

Leading the debate on Future Energy and Sustainability

Abu Dhabi - United Arab Emirates
The meeting place for world leaders



Abu Dhabi Sustainability Week (ADSW) is the ground-breaking global forum that unites thought leaders, policy makers and investors to address the challenges of renewable energy and sustainable development. With the global population set to reach nine billion by 2030, ADSW promotes collaborative thinking and development to accelerate the sustainable solutions needed to support rapid economic and population growth. An Abu Dhabi government initiative, ADSW is the largest gathering on sustainability in the Middle East and a significant forum in stimulating the international dialogue and action.

Key Events



ABU DHABI

SUSTAINABILITY WEEK



With a mandate from countries around the world, IRENA aims to encourage governments to adopt enabling policies for renewable energy investments and provides practical tools and policy advice to accelerate renewable energy deployment with a goal to provide clean, sustainable energy for the world's growing population.



The Opening Ceremony

The ADSW Opening Ceremony initiates four days of debate, discussion and cooperation. Attended by over 3,400 delegates, it brings the world's sustainability community together.



Global Action Day

Abu Dhabi Global Action Day at Abu Dhabi Sustainability Week is a high-level event aimed at turning the ambitious goals of COP 21, the Paris Climate Agreement and the 2030 Agenda for Sustainable Development into practical and innovative policy, investment, technology and partnership solutions.



The Awards Ceremony

The Zayed Future Energy Prize is the UAE's international awards for energy and sustainability pioneers and represents the vision of the nation's founding father Sheikh Zayed Bin Sultan Al Nahyan, who championed environmental stewardship. Through these annual awards, his legacy has ensured over 150 million people have been positively influenced by the winners of the prize since its inception in 2008.



Conference

Women in Sustainability, Environment and Renewable Energy is a bold, action-oriented initiative that endeavours to mentor, empower and inspire women to be catalysts of innovation, industry leaders and drivers of commercial solutions.





18 - 21 January, 2016

The World Future Energy Summit (WFES) is the foremost annual global event committed to advancing future energy and clean technology. As the centrepiece of Abu Dhabi Sustainability Week, it engages political, business, finance and academic leaders to stimulate dialogue, innovation, and commercial and investment opportunities to drive the development of sustainable energy worldwide.





18 - 21 January, 2016

The International Water Summit (IWS) is a global platform for promoting water sustainability in arid regions. Based in Abu Dhabi, a global hub for water innovation, IWS is at the heart of the water-energy nexus; the only place where the world's water and energy experts come together.



EcoWASTE is a leading international platform for advancing sustainable waste management and recycling across MENA and beyond. Seeing waste as a valuable economic resource, EcoWASTE brings together leading local and international experts and providers with key buyers and decision makers.





The Festival at Masdar City is a programme that engages in a multitude of activities and surprises. Aiming to spread awareness and educate the public about sustainability and clean energy.

International Renewable Energy Agency (IRENA) General Assembly



The International Renewable Energy Agency (IRENA) is mandated as the global hub for renewable energy cooperation and information exchange by 140 Members from 139 States and the European Union. Roughly 30 additional countries are in the accession process and actively engaged. IRENA supports countries in their transition to a sustainable energy future, and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. The Assembly is IRENA's ultimate decision-making authority and is made up of one representative from each member. It convenes annually to discuss and decide upon issues such as the work programme, the budget, the adoption of reports, applications for membership and potential amendments to the Agency's activities.

For more information visit: www.irena.org









The Opening Ceremony and Global Action Day



Every year, at the beginning of Abu Dhabi Sustainability week in January, our world class Opening Ceremony initiates four days of debate, discussion and cooperation. Attended by over 3,400 delegates – from world leaders and policymakers to business leaders, scientists and academics – it brings the world's sustainability community together.

Abu Dhabi Global Action Day at Abu Dhabi Sustainability Week is a high-level event aimed at turning the ambitious goals of COP 21, the Paris Climate Agreement and the 2030 Agenda for Sustainable Development into practical and innovative policy, investment, technology and partnership solutions.

For more information visit: www.adsw.ae











The Zayed Future Energy Prize Awards Ceremony



The Zayed Future Energy Prize was established by the UAE leadership in honour of the environmental, social and economic sustainability advocated by the nation's founding father Sheikh Zayed Bin Sultan Al Nahyan.

The US\$4 million annual awards invites innovators from around the world to be part of a growing community, committed to finding solutions that will meet the challenges of climate change, energy security and the environment.

In 2015, a record number of entries, 1437, were received from 97 countries. This underlines the truly global reach of the prize and the farsighted vision shown by the UAE leadership in sustainability and renewable energy.

For more information visit: www.zayedfutureenergyprize.com









The World Future Energy Summit



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By bringing thousands of future energy specialists together, WFES is a highly effective platform for promoting the latest solutions, generating leads and identifying new business potential.

For more information visit: www.wfes.ae











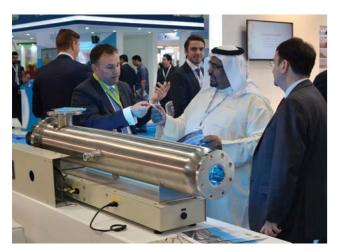
The International Water Summit



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At IWS, policymakers, scientists and business leaders tackle the urgent challenges of water waste, access and security, across the municipal, industrial and real estate sectors. IWS encourages capacity building by global collaboration and sharing best practice, offering cutting-edge solutions, fostering innovation and enabling new opportunities.

For more information visit: www.iwsabudhabi.com









EcoWASTE



EcoWASTE is a leading international platform for advancing sustainable waste management and recycling across MENA and beyond. Seeing waste as a valuable economic resource, EcoWASTE brings together leading local and international experts and providers with key buyers and decision makers.

Showcasing the latest innovations and technologies, enabling the exchange of best practice, and opening-up new business opportunities, it plays an ever more important role in helping municipal authorities, industry and large corporations to meet ambitious landfill and recycling targets.

For more information visit: www.ecowaste.ae













The WiSER Initiative Conference



Founded by Masdar, Abu Dhabi's renewable energy company, and the Zayed Future Energy Prize, WiSER is a bold, action-oriented initiative that endeavours to mentor, empower and inspire women to be catalysts of innovation, industry leaders and drivers of commercial solutions, with an aim to expand and secure access to energy, water and food while mitigating climate change.

The platform promotes the role women play in industries related to science, technology, engineering and mathematics (STEM). At its heart, WiSER exists to encourage greater female participation and decision making in STEM fields and share knowledge with young women through mentorship. The WiSER initiative holds its annual conference in Abu Dhabi, at the sidelines of ADSW.

For more information visit: www.masdar.ae/wiser









WOMEN IN SUSTAINABILITY,
ENVIRONMENT AND RENEWABLE
ENERGY FORUM



The Festival @ Masdar City



The community-focused Festival @Masdar City extends the spirit of ADSW to the general public. Organised by Masdar and hosted in Masdar City, the event seeks to inspire UAE residents to adopt more sustainable practices through a collection of fun-filled activities, live music and entertainment, eco-shops, food stalls and educational workshops for children – all in the sustainable surroundings of Masdar City.

For more information visit: www.adsw.ae















What's new at ADSW 2016

WFES Solar Expo

The all-new WFES Solar Expo is set to showcase the latest innovations in photovoltaic, concentrated solar power and other cutting-edge solar technologies. Putting WFES 2016 at the heart of the world's most vibrant and fast-growing solar market, the Expo will give you access to a unique audience of solar leaders: experts, suppliers and innovators.

WFES Sustainable Transport Zone

WFES 2016 will be a hub for energy-efficient mass transit as we introduce our first ever zone dedicated to Sustainable Transport, presenting an eye-catching range of beautifully designed zero and low emission cars. And as radical new technologies and power sources come into focus – from natural gas and hydrogen to efficient batteries and pedal power – you'll be able to experience the latest in sustainable vehicle design.

Future Cities Forum in cooperation with IRENA and the UN Habitat

Cities are our future. With 75% of the global population expected to be urban by 2050, the way that cities look, feel and operate will determine the success of regional, national and global economies. Masdar's new Future Cities Forum will address the challenges faced by urban policymakers as they shape the path to tomorrow's sustainable communities.

Egypt Energy Forum

A unique forum dedicated to showcasing the latest news, insights and intelligence on developments in Egypt's fast expanding energy sector – including coverage of solar, wind, gas and water. Meet the pioneers shaping the future of Egyptian energy.

Blue Economy Summit

The Governments of Seychelles and the United Arab Emirates in partnership with UNESCO-Intergovernmental Oceanographic Commission are hosting the second Blue Economy Summit on 19 January 2015. This high-level meeting is perfectly timed to build upon the outcomes of the UN Sustainable Development Summit 2015 and UNFCCC COP 21. The Summit will investigate options for practical implementation of the Blue Economy paradigm to support these global environmental imperatives.

The Students Exclusive

Masdar will be hosting The Student Exclusive, a one-of-a-kind event dedicated entirely to students will be taking place on January 19, 2016. This engaging and informative event will include the opportunity for students to engage with young Emiratis who will speaking about how they took their passion for innovation, reading, and sustainability, and made a career out of it. It will also include an inspirational performance from the Landfill Harmonic orchestra, an interview with special guest AKON, singer, rapper and founder of the Akon Lighting Africa Initiative and more.





ADSW 2015 Highlights

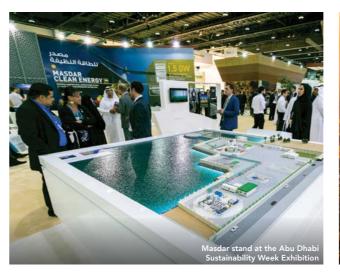
















Abu Dhabi Sustainability Week in Numbers*

* based on 2015 statistics

33,500

850

exhibiting companies from **42** countries

attendees

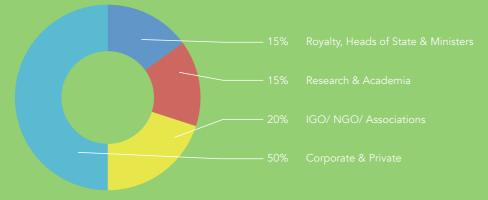
170 countries represented

101
official delegations

500 press registrations from 36 countries

3,700 opening ceremony delegates and more than 250 high level speakers

Speaker statistics



"Our energy demands will grow by more than a third by 2035. If we don't do something, if we tackle nothing, if we don't make an effort, then we can rest assured that disaster will befall us."





"The partnership that we have established between the United States and Abu Dhabi around renewable energy and climate change and sustainable development that takes advantage of human capital, is one of the most important partnerships for the future that we could be pursuing."

Hillary Rodham Clinton, former Secretary of State of the United States of America

"Abu Dhabi's bold vision for sustainable energy is transforming this nation and inspiring our region. No one can predict the future, but this much is true: Energy requirements will play a vital role in determining it."

H.M. Queen Rania Al Abdullah, Queen of the Hashemite Kingdom of Jordan





"We are here to build a new energy future... a future that harnesses the power of technology and innovation in the service of people and the planet. Sustainable energy for all is within our reach."

Ban Ki-Moon, Secretary-General, United Nations



New Products to be launched at WFES 2016



Company Name: Anhui Daheng Energy Technology Co.,Ltd

Hall 8 - Stand: 8001 - China Pavilion
Product Name: ALL BLACK SOLAR PANEL

Black frame and black backsheet, beautiful appearance and high ficiency.

Company Name: Anhui Daheng Energy Technology Co.,Ltd Hall 8 - Stand: 8001 - China Pavilion Product Name: COLORFUL SOLAR PANEL

Manufactured with specially designed solar cell.

The colorful solar panel have unique appearance and high efficiency.



Company Name: AXITEC Energy GmbH & Co. KG Hall 7 - Stand: 7154 - Germany Pavilion

Product Name: AXIpower poly 260Wp

The polycrystalline modules of the AXIpower series are the all-rounders among the AXITEC modules.

Whether for small systems or power plants – the high quality solar modules with an efficiency of up to 15.98% provide an outstanding energy yield at reasonable cost.



Company Name: AXITEC Energy GmbH & Co. KG

Hall 7 - Stand: 7154 - Germany Pavilion Product Name: AXIpower poly 310Wp

The polycrystalline modules of the AXIpower series are the all-rounders among the AXITEC modules.

Whether for small systems or power plants – the high-quality solar modules with an efficiency of up to 15.98% provide an outstanding energy yield at reasonable cost. The 72 cell modules are the experts for power plants.

Company Name: Back 2 Back FZE

Hall 7 - Stand: 7321

Product Name: Long SMF Deep Cycle AGM & GEL BATTERY LONG" Range of Batteries : Made In VIETNAM (Certified by APC SCHNEIDER UPS)

- Reserve Power VRLA Battery 1.2Ah/6V ~ 62Ah/12V
- Deep Discharge SMF (VRLA) Battery 75Ah/12V ~ 230Ah/12V
- Deep Discharge SMF (Gel) Battery 40Ah/12V ~ 150Ah/12V
- Motive Power Electric Vehicle Battery 5Ah/12V ~ 36Ah/12V
- Stationery Battery 75Ah/2V ~ 440Ah/2V
- Front Terminal Battery 100Ah/12V ~ 155Ah/12V

Long battery suitable for various application:
Uninterrupted Power Supply (UPS) Battery
Backup power application for security or fire/alarm system
High-rate and deep-cycle application
Automotive or motorcycle startup application
Telecommunication base stations



Please note:

1) Battery 75Ah & above capacity are AGM deep cycle SMF battery, suitable for stand by UPS application 2 LGK100-12N & LGK2150 are SMF Deep cycle Gel battery, suitable for solar application.

We have many product types and a wide range of applications. If you have any other different discharge requirements, or cannot find suitable battery specifications that you need, please refer to our complete catalog.

New Products to be launched at WFES 2016



Company Name: Back 2 Back FZE

Hall 7 - Stand: 7321

Product Name: DO POWER High Efficiency Pure Sine wave Inverter

DOPOWER presents a series of high quality crystalline solar photo-voltaic modules ideally suitable for o-grid and on grid applications. The solar panels are manufactured conforming to international standards ensuring best performance and highest energy yields over the entire lifespan, even under challenging climatic conditions.

The compact dimensions of the DOPOWER PV module and the solid workmanship of its aluminum frame allow for easy and flflexible mounting.

The design of the water repellent junction box makes wiring easy and secure. The junction box is equipped with two cable glands and two easy to wire spring-type or screw type clamps requiring no special tools for wiring and thereby simplifying and speeding up the installation.

Salient Features:

- PV Solar Module ranges in 36 Cells, 60 Cell and 72 Cells
- Super BOM
- Hi-Tec, Cell Design & Engineered in "USA"
- Selective emitters technology for highest efficiency upto 17%
- Wake up early and sleeps late
- Bypass diode minimizes the power drop by shade
- Positive tolerance and PID free with RFID
- Completely weather and waterproof
- Strong aluminum alloy frame, tempered glass and waterproof lamination
- Plug and Play
- Life expectancy over 25 years

Company Name: Burcev

Hall 7 - Stand: 7235

Product Name: Solar Ionic Cells 82%. Super Capacitor 6v and 30000F

Active solar panels from 6 am until 8 pm, and ranges from 80 to 92%. Activity night from 8 pm to 6.00am ranges from 54% to 28%.

The climatic conditions (rain, snow, hail, fog) activity ranges from 82% to 50%.

Solar panels 82% - 1 square meter = 1000 W=1kW= 600 Euro
Batteries of (1battery 5.5v and 360 A\h). = 80 Euro
Inverter (380-415v and 28 A-24 A and 50-60hz) 1kW = 100 Euro
Inverter (380-415v and 1315 A-1205 A and 50-60hz) 500 kW

Without additional cables and devices.





Company Name: CSUN

Hall 7 - Stand: 7210

Product Name: Solar Module CSUN260-60M

- World mono efficiency for rooftop projects
- Positive tolerance offer
- Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation
- Certified for salt/ammonia corrosion resistance
- Load certificates wind to 2400Pa and snow to 5400Pa
- Excellent performance under low light conditions
- Good Temperature Coefficient enables higher output in high temperature regions

Company Name: CSUN Hall 7 - Stand: 7210

Product Name: Solar Module CSUN315-72M

- World class mono efficiency for rooftop projects
- Positive tolerance offer
- Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation
- Certified for salt/ammonia corrosion resistance
- Load certificates wind to 2400 Pa and snow to 5400Pa
- Excellent performance under low light conditions
- Good Temperature Coefficient enables higher output in high temperature regions.

Company Name: CSG PVTech Co., Ltd.

Hall 8 - Stand: 8007 - China Pavilion

Product Name: Poly Crystalline Solar Module, Mono Crystalline Solar Module

Module power are up to 270wp for Poly and 280wp for Mono.

Features:

- 30 years manufacturing experience and complete PV chain to realize high quality and cost control.
- High power yield rated by Photon International Magazine.
- Modules certified by TUV, JET, CEC, ETL Anti-PID, Salt-mist corrosion, Fire Class Test certification, etc.
- Triple EL testing before and after lamination and before packaging to ensure lowest breakage of cells;
- Good weak light and anti-PID performance approved by professional third-party.
- Guarantee from 0 to +6w as power tolerance.



New Products to be launched at WFES 2016



Company Name: East Group Co., Ltd. Hall 8 - Stand: 8322 - China Pavilion Product Name: Hybrid Inverter

Hybrid (Bi-direction) Solar Inverter is ideal solution for power generation combined with the grid and household energy storage.

Company Name: East Group Co., Ltd. Hall 8 - Stand: 8322 - China Pavilion Product Name: On-Grid Solar Inverter

On-Grid solar inverter with high efficiency, high benefit, easy installation, easy operation, sturdy and durable.



A responsible investment for the best metrological performances



Company Name: Environnement S.A.

Hall 8 - Stand: 8200

Product Name: New Air Pollution Monitors: e-Series

Dedicated to the measurement of regulated pollutants such as ozone (O3), carbon monoxide (CO), sulfur dioxide (SO2) and nitrogen oxides (NO- NO2 and NOx), the e-Series of analysers, has been designed with a special consideration to the environmental impacts of the product during its whole lifecycle.

• Heavily polluting components have been fully eliminated within the e-series. As an example, the O342e is the 1st ozone analyzer on the market which does not use Mercury lamp as excitation source.

- The e-Series is fully compliant with Ecodesign and ROHS directives. As the lifetime energy use and environmental aspects have been taken into account during the conception and design phases, over 95% of each analyzer can be recycled.
- The analyzers are very compact, lightweight and have a low carbon footprint: up to 82% less than other criteria pollution monitor on the market.
- Engineered with breakthrough technologies, the e-Series achieve a previously unreachable level of autonomy: it also integrates self diagnosis and a high level of self-operation.
- Service assistant Inside: Each analyzer is self monitored continuously for performance and fault control: it detects early signs of trouble, identifies the service needed and even guides the service operations!



Company Name: Hefei JNTECH New Energy Co., Ltd

Stand Number: Hall 7 Stand: 7210

Product Name: 1kW/1.5kW/2.2kW solar pump inverter

MPPT Range:150~400Vdc Output: 220~240Vac

Output Frequency Range: 0~50/60Hz

Phase: Three Phase Protection: IP65

Product Features

- Drive power-matched three-phase AC pump
- Adopt advanced IGBT power module
- High conversion efficiency, low temperature rise, low noise, long lifespan
- Advanced MPPT technology, efficience >99%
- Fully automatic operation, it can store operation date for 10 years
- Perfect system protection, high reliability
- New design of anodized aluminum case
- LCD display
- Interface:RS485/GPRS
- Modular design, easy to install, operate, maintain

Company Name: Hefei JNTECH New Energy Co., Ltd Hall 7 - Stand: 7210

Product Name: 11kW/15kW/18.5kW solar pump inverter

MPPT Range:460~850Vdc

Output:380~460Vac

Output Frequency Range: 0~50/60Hz

Phase: Three Phase Protection: IP65



New Products to be launched at WFES 2016



Company Name: HIOKI E.E. Corporation

Hall 9 - Stand: 9113 - Japan Pavilion

Product Name: PW3365 Clamp On Power Logger

HIOKI Clamp On Power Meters are multi-channel power measuring devices utilizing clamp sensor input to accurately and safely measure power on single-phase to three-phase lines.

The PW3365-20 takes safety and convenience one step further by being the world's first non-metallic contact power meter that utilizes completely covered voltage clips that can be attached to any part of a cable or busbar. Customers can now monitor power demand and

other power parameters to aid in energy audits and validate energy saving measures without risk of short-circuit accidents, power interruptions, or bodily injury due to electrocutions.

Company Name: HUAWEI Technologies Co., Ltd.

Hall 6 - Stand: 6330

Product Name:Solar Inverter, FusionSolar Smart

PV Solution

Huawei FusionSolar Smart PV Solution takes solar plants as products that can be delivered to customers. Huawei optimizes and innovates the entire process, from solar plant construction to operation and maintenance (O&M), and integrates the digital information technology, Internet technology, and PV technology, to optimize initial investments, reduce O&M costs, raise the energy yield, and increase ROI.

The Smart PV Solution differs greatly from the traditional power solutions that feature central inverters, in that the Smart PV Solution is full-digital, has simple solar plants, and supports automatic global O&M.





Company Name: KACO new energy

Hall 7 - Stand: 7200

Product Name: Powador 30.0-60.0 TL3

The Powador 30.0 TL3 to 60.0 TL3 solar PV inverters are transformerless, 3-phase units with AC powers ranging from 25.0 kVA, 27.5 kVA, 30.0 kVA, 33.3 kVA, 36.0 kVA to 49.9 kVA.

They combine the utmost efficiency with ultimate uptime for decentralized commercial and utility-scale solar power plants.

Thanks to their 3 MPP trackers, the Powador 30.0 TL3 to 60.0 TL3 solar PV inverters

give you extreme flexibility in designing single inverter as well as decentralized PV systems.

These Powador inverters come in four "sizes": M, XL, XL-F and XL-SPD 1+2. The integrated string collector with string fuses and overvoltage protection for the XL version opens up significant cost advantages. Using the XL version, 4 strings can be connected per MPP tracker. This allows for cost-effective, clearly arranged cabling of decentralized PV systems. Additional flexibility is achieved with

- our XL-F version with fuses at the plus and minus DC connections
- our XL-SPD 1+2 version with surge protection devices type 1+2 placed before each MPP tracker

Do you have external string collectors in use in your PV park? Consider the Powador 36.0 TL3 M1 or Powador 39.0 TL3 M1 as the appropriate inverters. They are equipped with 1 MPP



Company Name: Mibet (xiamen) New Energy Co., Ltd

Hall 8 - Stand: 8332 - China Pavilion **Product Name: MRac Car Port Solution**

MRac Car Port is sepcially designed to fit specific requirements for different installation area with a guick and easy installation. We take great pride in our products and continually seek out the best quality at themost competitive price. Covered by the car port, the Mrac Car Port solution will not only generate clean energy but also offer comfortable shading for your cars in sunny days.

Company Name: Mibet (xiamen) New Energy Co., Ltd Hall 8 - Stand: 8332 - China Pavilion

Product Name: MRac Ground Terrace IV

MRac Ground Terrace IV, a newly-updated ground solution on the base of Ground Terrace III, is specially developed for middle-large PV ground projects. With its high structural strength and stability, the highly preassembled solution can freely adjust to areas in extreme environments with an all around adjustment, greatly reducing the precision requirements of system installation. What's more, the structural designs save time and labor



Company Name: NEWGENS SA Hall 7 - Switzerland Pavilion

Product Name: 4HT - WASTE-TO-ENERGY PLANT

The 4Ht reactor, using the power it generates, heats up to 2000°C. Waste is safely ground into small particles that, once introduced into the reactor, vitrify in less than 15 seconds undergoing thermochemical decomposition. The vitrification process induces all waste material to release pure hydrogen which is then used to fuel steam compressors, turbines and heat exchangers to generate electricity and heat sufficient enough to power the whole system with enough surplus to guarantee over 80 MWh to be sold to the market.

The safety of the system is guaranteed by the exclusion of any oxygen from the hydrogen plant thus making it impossible for the hydrogen to react in an uncontrolled manner.

The vitrified waste is completely inert and can be used in road building applications, the CO2 released by Pyrolysis can be sold to the food industry, the water released by burning hydrogen can be sold ad distilled water or be injected into a desalination plant, the Hydrogen is used to produce energy. No other by-product or emission is released by the system, including dioxins.

New Products to be launched at WFES 2016



Company Name: NGK Insulators, Ltd.New Energy Co., Ltd

Hall 9 - Stand: 9300 - Japan Pavilion

Product Name: NAS battery/Energy Storage System

AS battery is one of the first commercialized large scale energy storage systems in the world. NAS battery has large capacity, high energy density and long life and is ideal for reducing peak electricity use charging during off peak times and discharging during peak times, can be used as suppression of fluctuation, energy shift, smooth output power and 1 day-ahead planned operation of renewable energy such as wind and solar.

Company Name: QS Solar

Hall 8 - Stand: 8230 - China Pavilion Product Name: QSDGP/260Wp

- Double glass crystalline silicon solar modules;
- Amorphous silicon thin film solar modules.

Company Name: QS Solar Hall 8 - Stand: 8230 - China Pavilion

Product Name: QSP6-72/310 Polycrystalline

- Cell:72pcs
- 310Watt

Company Name: Qinhuangdao Safety-contact Electrical Co., LTD.

Stand Number: Hall 8 Stand: 8422

Product Name: 100W solar power system

100W solar power system: 100W poly solar panel, maintenance-free Lead-acid Battery 12V /40AH, Pure Sine Wave inverter 300W /12VDC-110 /120/220/230VAC, AC output 110V/120V /220V/230V, DC output: 12V /5A. USB output 5V /2A.





Company Name: Qinhuangdao Safety-contact Electrical Co., LTD.

Hall 8 - Stand: 8422 **Product Name: PV-SC0902**

PV-SC0902:TUV CETIFICATE, Protection Degree IP65, Connecting Cable 4mm², Waterproofing structure O-ring Seal, Overall Dimension 142 (96) ×151(138)×25.6 mm, MC4 Connector.





Company Name: Suntrace GmbH Hall 7 - Stand: 7135 - Germany Pavilion

Product Name: HelioScale - Irradiation Measurement System

Reliable quality solar radiation data is becoming increasingly important in solar energy. Reducing solar resource uncertainty a few per cent significantly impacts the return on investment of a solar power plant. The HelioScale series of solar measurement stations are available in 3 variants:

HelioScale (alpha), HelioScale (phi) and HelioScale (omega), which are designed to suit specific needs of Solar Photovoltaic (PV), Concentrating

Photovoltaic (CPV) and Concentrating Solar Thermal Power CSP).

The cooperation between Suntrace and Wilmers Messtechnik combines deep knowledge and scientific experience in the field of solar energy site assessment with long-term experience in design and conduction of wind, solar and meteorological measurements. HelioScale provides the perfect base for reliable development of your solar energy project.

Key features of HelioScale stations:

- High quality solar radiation instruments conform with ISO & IEC standards and following WMO and IEA recommendations
- Robust design: ability to withstand extreme weather conditions like dust, strong rain or high humidity
- Compact & efficient layout: easy to transport, install and maintain
- Made in Germany

Company Name: Tabuchi Electric Co. LTD Hall 7 - Stand: 7340

Product Name: Ecological Intelligent Battery System (EIBS)

All-in-One Plug-n-Play 5.5kW residential inverter paired with 10kWh Lithium Ion Battery.

Features:

- 3 MPPT 5.5kW Hybrid Solar Inverter
- Bi-directional DC/DC Battery Converter
- Automatic Transfer Switch
- Battery Charge Controller
- 10kWh Lithium Ion Battery
- Easy remote controlled setup
- Solar and battery remote monitoring



New Products to be launched at WFES 2016



Company Name: Tabuchi Electric Co. LTD

Hall 7 - Stand: 7340

Product Name: Ecological Mega Value System (EMVAS)

EMVAS is Tabuchi's 3-phase workhorse. It is our most versatile inverter used for projects as small as 25kW and as large as utility scale, and can be mounted on the ground, rack, or roof.

Features:

- Individual MPPT DC input Strings
- 97.3% (Maximum 97.8%) Efficiency
- Highly corrosion-resistant enclosure
- Fanless model provides passive cooling
- Eliminates the need for combiner boxes
- Remote setup and monitoring
- Suitable for Outdoor Installation
- Designed for distributed solar systemm

Company Name: UNIVERSAL ECOLOGY CO., LTD.

Hall 8 - Stand: 8264

Product Name: Safety Pole, Ryukyu Wind Soul

Safety Pole is a system which equipped with a variety of functions such as LED lighting, Web camera , and AED etc.

This system can generate electricity from wind and solar power.

The Ryukyu Wind Soul, is applied the aviation engineering to wings of the wind

This is a small sized generator which rotates any wind direction even in the small wind.

Company Name: YanTai Haoyang Machinery Co.,Ltd

Hall 8 - Stand: 8000 - China Pavilion

Product Name: Blade bearing

We provide our customers slewing bearings in 6 series,like:single-row four-point contact ball series,three-row roller series,single-row crossed roller series,double-row ball series etc. The raceway diameter form 200 mm to 5000 mm.

1) The customer provides data required for slew bearing design according to "slew bearing selection technical parameter table".

The designers calculate strengths including

Use"slew bearing design software LAGBE" to calculate track and bolt strength.

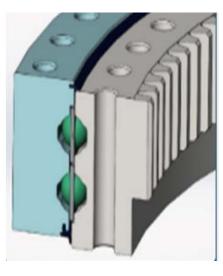
Use"Nieman method gear calculation "to calculate gear strength.

Subsequent wind power bearings use finite element analysis design.

Note: We can also perform manual calculation. Software can improve efficiency and reduce errors.

Prepare countersignature maps. Both parties confirm the maps and sign the technical agreement.

2) For each type of product, the process team will develop separate production process based on product design drawings. CNC team develops CNC program for each type of product.



Company Name: YanTai Haoyang Machinery Co.,Ltd

Hall 8 - Stand: 8000 - China Pavilion Product Name: SLEWING BEARING

We provide slewing bearings in 6 series: single-row four-point contact ball series,three-row roller series,single-row crossed roller series,double-row ball series etc.

The raceway diameter of slewing beaing is form 200 mm to 5000 mm.

1) The customer provides data required for slew bearing design according to "slew bearing selection technical parameter table".

The designers calculate strengths including Use"slew bearing design software LAGBE" to calculate track and bolt strength. Use "Nieman method gear calculation "to calculate gear strength. Subsequent bearings use finite element analysis design.



Note: We can also perform manual calculation. Software can improve efficiency and reduce errors. Prepare countersignature drawings. Both parties confirm the drawings and sign the technical agreement.

2) For each type of product, the process team will develop separate production process based on product design drawings. CNC team develops CNC program for each type of product.

Company Name: YanTai Haoyang Machinery Co.,Ltd Hall 8 - Stand: 8000 - China Pavilion Product Name: Slewing Drive

We are specialized in supplying slewing drive which is widely used for solar tracking system, antenna etc.

It includes single axis slewing drive(3-28 inch), dual axis slewing drive(3-21 inch);single worm slewing drive(3-28 inch),dual worm slewing drive(14-28 inch);enclosed housing slewing drive(3-28 inch),open housing slewing drive(9-25);vertical slewing drive(3-21 inch);spur drive(12-38 inch).





New Products to be launched at WFES 2016

Company Name: YanTai Haoyang Machinery Co.,Ltd

Hall 8 - Stand: 8000 - China Pavilion

Product Name: Yaw bearings

We provide our customers slewing bearings in 6 series,like:single-row four-point contact ball series,three-row roller series,single-row crossed roller series,double-row ball series etc. The raceway diameter form 200 mm to 5000 mm.



The designers calculate strengths including

Use"slew bearing design software LAGBE" to calculate track and bolt strength.

Use"Nieman method gear calculation "to calculate gear strength.

Subsequent wind power bearings use finite element analysis design.

Note: We can also perform manual calculation. Software can improve efficiency and reduce errors. Prepare countersignature maps. Both parties confirm the maps and sign the technical agreement.

2) For each type of product, the process team will develop separate production process based on product design drawings. CNC team develops CNC program for each type of product.



New Products to be launched in IWS 2016



New Products to be launched in IWS 2016

Company Name: Nanotera Group

Stand Number: 4120 Product Name: Alpha Gaia

Gaia Alpha is a unique and new revolutionary technology for organic substance decomposition and powderisation based on oxygen radicals. This technology allows completely new opportunities to treat organic waste on a local and decentralized scale with extremely low energy consumption.

Our solution can effortlessly decompose and powderize organic material and residues such as:

- Excess sludge
- Blue-green algae
- Domestic organic waste
- Food industry organic waste (ex. Slaughter houses, chicken farms etc)
- Hospitality industry organic residues (restaurants, hotels, cruise ships)

The main benefits of this new solution are:

- No thermal energy required to dewater residues completely
- Absolutely no need for microbe or catalyst
- No use of ozone
- No use of thermophilic bacteria
- No physical disruption
- No alkaline agent
- No oxidation agent
- No electrolyzation
- Extremely compact and energy-saving (200WH)
- Modular and scalable solution from small to medium sizer applications
- Mobile solution
- Operation running costs are drastically reduced



New Products to be launched in IWS 2016

Company Name: Nanotera Group

Stand Number: 4120 Product Name: GWTS

GWTS system was designed for efficient and complete destruction of chemical waste (including halogenated waste) and for recovery of halogen acids.

- The system is based on plasma technology that produce a temperature of several thousand degrees (2000 4500°C), that breaks apart the molecular bonds of waste compounds. The system operates continuously,
- The waste is converted into non-hazardous gaseous products which are released to the environment. Emissions are in agreement with international standards.
- A mobile version was constructed in a transportable 20 ft container frame. The system is mobile, easy and safe to operate and maintain.

GWTS system can effectively user for treatment of following materials:

- Contaminated solvents such as Methylene Chloride, Toluene, Xylene, etc.
- Chemical waste from the production of halogenated organic material (e.g. bromo organic).
- Chemical waste from the production process in the chemical, pharmaceutical and pesticide industries
- Methyl Chloride
- Methyl Bromide
- Ethyl Oxide
- Dioxides
- Isopropylamine (IPA)
- Pullant gas emission containing Methylene Chloride
- Freion
- Others

Advantages of the GWTS system are:

• Versatility.

Allows rapid and complete destruction of a wide range of organic and inorganic wastes. Easily adaptable to various waste stream types.

• High Efficiency.

Allows control and adjustment of operation parameters in order to achieve high process efficiency. Adjustable parameters include waste injection method, mixing with the plasma stream, duration of the decomposition stage.

- Operator-friendly.
- Low capital, operating, and maintenance costs in comparison to treatment by incineration.
- Environmentally friendly.
 Emissions are well below international regulations.
- Flexibility

Full treatment of chemical waste in the form of gases and liquids, adhering to most stringent requirements.

• Mobile. On commercially available trucks



New Products to be launched in IWS 2016

Company Name: Nanotera Group

Stand Number: 4120

Product Name: NANOBUBBLER MK-1

NANOBUBBLER MK 1 is a unique and innovative Ultra Fine Bubble (UFB) Generator to enhance the aeration of water for various applications:

- Cleaning of industrial waste water
- Cleaning of dairy waste water
- Aeration of Aquaculture dams & ponds
- · Aeration of agricultural water

NANOBUBBLER MK creates 170 Liters of air bubbles per minute and produces three major categories of air bubbles:

Macro Bubbles - These bubbles are large and visible. They create movement in the water column as they rapidly rise to the top of the water surface. They attached to dead bacteria and other debris and lift them to the surface

Micro Bubbles - These bubbles are much smaller but still visible. They remain in the water column for a short period of time (1 min- 1hour). Some of these bubbles will amalgamate with others and form bigger bubbles. Others will implode under the water pressure and the air will dissolve into the water increasing/maximizing dissolved oxygen. Dissolved oxygen is crucial not only for aquaculture but also for aerobic oxidative bacteria. The more dissolved oxygen in the water the more active are the aerobic bacteria in degrading organic matter improving the water body conditions.

Nano Bubbles - With most polluted water sources there is a thick layer of sediment at the bottom of the water column. This sediment is usually in an anaerobic state as little or no oxygen reaches this layer. The Nano Bubbles has the ability to sink in water down into this sediment layer. At this depth air inside the bubble is dissolved into the sediment layer. This changes this area to an aerobic condition accelerating organic matter oxidation and decomposition cleaning the sediment layer.



New Products to be launched in IWS 2016

Company Name: Nanotera Group

Stand Number: 4120
Product Name: Terrasat

TERRAST, a new, inorganic processing material, whose ingredients are recycled charcoal and aluminum, is used our patented technology which fixes the particular charcoal and aluminum without an adhesive. Just dropping "TERRAST" into the wastewater, it generates the electric potential difference and the electric current starts to flow. As the result, the electric current elutes active aluminum ion and heavy metals are condensed by the absorption reaction of aluminum ion.

We focused on the great volume of the emission of aluminum electron in "TERRAST". Utilizing the process that OH radicals (active oxygen) are generated by reacting aluminum electron and iron electron, we succeeded in generating great volume of OH radicals by reacting aluminum electron and hydrogen peroxide. The problems in active oxygen processing, such as the increase of generated OH radicals and energy inefficiency, are solved by this "TERRAST Reaction process".

Accordingly, this process enables easy removal of industrial chemicals with difficult degradability, color of dyeing, medicines, surfactants and agricultural chemicals at low cost.

TERRAST Reaction Process Simultaneous processing test to remove the color and COD in dyeing wastewater by "TERRAST Reaction Process"

Our technically proven and robust solution allows you to:

- Treat almost ANY type of inorganic residue, such as heavy metals, silica, fluorine, etc
- Perform low-concentration treatment
- Cut down initial costs by easy installation into your existing facilities
- Keep a low running cost since TERRAST only requires refill every 6 months

TERRAST is particularly performant for removal of following material from the water:

- Cadmium
- Mercury
- Lead
- Fluorine
- Antimony
- Phosphorus
- Boron
- Zinc, copper, chrome and nickel
- Etc...





New Products to be launched in IWS 2016

Company Name: Nanotera Group

Stand Number: 4120

Product Name: Plasma Arc Waste Destruction System (PAWDS) PAWDS is Plasma Arc Waste Destruction System (PAWDS) is the world's most compact, easy-to-operate, high temperature, plasma-based waste treatment system. With rapid start-up and shutdown



capabilities, PAWDS effectively destroys paper, plastics, food, oily rags, as well as waste oil, sewage sludge, hazardous gases, chemical waste, all with minimal segregation.

- Very compact design: Impressive ROI for new builds and retrofits
- Fully automatic/sailor friendly with minimal manpower
- Rapid start-up and shutdown (no refractory/brick)
- No visible plume or heat signature
- Safe with no risk of fire

Company Name: Seas Falcon Trading LLC

Stand Number: 3230

Product Name: AWA Modula



Company Name: VIP-Polymers
Stand Number: UK Pavilion
Product Name: Tyton-SIT VIPER



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