



SWITCH TO  
**SOLAR**  
POWER FREE ANYWHERE

ECOBXX®  
POWER<sub>4</sub>FREE





# SWITCH TO SOLAR

Sunlight is one thing we get for free, all we need to do is harness and store this energy to benefit from its astounding power. More specifically, we need a solar panel and power pack. Hello Ecoboxx. Simple to use, this plug and play system can provide instant power to anyone, anywhere.

Ecoboxx has a multitude of valuable uses. Starting with back-up power in case of power cuts, to recreational activities such as camping and hiking, filming in remote locations and proving highly beneficial on construction sites and small dwellings such as holiday homes. Ecoboxx is not only practical and convenient but also comes with a social responsibility. Shockingly the world most emerging market, Africa, is being left in darkness. More than 70% of the Africa has no access to electricity, and in rural areas this can exceed 95%. Ecoboxx addresses this issue by providing a cost effective and safe alternative, dramatically reducing the hazards of a widely used fuel such as kerosene which causes up to 1 million deaths a year. The student and barber kits are particularly aimed at this market, helping those without power to use laptops, charge cell phones, provide light for reading and to generate business, without relying on the grid.

The Ecoboxx Power4free range consists of 10 products, 8 Power Kits, 2 special kits (student kit and barber kit) and a professional portable high output power unit. Each box provides its own quantity of power to meet individual needs.





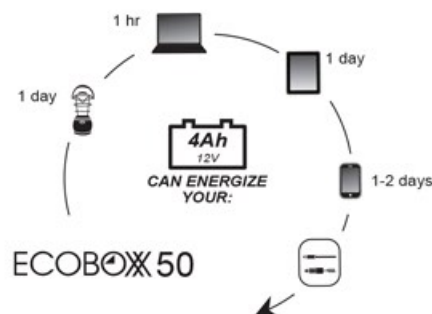
# GREEN PORTABLE POWER FOR FREE



## ECOBXXX 50 KIT

UP TO **16 HOURS** OF POWER

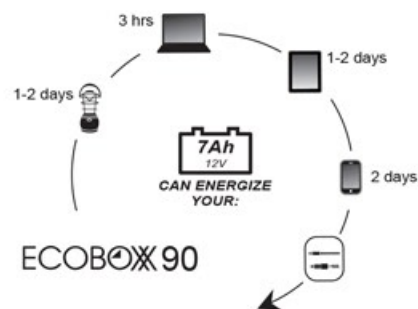
- 5Wp solar panel
- Portable Power with 4 Ah AGM battery built-in for 50 Wh available
- 2 x 3W LED light with switch
- USB to charge any smart phone
- 12Vdc, 7Amp, Cigarette lighter socket



## ECOBXXX 90 KIT

UP TO **30 HOURS** OF POWER

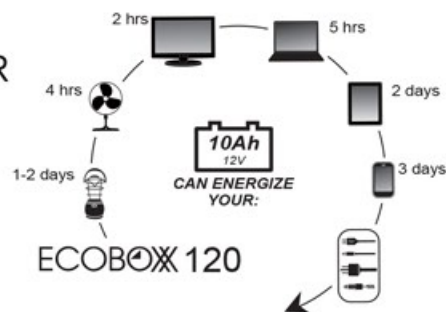
- 10Wp solar panel
- Portable Power with 7 Ah AGM battery built-in for 90 Wh available
- 2 x 3W LED light with switch
- USB to charge any smart phone
- 12Vdc, 10Amp, Cigarette lighter socket



## ECOBXXX 120 KIT

UP TO **40 HOURS** OF POWER

- 10Wp solar panel
- Portable Power with 10 Ah AGM battery built-in for 120 Wh available
- 2 x 3W LED light with switch
- USB to charge any smart phone and tablet
- 100 W AC power outlet
- 12Vdc, 10Amp, Cigarette lighter socket



\*All product specifications subject to change





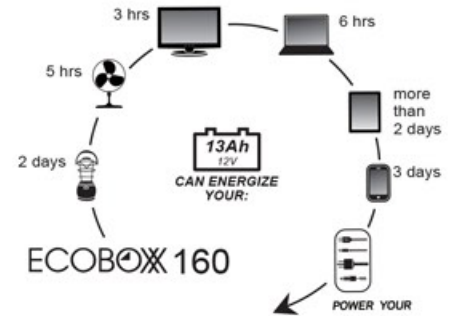
# GREEN PORTABLE POWER FOR FREE



## ECOBXXX 160 KIT

UP TO **52 HOURS** OF POWER

- 2 x 10Wp solar panel
- Portable Power with 13 Ah AGM battery built-in for 160 Wh available
- 2 x 3W LED light with switch
- USB to charge any smart phone and tablet
- 100 W AC power outlet
- 12Vdc, 10Amp, Cigarette lighter socket



## STUDENT KIT-ENERGY FOR LIFE

UP TO **52 HOURS** OF POWER

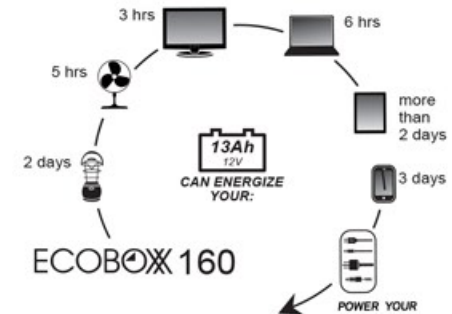
- 2 x 10Wp solar panel
- Portable Power with 13 Ah AGM battery built-in for 160 Wh available
- 2 x 3W LED light with switch
- USB Fan
- 10 in 1 USB phone charger cable
- 100 W AC power outlet
- 2 Amp AC/DC charger



## BARBER KIT-ENERGY FOR BUSINESS

UP TO **52 HOURS** OF POWER

- 10Wp solar panel
- Portable Power with 13 Ah AGM battery built-in for 160 Wh available
- 2 x 3W LED light with switch
- USB Fan
- 10 in 1 USB phone charger cable
- 100 W AC power outlet
- Hair Clipper
- 2 Amp AC/DC charger



\*All product specifications subject to change



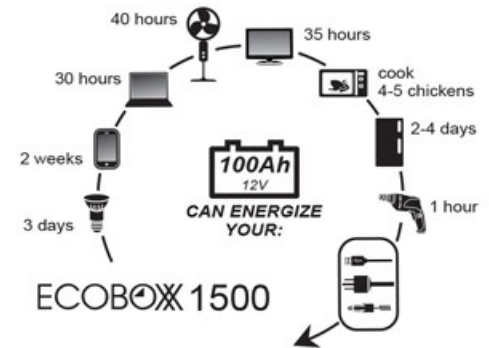
# FREE ELECTRICITY FOR YOUR APPLIANCES ANYWHERE



## ECOBXX 1500

UP TO **500 HOURS** OF POWER

- Portable Power with chainable connection to AGM battery from 100 to 300 Ah
- Large LCD display for easy monitor of state of charge of the battery
- 12 Vdc DC jack output to connect LED light
- 12 Vdc cigarette lighter socket
- USB to charge the phone, tablets and smartphones
- 2 x 230 Vac socket with 1500 W AC pure sine wave Inverter continuously available



\*All product specifications subject to change



# YOUR MOBILE POWER PLANT WITH FREE ELECTRICITY

## ENERGY STATION 1500

Energy station comes as a powerful, silent and environmental friendly source of energy anywhere you are; it represents the natural replacement of diesel generator in outback application where the grid is not available. Energy Station 1500 helps also to have a reliable and always available source of energy in your home for emergency and outage of the grid. This helps to have always safely the electricity for your home. More it can be used to offset your electricity bills during day time or even night time according the battery capacity installed.

### The KIT includes:

- 1 x Ecoboxx 1500
- 2 x 65 Wp solar panel with stand
- 1 x EcoTank 100 with 100 Ah AGM battery built-in
- 1 x 5 Amp AC/DC charger
- All cables necessary to connect to the solar panel.







# HOW IT WORKS

## 1. THE SUN AS ENERGY CREATOR

The sun gives life to the earth through its light and heat. The process of solar energy began when photons are created through the fusion of atoms in the sun's core and eventually be what generates solar power, but not until they are able to escape from the sun.

Once the photons reach Earth, we must harness them in order to create electricity. This is done through the use of photovoltaic cells, which react with the photons. These PV cells are coated with a material, which displays the photovoltaic effect.

The photovoltaic effect is used to describe the process in which energy is created by certain materials when they are exposed to solar radiation or sunlight. These PV cells are stimulated by sunlight and produce direct current electricity. However, this energy must still be made useable.

## 2. AC/DC

Most appliances and electronics use alternating current or AC power, which differs from the direct current or DC power that is generated by solar panels. In order to transform this DC power into AC power, it is necessary to have a solar power inverter connected to your solar panels. This inverter allows the energy generated to be consumed, or used to charge a battery depending on what type of solar energy generating unit you have.

## 3. SOLAR ENERGY CONSUMPTION AND STORAGE

Once solar energy is converted into AC power, it is possible to use this energy to power your appliance, home or even business. If you have an off-grid solar system, then your system will have a rechargeable battery in the loop, right after the inverter. This battery is charged by your solar cells and stores any excess energy, which guarantees that you will always be using the energy you generate yourself, and that you'll always have energy as long as you produce sufficient amounts.

## HOW SOLAR ENERGY IS MEASURED

Solar Energy is measured in kilowatt-hour. 1 kilowatt = 1000 watts.

1 kilowatt-hour (kWh) = the amount of electricity required to burn a 100 watt light bulb for 10 hours.

## ADVANTAGES OF SOLAR SYSTEMS:

- Solar energy is free, supplied by nature itself
- Solar energy systems are environmentally friendly – as an alternative green energy source
- Solar panels (photovoltaic PV panels) can be easily placed in residential areas (residential solar panels) in, on or off grid installations
- On grid solar panel installations supply generated electricity to the power network
- Off-grid solar panels store generated electricity for own use – e.g. in country farms and remote areas
- Solar panels cost has been falling and is expected to continue on a diminishing turn in the future; this means that PV panels will gradually become economically more viable – not in need of any subsidy incentives
- Solar Photovoltaic (PV) panels constitute a mature technology; PV panels are a reliable technology



Recharge from either Solar Panel or AC/DC adaptor.  
**DO NOT** charge with both at the same time.



# ECOBOX®

POWERFREE



**PromoTech**  
CREATIVE MANUFACTURING