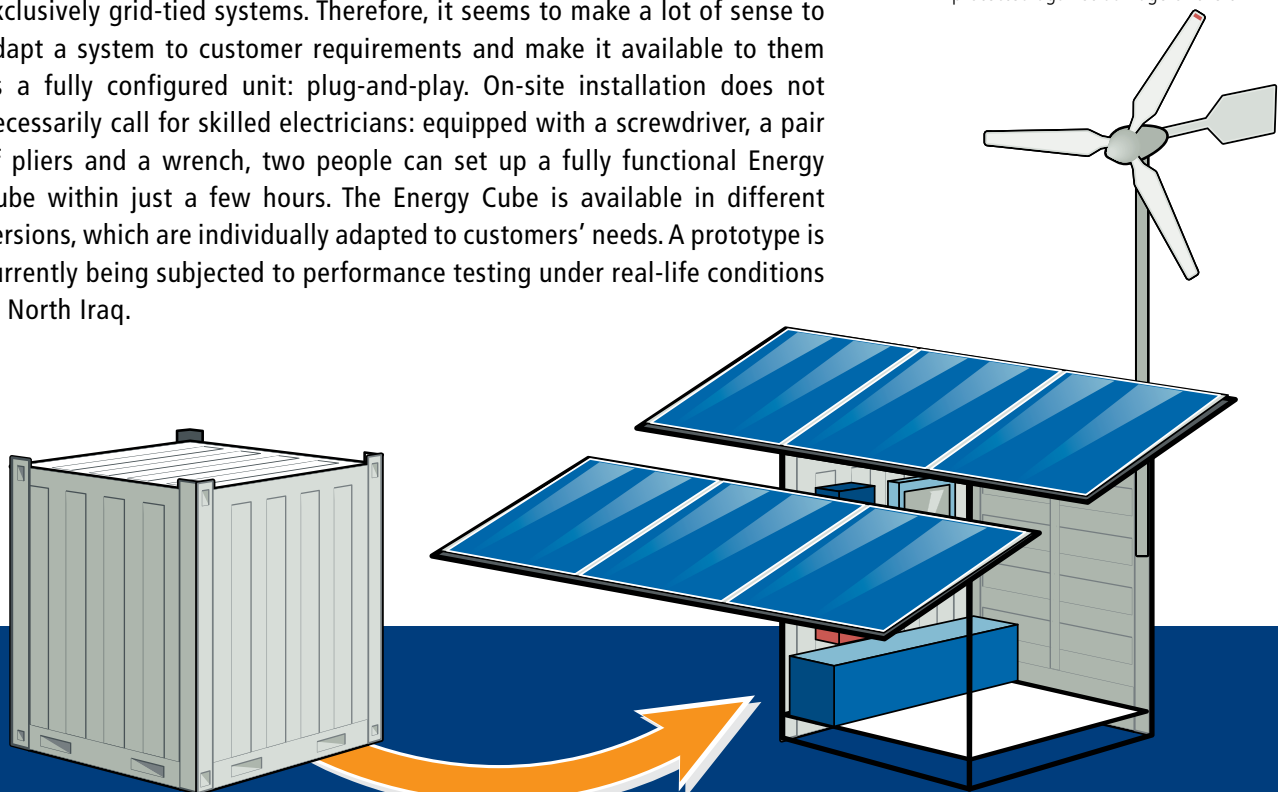
A Magic Cube

Regardless of our joy about the continuously increasing share of photovoltaics in the energy mix of numerous countries, there is a simple fact that we should keep in mind: a great part of the human population has to live without and will never receive a public energy grid; one to two billion people have to do without electricity altogether. Therefore, it is only logical for KACO to strengthen its commitment in the field of off-grid energy supply. The Energy Cube has been designed specifically for use in regions whose infrastructure does not allow the development of public grids. It constitutes a mobile power supply unit, which – in contrast to other common systems – works without diesel blocks and is fully (100 %) based on renewable energy sources. Using a 1.3kW PV generator, it converts sunlight into current and subsequently stores it in a battery bank. The system is supported by a wind generator, which compensates for the lack of solar energy at nighttime or during months of reduced solar radiation. The “heart” of the system is a KACO K 3000 off-grid inverter, capable of providing short-term peak power of 9 kW.

Typical weaknesses of the off-grid concept have been eliminated with a special focus on providing a turnkey system that is perfectly adapted to our customers’ requirements. The implementation of stand-alone systems was unsuccessful in many cases because components were just “put together,” did not match, or quite simply, were not compatible. Decentralized energy supplies are more difficult to plan, construct and operate as compared to exclusively grid-tied systems. Therefore, it seems to make a lot of sense to adapt a system to customer requirements and make it available to them as a fully configured unit: plug-and-play. On-site installation does not necessarily call for skilled electricians: equipped with a screwdriver, a pair of pliers and a wrench, two people can set up a fully functional Energy Cube within just a few hours. The Energy Cube is available in different versions, which are individually adapted to customers’ needs. A prototype is currently being subjected to performance testing under real-life conditions in North Iraq.



Location Irbil, Iraq: All the components are accommodated in a container cube and securely protected against damage or theft.



Energy Cube

KACO at the **INTERSOLAR** Exhibition

At the first Intersolar exhibition in Munich, KACO was represented with a completely new exhibition stand. The two-story cube on an area of 2500 sq.ft. offered just enough space to present all the new developments and to welcome the numerous interested visitors in an adequate manner.

The second day of KACO's appearance at the exhibition was a real highlight: CEO Ralf Hofmann introduced our most important innovation of 2008, the central inverter KACO XP100-HV, to visitors and the trade press – and achieved record-breaking sales volume on the same day!

Of course it is hardly possible to attribute such overwhelming success to a single event only, but the Intersolar exhibition with its excellent results definitely has contributed towards KACO's 2008 sales volume of about 480 MW.

This is why we will continue to demonstrate our excellence again during the next exhibition in 2009.



Construction of Factory IV

Everybody talks about the weather... shuddering with fear of a stormy year 2009. Or worse, a year of recession. KACO, however, remains confident that photovoltaics will be amongst the final winners and has invested in the next level of expansion. The construction of our new Factory IV started in October 2008 and is expected to be completed in July 2009. Of the total 60,000 sq. ft. area, 25,000 sq. ft. is for production and warehouse areas. The new company headquarters will be located in this facility – an important strategic action to pool our Research & Development and Sales & Marketing activities in a single location. Just like our other buildings, the future headquarters will also be equipped with a PV rooftop plant and solar-panel facade.

The groundbreaking ceremony was hosted by Joachim Kruck, CEO of the construction company, and his colleague and site manager Werner Durst, as well as by our long-standing supporters Thomas Strobl, CDU member of the German Congress, and Klaus Grabbe, Mayor of Neckarsulm.



F. l. t. r.: Werner Durst (Kruck&Partner), Klaus Grabbe (Mayor), Member of the Bundestag Thomas Strobl (CDU), Ralf Hofmann (KACO) and Joachim Kruck (Kruck&Partner).



AUSTRIA

KACO at the "Wilder Kaiser"

On the slopes of the "Wilder Kaiser," the famous mountain chain in the Eastern Alps, KACO solar inverters are being used for the ski racing circuits this winter season. The new gondola lift "SkiWorld – Kitzbuhel Alps" near Brixen in Thale (Tirol) has been supplemented by a drag lift now being operated with the power of a 14.5 kW photovoltaic plant. Using the PV modules located at the south side of the new valley station, and four 3500xi inverters made by KACO, the first solar ski lift worldwide is now driven 100% by solar power. The plant yields approx 12,000 kWh per year, whereas 9,000 kWh are needed for operation during the winter season, states Rudi Köck, authorized representative of the "Bergbahnen Brix." The rest of this output is fed into the public grid of Tirol.



PORTUGAL

Portugal and the Long Wind of PV

Bad news from Portugal.

Although KACO has been the first manufacturer to receive a certificate that authorizes the use of its solar inverters in Portugal, we are still unable to report a big jump in the growth of PV power from the Portuguese grid. The reasons seem to be quite familiar. On October 2nd 2008, the Direccao General de Geologia e Energia (DGGE) published statistics showing clearly how strongly the implementation of the new grid-feeding legislation is hindered in practice

by interest groups. During the first six months, 4,120 applications were filed for 14MW of grid-feeding power. Of these applications, only 1,516 were accepted and released, corresponding to 5.3 MW of solar power. What's more, this release is only temporary – the final release is not granted until the plant is accepted by the controlling body, Certiel. Up until October 2nd, Certiel had conducted a mere 80 plant acceptance procedures for 273 kW (!) – out of the 1,516 applications mentioned

above. And these plants are not even commissioned!!

Although – theoretically – nothing stands in the way of a connection to the public grid, many electricity distributors simply refuse to cooperate or take other steps to hinder or delay the process. The facts and figures are speaking for themselves!

All this, of course, demonstrates the truth of our motto at KACO: You have to be more than just fast – you have to be persistent!



CELEBRITY SOLSTICE

KACO Inverters Going on a Cruise

The "Celebrity Solstice" is the first cruise liner in the world that is equipped with a PV plant. On board, of course: KACO 4501xi, 3501xi and 1501xi inverters.

The photovoltaic plant has been planned and implemented by the company Kopf Solarschiff GmbH from Sulz/Neckar. The "Celebrity Solstice" is the largest cruise liner built by the Meyer shipyard GmbH and is owned by the ocean carrier Celebrity Cruises. The word solstice is derived from the Latin *sol* (sun) and *sistere* (to stand still), because at the solstices, the Sun stands still in declination; that is, its apparent movement north or south comes to a standstill (wikipedia). The AC grid aboard a ship presents solar inverters with special challenges. On-board power supply systems do not exhibit the same stability as power supply systems on land. Fluctuations in the main's frequency would cause the inverters to be disconnected from the grid. As a countermeasure, the impedance measurement was deactivated and the safety shut-down thresholds were expanded. With a total output of 47 kW from 6 partial plants, our KACO inverters now continuously deliver valuable energy to the on-board power supply.

The solar modules, too, had to fulfill extraordinary requirements. The atrium and solarium of the "solar ship" are covered with a total of 61 glass on glass modules serving as design elements. Each module is custom-made and has to withstand salt water and wind speeds of up to



100 mph. The glass modules are safe to walk on and deliver 18.8 kW; additional modules with an output of 28.2 kW are laminated directly on the deck, so as to avoid wind resistance. Celebrity Cruises plans to equip more ocean liners with solar energy in the future. In the meantime, however, the ingenious technical accomplishments aboard the "Celebrity Solstice" can be admired by anyone wishing to set out for a cruise of the Mediterranean or Caribbean.

SPAIN

Tordesillas

Solar park with 3.06 MW

Horst Siffrin (Embassy Counselor), Juan Alonso Morales (Mayor of Rueda), Ricardo González Mantero (Director General for Energy at the Ministry of Industry of the Region Castilla y León), Thomas Strobl (MdB, Member of the Bundestag), Luis Parra (Site Manager), Ascencion Pajares (Project Coordinator), Dr. Roberto Soto (CEO, Deutsche Solar Ibérica), Joachim Kruck (CEO, Deutsche Solargesellschaft mbH)

Tordesillas

On 15 July 2008, Thomas Strobl, Member of the German Congress, Horst Siffrin (Embassy Counselor), Juan Morales (Lord Mayor) and the Director General for Energy at the Ministry of Industry, Ricardo Gonzales Mantero, conducted an official parliamentary visit of the 3.06 MW Solar Park Tordesillas, Spain. The visit had been scheduled by Mr. Kruck, CEO of the DS Deutsche Solargesellschaft GmbH.

A total of 90 SunCarriers built by a+f, combined with 90 KACO 33000xi-Park central inverters were installed in Tordesillas, which is located 110 miles north of Madrid. With 2,000 kWh/kW, the average annual energy production is expected to far exceed the forecasts – a fact that is true for all solar parks equipped with KACO inverters, SOLON modules and SunCarrier tracking systems.

Going up to the Grid

The village of Calasparra is situated about 50 miles west of Murcia, in one of the sunniest regions of the Spanish peninsula. Here, in the south-east of Spain, KACO and the DSG Deutsche Solargesellschaft mbH, have built up the Solar Park Calasparra consisting of 45 tracking systems with a capacity of 35 kW each and a total output of 1.59 MW. Independent predictions expect an annual yield of more than 2,000 kWh per installed kilowatt power; corresponding to an electricity supply for about 3,000 persons per year. And as we know from our experience with the Solar Park Alcolea, the real output may be significantly higher than expected.

Just about 8,000 polycrystalline P220/6+ Solon modules were installed in Calasparra. These modules were chosen specifically because of their good temperature coefficient. The tried and tested SunCarrier system of a+f GmbH is used for tracking, which again will make yields increase by approx. 25 percent as compared to a fixed installation. And, of course, the solar inverters are made by KACO: Our 33000xi-Park inverters are the ideal partners to work with under the hot Spanish sun.

Calasparra

Solar Park with 1.59 MW Calasparra



Stable in Salbitz

First to Become a Partner of First!

Sonnemann & Schmid Solar GbR combined the enjoyable with the useful and built a new riding hall with a 160 kW PV plant for its precious horses in the Saxon town of Salbitz. The PV solar plant consists of 2205 First solar FS-272 modules, paired with 18 KACO 8000xi and 1 KACO 3500xi. First Solar, one of the world-leading manufacturers of thin-film modules, has released its CdTE modules for operation with transformerless (!) solar inverters made by KACO. This means that First Solar plants generally can be configured with KACO inverters by means of a so-called single SDA by an authorized First Solar retailer. About 500 guests celebrated the inauguration of the new riding hall and the new PV plant in September 2008.

GERMANY

SPAIN

Trade Exhibition in Valencia

The PV-SEC, which took place in Valencia early in September 2008, seemed to remain greatly unaffected by the plans to change the Spanish feed in Tarrif at the end of the month. KACO's exhibition stand was well-attended and offered another good opportunity to discuss the previous year and the new conditions for the upcoming years with our

customers. Of course, the euphoria of the years before had been dampened and the demand shifted from megawatt parks towards smaller, more manageable sizes. Perhaps this development merely reflects a "normalization" on the Spanish PV market, which in fact, is very positive for all market players.



Matthias Haag (KACO, 3rd from left) with Dr. Matthias Vetter, Prof. Eike Weber and Dr. Günther Ebert (all from Fraunhofer ISE)



JINDO

10MW PV Project in South Korea

At the end of 2007, the idea was born to build a 10MW PV power plant with tracking technology on the island of Jindo in Korea. KACO was able to win through harsh competition with its excellent products combined with the SunCarrier tracking system of a+f GmbH. In close cooperation with the local KACO subsidiaries, KACO AP and KACO KOREA, the first partial plant with 400 kW was finished by the end of September 2008 and since that date, has successfully fed green energy into the Korean grid. By the end of this year, another 1.6 MW of solar power will be connected to the grid. The plant is equipped with KACO 33000xi and XP100-HV central inverters, both units ideally suited for ground-based solar power plants. KACO CEO Ralf Hofmann attended the plant commissioning personally and congratulated Mr. Lee Kyu (SunCarrier KOREA) on the successful start of the project. This excellent cooperation will ensure that the overall project can be finished in 2009.



David Kim (KACO AP), Ralf Hofmann (KACO Gerätetechnik) and Lee Kyu (SunCarrier KOREA)

Round Trip through KOREA ...



Peter Flachsmann and Ralf Hofmann visiting KACO KOREA



Ralf Hofmann,
Paul Kim,
Peter Flachsmann

GREEN ENERGY EXPO 2008



The Green Energy Expo 2008 was held in Daegu, South Korea from May 21st – 23rd, 2008. The third largest city

in South Korea, Daegu is located in the south-eastern part of the Korean peninsula. The German Chamber of

Commerce and Industries described this exhibition, which is provided with a special "German Pavilion", as the most influential exhibition for renewable energies.

KACO displayed its products right next to the German Pavilion, focusing on the introduction of its new KACO XP100-HV. This newly launched "workhorse" received much attention from many visitors, due to its clearly superior design, excellent performance and powerful MMI functions. The exhibition was attended by about 190 companies and, with 80 international companies from 31 countries, demonstrated that it has gained an excellent reputation at the global level.

KOREA ENERGY SHOW 2008


KACO was also represented at the Korea Energy Show 2008 in Seoul. From September 29th to October 2nd, 2008, our focus was on inverters of the power classes 30kW and 100kW, which present the most efficient solution in regards to the Korean Feed in Tarrif. As the most economical plant capacities are now at max 200 kW, PV installers are now more interested in 30KW/100KW inverters instead of big inverters over 250KW, which had been preferred under the old FIT legislation. "Our expectations have been met by far, and our Powador Series 00xi and the new XP100-HV received remarkable attention by many visitors. Once again, this exhibition has convinced us that KACO will continue to be the most successful supplier of solar inverters in the Korean market next year," said Eric Hong of KACO Asia Pacific. This trade

exhibition was organized by Korea Energy Management Corporation, the most influential public corporation handling all the subsidy programs

concerning renewable energies. About 200 exhibitors from 17 countries participated in this Korean exhibition for renewables.



US TRADESHOWS & EVENTS



We are excited about the many tradeshow events that we'll be a part of this year. For the first time since we announced the creation of the O2xi series inverters we will officially begin taking orders at the ASES show in May of 2009! We are just as excited as the rest of the industry for these fantastic additions to the KACO product offering. We will also be releasing some exciting new inverters in 2009 that we'll talk more about at Intersolar and Solar Power so stay tuned!

We have organized a training event at all the shows mentioned below so be sure to email us and sign up today!

NEW YORK

ASES

05/11 – 05/16
Buffalo, NY
Buffalo Convention Center
www.ases.org
Booth # 501 & 502
SEE THE O2XI INVERTERS!

WISCONSIN

Midwest Renewable Energy Fair

06/19 – 06/21
Custer, WI
ReNew the Earth Institute
www.the-mrea.org
Check www.kacosolar.com for booth #
SEE THE O2XI INVERTERS AND NEW MONITORING!

VERMONT

Solar Fest

07/10 – 07/12
Tinmouth, VT
Forget-Me-Not Farm
www.solarfest.org
Check www.kacosolar.com for booth #
SEE THE O2XI INVERTERS AND NEW MONITORING!

CALIFORNIA

Intersolar

07/14 – 07/16
San Francisco, CA
Moscone Center
www.intersolar.us
Booth # 9447
SEE THE EXPANDED O2XI INVERTER LINE AND NEW MONITORING!

Solar Power

10/27 – 10/29
Anaheim, CA
Anaheim Convention Center
www.solarpowerinternational.com
Booth # 2138
SPECIAL INVERTER LINE RELEASE!

"KACO NEW WAY TO TRAIN"

This year, KACO introduces the "New Way to Train" program. We now offer interested solar contractors and new solar folks the opportunity to let us know when and where to offer solar training. We have also expanded our training program to include information needed by the new solar contractor. It's a growing market, and KACO is the best partner for new installers needing to learn the ropes. It's a competitive world and having the right education makes all the difference. Contact us at events@kacosolar.com today to learn more about how to set up a training date at a location of your choice today!



KACO TRAINING CENTER

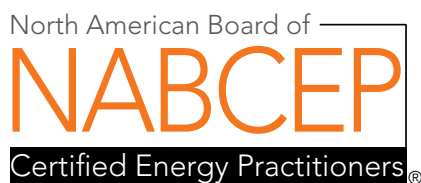
KACO is excited to offer a tremendously updated training program in 2009. Our timely and helpful curriculum speaks directly to the needs of the installer that is not yet familiar with the solar industry. Not only are we offering a solid "Introduction to Solar," we go a step further - providing a unique "Advanced Solar" section at our training. Among a wide variety of PV topics, the training includes everything from residential, commercial and utility-scale system design to important industry information and contacts.

With the solar industry now becoming one of the most exciting and well-paid industries in the world, KACO has created a way to help more people be a part of the action. If you or your team are excited about solar and want to know more just give us a call. Together we'll discover the topics that interest you most, and KACO will provide a customized training session specifically tailored for your needs.

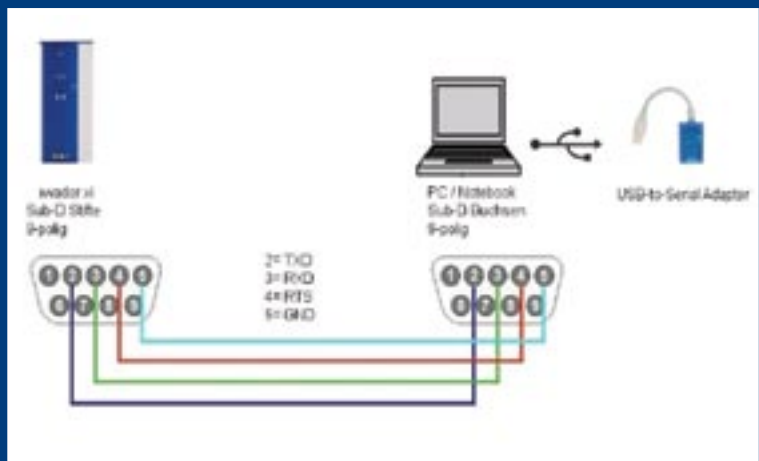
Contact the KACO-training center at 415-931-2046 now and get more information about our new and unique way to teach you about solar.

We're NABCEP certified!

Participants who complete the certified technical training will receive three NABCEP continuing education credits. Individual participants will receive an official KACO certificate of completion.



KACO Accessories



System operators or owners of professional PV Plants must assure the ROI of their plants. No matter what kind of plant it may be, the high investments and the responsibility for investors and owners of PV systems, require a solid monitoring system. Kaco offers a variety of options for monitoring all that and more.

KACO-viso

The KACO-viso is a very simple tool for everyone to use for single inverter systems. This free program can easily be downloaded from our website. The image at left illustrates this easy to connect option for a laptop or desk computer.

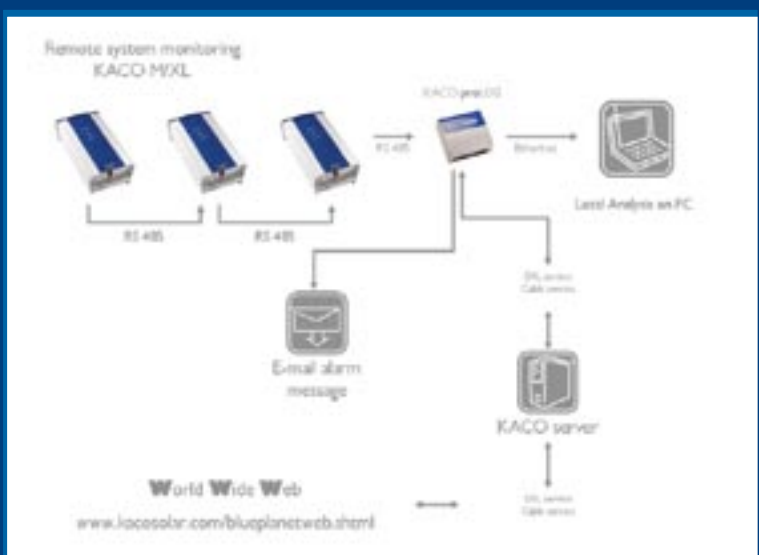


KACO-proLOG

The KACO-proLOG monitoring system allows you to monitor your photovoltaic installation from your PC anywhere in the world. The proLOG constitutes the most reliable way of remote plant monitoring assuring you instant notification by email, fax or text message in case of PV system failures or breakdowns. The integrated web portal can be added-on with powerful user interface options such as power production charts as well as financial and environmental data.

This web portal with the appealing graphical representation of the system provides everything you need to know about your PV plant.

The proLOG is capable of monitoring up to 36 inverters which will be a great and inexpensive tool to supervise large PV systems with multiple string inverters.



Monitor and Evaluate Systems and Plants at a Glance

KACO-watchDOG

Here we have our newest data monitoring accessory which will be integrated into the new 02xi blueplanet inverter. This card can collect data from up to three inverters. This allows you to use just one card and can save you a great deal of money and installation time.

The watchDOG is easy to install and lets the installer determine if the system is communicating with the inverter as well as our server by simple pushing a button on the card. An integrated LED will immediately show that the installation was successful.

KACO-inSIGHT

A new addition to our list of accessories is the KACO-inSIGHT. The wireless frame retrieves the system information directly from the server without going to your computer.

Efficient remote plant monitoring and analysis can be realized quickly. The interface is ultra user-friendly and employs modern data system technology. This innovative monitoring technology contributes to cost cutting by optimizing resources and service planning and transferring data cost efficiently via the Internet.

For more information, please go to www.kacosolar.com



After a long time of waiting I can safely say there is a light at the end of the tunnel.

First, let's talk **02 series inverters** and the progress. To date we have installed beta units all over the United States. We have been collecting data and the inverters have been producing power. We have stable software that has run for very near a year and we are very comfortable in its reliability. The best news was getting the formal listing on two of the four new inverters. This listing comes to us very late as some of you may know. You may wonder why? We would like to say, we wanted more time to produce a reliable end product and we did not want the installers of

America to be our laboratory. We are very pleased to receive the UL listing on the **1502 and 2502 inverters** and look forward to shipping one to you soon. We expect UL on the **3502 and 5002** to follow right behind and we will keep you posted on these units.

The KACO blueplanet 1502 and 2502 are the only inverters in their class to have such high efficiencies and will be a perfect solution for the new breed of systems to be installed in this challenging economy. We feel the average residential system size may decrease due to the economic realities facing us all today. These smaller models are a perfect fit for the numerous smaller residential installations we see becoming the trend all over the country. Not to mention they are a great value for the cost and the many features they have.

The home builder market may have slowed to a snail's pace; but new homes with solar are moving faster than those without. Remember, solar can sell homes!

A New Breed of Inverter

Through tireless direct interaction with installers across the country, KACO has realized the most pressing needs of PV professionals and has transformed those wishes into the **02xi blueplanet** series. Our new inverter design is the perfect combination of form and function that today's solar installer is looking for. KACO has also subjected the 02xi series to a bundle of field tests to ensure the most successful release of a new inverter in the industry.



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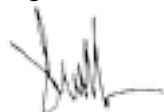
Visit us online and discover why you should be using KACO inverters with your projects today.

We are excited to speak about the simplicity of installing the 02 series inverters. The new KACO inverters are very easy to install, just mount and connect! The inverters include an integrated AC/DC disconnect switch that the installer will not have to wire up or install on to the inverter. Yes, that's right, just mount the inverter and connect the AC and DC wiring and move to the next job. We shall continue to use high frequency transformers so they remain lightweight. And we will still offer inverters with no fans to cool them, just the air we breathe keeps them temperate. These

units will work in a positive or negative grounded array and 240V or 208V grids. Please ask us for the KACO-watchdog inverter integrated monitoring card which will monitor your PV system. It is economical and feature intensive. You can monitor up to three inverters per card. If a failure occurs the installer and the customer will receive an instant alarm to notify them of the error. This will minimize downtime to industry leading heights. Connection is done through the standard 485 communication protocol.

We will notify the industry about the shipping dates for this series and we will keep you posted on the other two units and their UL status.

Regards,



Vince Lucia
VP Operations KACO Solar

0% Emissions 100% Dedication

Clean energy made ...clean!

Our commitment to clean energy goes way deeper than just the quality inverters we manufacture. Our entire corporation is dedicated to implementing and innovating green business practices from the inside out.

You see, we believe clean energy products should be made with clean energy. KACO's onsite PV systems generate more than 100% of the electricity that we use on an annual basis. Our onsite Biomass Combined Heat & Power Plant provides 100% of our heating needs.

KACO also provides employees free public transportation passes, electric vehicles and bicycles for their commute. We have even started to plant trees to further meet our goal of carbon neutral manufacturing.

We believe quality clean energy components should be made clean.

Learn more about our commitment to cleanenergyandotherimportantcompany developments at www.kacosolar.com/zeroemissions.php



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KACO



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