ENERGY GLOBAL AWARD 2012

ENERGY GLOBAL AWARD 2013

ENERGY GLOBAL AWARD 2016

TUV CERTIFICATION

ENERGY SAVING CERTIFICATION

TOP 100 - VIETNAM GOLD AWARD

IREX
a member of SolarBK

THE LEADING PIONEER PROVIDE SAVING ENERGY PRODUCTS AND SOLUTIONS IN VIETNAM

BACH KHOA INVESTMENT & DEVELOPMENT OF SOLAR ENERGY CORPORATION (Head Office)
No 47, Le Van Thinh street, quarter 5, Binh Trung Dong ward, district 2, HCMC, Vietnam
Tel: (+84.28) 7300 6759 I Fax: (+84.28) 6255 8093
Email: info@solarbk.vn I Website: solarbk.vn

REPRESENTATIVE OFFICE OF BACH KHOA INVESTMENT & DEVELOPMENT OF SOLAR ENERGY CORPORATION
- A18, villas My My, Nguyen Hoang street, An Phu ward, District 2, HCMC, Vietnam
  Tel: (+84.28) 7300 6759 I Fax: (+84.28) 6255 8093
- No 310, street 30/4, Chanh Nghia ward, Thu Dau Mot city, Bình Dương province, Vietnam
  Tel: (+84.28) 6255 8092 I Ext: 7000
- No 70, Le Hong Phong street, Phuoc Hai ward, Nha Trang city, Khanh Hoa province, Vietnam
  Tel: (+84.28) 6255 8092 I Ext 6000
- No 349, Hoàng Hoa Thám Street, Lieu Giai Ward, Ba Đình District, Hanoi, Vietnam
  Tel: (+84.24) 7305 8687

CENTRAL REGION SOLARBK INVESTMENT AND DEVELOPMENT CORPORATION
No 400, Street 2/9, Hoa Cuong Bac Ward, Hai Chau Dist, Da Nang city, Vietnam
Tel: (+84.236) 374 9279 I Fax: (+84.236) 374 9079
Email: info@solarbk.vn

IREX ENERGY JOINT STOCK COMPANY
No 47, Le Van Thinh Street, Quarter 5, Binh Trung Dong Ward, District 2, HCMC, Vietnam
Tel: (+84.28) 7300 1559 I Fax: (+84.8) 6255 8093
Email: info@irex.vn I Website: irex.vn

Factory: Street 9 , Phu My 1 Industrial Zone, Tan Thanh District,Ba Ria - Vung Tau Province, Vietnam
Tel: (+84.254) 392 3594 I Fax: (+84.254) 392 3594

SOLAR ESCO JOINT STOCK COMPANY
A18, villas My My, Nguyen Hoang street, An Phu ward, District 2, HCMC, Vietnam
Tel: (+84.28) 6685 4535

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SOLARBK'S GREEN POWER SOLUTIONS PHOTOVOLTAIC & WIND ENERGY

Consulting and providing overally generated electric solutions.

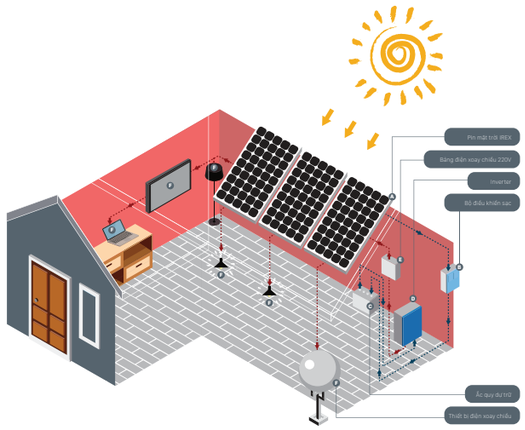
Providing products and solutions in term of clean and renewable energy thanks to absorb and transform nature energy methodology.

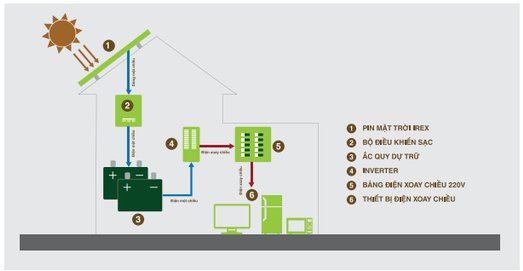
Website: www.solarbk.vn
Email: info@solarbk.vn

Hotline: **1900 636 759**

THE OFF-GRID
STANDALONE PV POWER SYSTEM

An off-grid standalone PV Power system suitable for remote areas as islands where there arr limited access to electricity from the national power grid. This solution can be designed with renewable energy resources such as solar or wind energy combined with diesel generators and back-up batteries for continuous electricity supply 24/7.



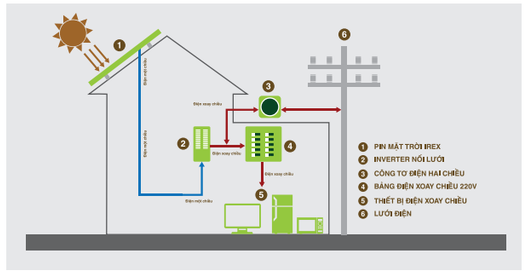


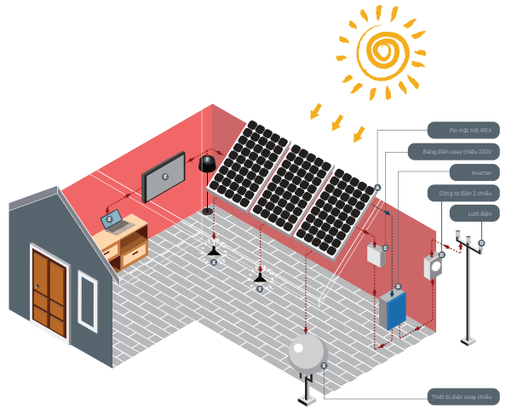
THE GRID-TIE
PV POWER SYSTEM

A grid-tie PV Power system is especially suitable for areas where the national power grid is available. This system will use the photovoltaic power as the first priority pwer supply for the electrical appliances. If the electric power comes in excess, this surplus of energy will be transferred to the national power grid. When the system is short of electricity, it will take power from the national grid as a supplementary power source.

- The grid-tie system's advantages are the lowest investment cost compared to the other PV solutions, sustainability and longevity.

- The grid-tie system's drawback is the shutdown of the system when the electricity from the national power grid is cut off.



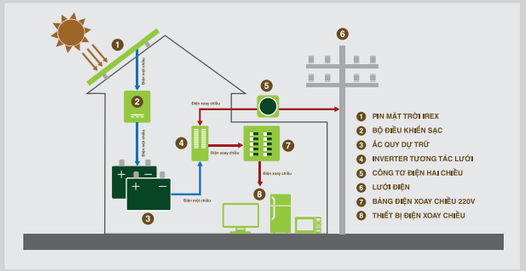


THE GRID-INTERACTIVE
PV POWER SYSTEMTEM

A grid-interative PV power system is the same as a grid-tie PV power system but the former comes equipped with back-up batteries.

- The grid-interactive system's advantage is to maintain the power supply to the load even when the national power grid is cut off. It is suitable for the areas where electricity suppliers are unstable.

- The grid-interactive system's drawback is the higher investment cost in comparison with the grid-tie system.



SolarBK
Green Energy Made Smarter

With over 40 years of research and development since 1970, SolarBK is proud to be the pioneer in setting foundation of renewable energy industry in Vietnam

Our mission:
Popularize renewable energy into life and make it to be:

- **Affordable, sustainable**
- **Simple**

BUSINESS SECTOR

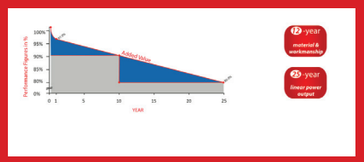
- Solar water heating solution
- Clean energy solution
- Energy solution for Telecommunications
- Small scale independent gird solution (Micro/Mini gird)
- Energy saving technology
- Research & Development of clean energy applications
- Turn-key solution for solar power, wind power projects (EPC Concept – Solar Farm, Wind Farm)

IMPORTANT COMPONENTS OF THE SYSTEM

PHOTOVOLTAIC (PV) PANELS

These Made-in-Vietnam PV panels are produced by Irex, a member of SolarBK. These panels comply with international standards such as UL (USA) and IEC (Europe).

Irex PV panels warranty is 12 years for materials or technical faults and 25 years for performance decline.



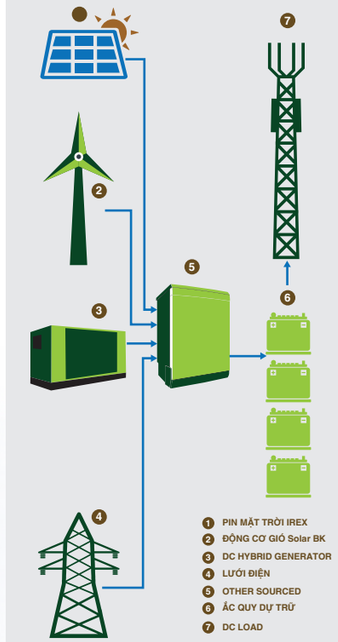
INVERTER/CHARGER:
OUTBACK and SMA

- An inverter converts DC current into AC current and is intergrated with the charge controller and the lagging AC current converter. The intelligent multi-status battery charge function of the controller helps the battery to be long lasting. This product can also be expanded by being connected to other similar products in case more power is required.
- There are 2 types of inverter/charge controllers: the sealed one (FX) and the vented one (VFX). The sealed one can be used in the harsh conditions such as high humidity, high corrosion or dusty environment. The vented one, which is designed with anti-insect net, is available for supply high AC power in high-temperature environments.

GREEN ENERGY POWER SOLUTION FOR BASE TRANSCEIVER STATION – BTS

- The Hybrid power solution offered by SolarBK is combined of energy sources from PV Panels, wind power, grid power, hybrid generator HybridGen and Zinc-Air batteries. This solution saves operating costs by prioritizing the use of renewable energy sources for load and charged into the batteries to back up for the energy shortage case. The system works fully automatically and can be monitored remotely via the internet.

- Depending on the conditions of the particular location od the BTS, the system may be set to be used with the most optimal and economical combination of the power supply sources but still ensure enough power to supply for the load 24/7. We offer flexible solutions depending on the actual situations of the installation places.



THE PROGRAMMABLE CHARGE CONTROLLER

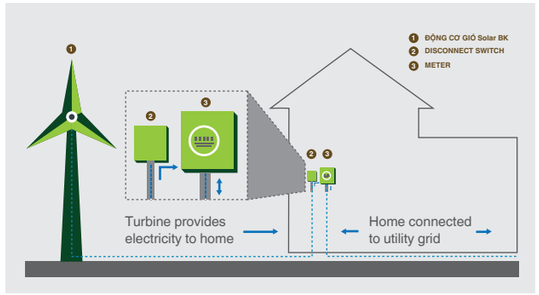
FLEXMAX

The programmable charge controller is designed with Maximum Power Point Tracking technology (MPPY) and energy data storage. MPPT algorithm helps to increase the efficiency of the system by 30% compared to non-MPPT one. Temperature management and active cooling system makes this controller available to operate with maximum capacity evenwhen the outdoor temperature is high. FLEXmax can connect to the internet, be programmed and managed remotedly, display and provide complete information about the operating status of the whole system.

THE BACK-UP BATTERY

SolarBK's Solar Powered System is a GEL Deep Cycle Rely Battery, specially designed for full charge and full discharge and high temperature. This type of battery has a life expectancy 40% higher than the AGM. Its outstanding features are completely maintenance free, such as other types of batteries, self-discharge slow, high stability when fully discharge, ultra-long life, completely closed design should be completely rust- No pollution, no gas emissions, as well as environmental protection.

TYPICAL PROJECTS
WIND TURBINE



WIND TURBINE

The wind turbine system includes: the wind turbine, the tower and control & connection systems. Some systems also include a battery system to store electricity.

Once impacted by wind, the turbine will spin and generate electricity commensurate with wind speed.

The generated energy is controlled by the wind turbine's integrated controller to provide AC power to the house. This electricity is the first priority for usage by the loads. In cases the load demand is higher than energy from the wind turbine, the electricity from the grid will be added. However, if the load deman is lower than energy from the wind turbine, the excess energy will sell back to the grid. This wind power solution is for areas already connected to the national power grid.

For areas where the national grid is unavailable, batteries are added to the system to store energy from the wind turbine and energy balance control system.

Projetc Trấn-Quân Area 3, Quảng Ninh.
Capacity: 5 wind turbines Skystream 3.7 with 14,4kW in total and PV

Project Guesshome in Southwest Cay Island (Song Tu Tay) – Truong Sa.
Capacity: 06 wind turbines Skystream 3.7 with 14,4kW in total.

Project Desalination system in Southwest Cay Island (Song Tu Tay).
Capacity: 02 wind turbines Xzeres 10kW, 01 wind turbine Skystream 3.7 with 24,4kW in total

THE APPLICATIONS
OF CLEAN ENERGY

SUN-SUITCASE
ISOLBOX

The sun suitcase provides portable solar energy as well as storage space. It is lightweight and highly portable with a battery life of up to 6 hours in cases of poor weather conditions. It is designed for mining, exploring, traveling, camping, and other long-term outdoor activities. It is also ideal for emergency response situations, particularly natural disasters.

SUNPACK
SOLAR ENERGY

Backpack is designed with a solar panel on the front or back of the backpack. When a user wears a daily backpack, the battery table absorbs the sun's heat radiation, converts it into energy, and stores it for reuse for portable devices.

PORTABLE CHARGING STATION

A customizable charging station with 2 adjustable capacity panels. Including an integrated reserve battery system, the station can charge devices or power electrical appliances such as lights at night. Once set-up, the station operates independently, drawing energy from solar panels and ensuring safety for users. It is designed for optimal mobility and is suitable for public buildings such as hospitals, clinics, schools, etc.

SOLAR BAG

Solar bag can supply electricity for business travel in remote areas, where isn’t gid power.

Solar panel integrate directly on the bag with charging port designed portable, very convenient during travel or picnic, useful for businessmen who move frequently, business travel,...

DESALINATION
SYSTEM

The desalination system uses wind and solar energy to power salt water filtering equipment to create drinkable water. This system is suitable for areas such as islands where there is a lack of usable water.

THE APPLICATIONS
OF CLEAN ENERGY

SOLAR LIGHTS

PV BASED LIGHTING SYSTEM

By using normal roadway lights by LED lights, we are taking part in energy saving and eco-friendly. Together with significant development of techniques, green energy lighting solution is highly developed and used widespreadly. Green energy based lighting solution.

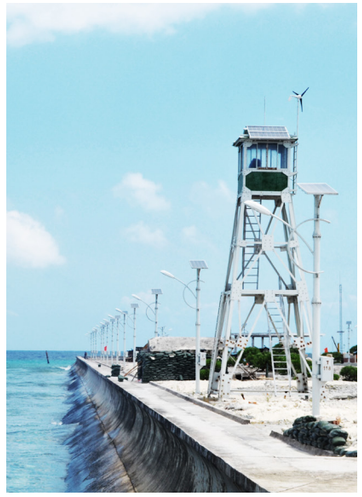
Customers got many benefits such as energy-saving machine, safety, eco-friendly system, long independence totally automation and low cost of maintenance.

Moreover, not onlu use solar energy but the lighting system can also wind energy combine solar energy at the places.

SOLAR
LIGHTS

Solar Lights SL2001V3 is a product exterior architecture lights using solar energy, environmentally friendly, suitable for garden villas, places for community activities, tourist sites, parks or where aren't use national electricity grid.

TYPICAL PROJECTS
FROM CLEAN ENERGY



Solar energy street lights
on Song Tu Tay islands

Supply electrics on Spratly islands:

. 48 islands
. 8,5 MWp Offgrid Capacity
. 150 Wind turbins
. 1000 solar energy street lights

Wind turbin
on Nam Yet island

Green One UN Home in Vietnam.
Capacity: 110kWp

Intergrated political and administrative centre Binh Duong province.
Capacity: 35 kwp

Power supply for Son Cha island – Hue
Capacity: 10 kwp Off-Gird Pv

TYPICAL PROJECTS
Pv Rooftop Residential scale

Mr. Thanh's house - Dist. 7 - HCMC
Capacity 2kWp - Installed in May 2015

Mr. Quân's house - Dist. 2 - HCMC
Capacity 2kWp - Installed in Oct 2015

Mr. Vượng's house - Dist. Hoang Mai - Hanoi
Capacity 2kWp - Installed in Sep 2015