1

COLLECT THE SUN'S ENERGY

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

2

STORE POWER FOR LATER USE

3

POWER YOUR GEAR

CHARGE ALMOST ANYTHING

- Phones, iPods, iPads
- Cameras, laptops, lights
- Power tools, appliances

1.THE SUN AS ENERGY SOURCE

The sun gives life to the earth through its light and heat. The process of solar energy began when photons are created though 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.

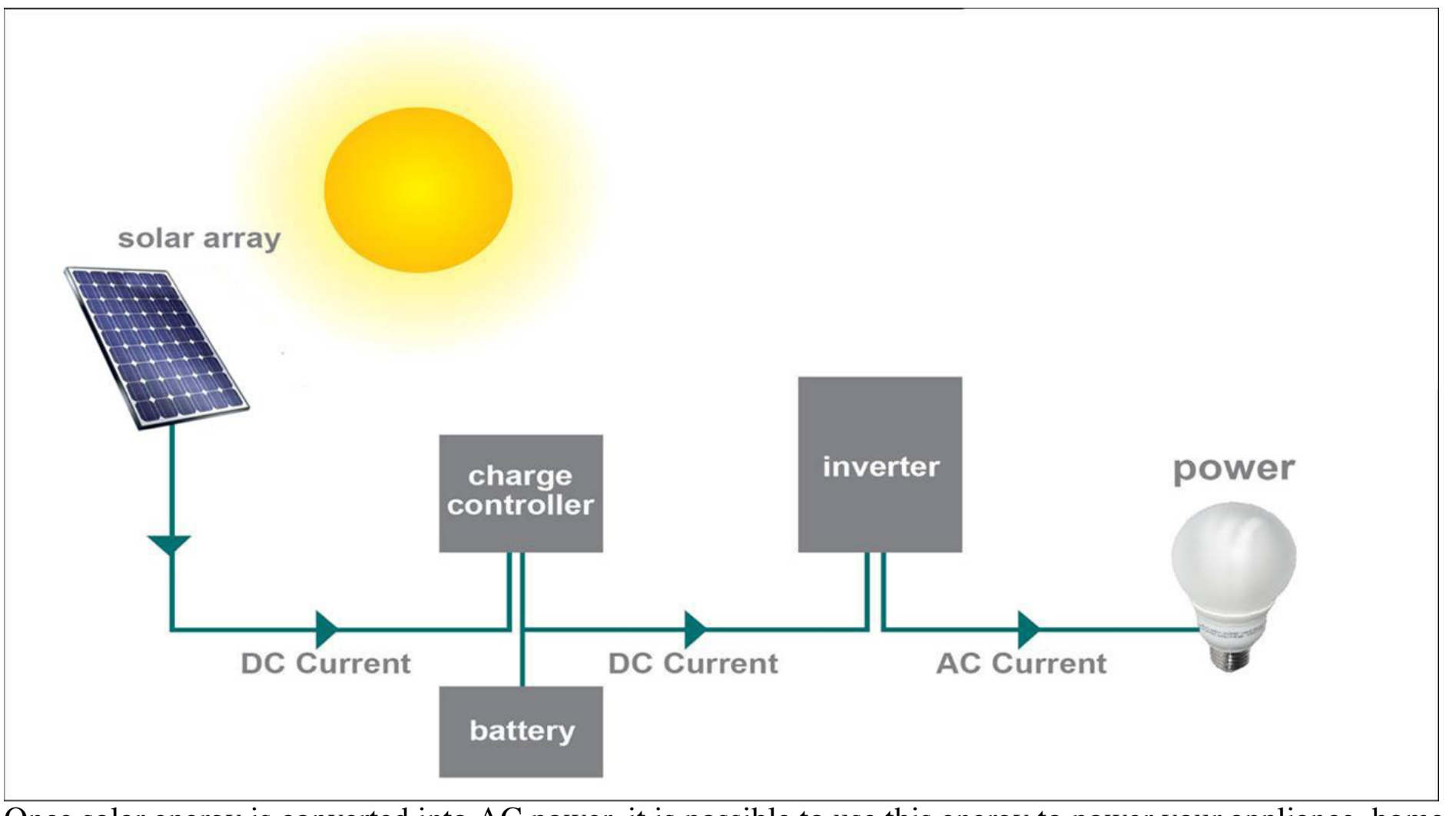
Once the photons reach Earth, we must harness them in order to create electricity. This is done through the use of photovoltaic cells, which react with the photons. These PV cells are coated with a material, which displays the photovoltaic effect.

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

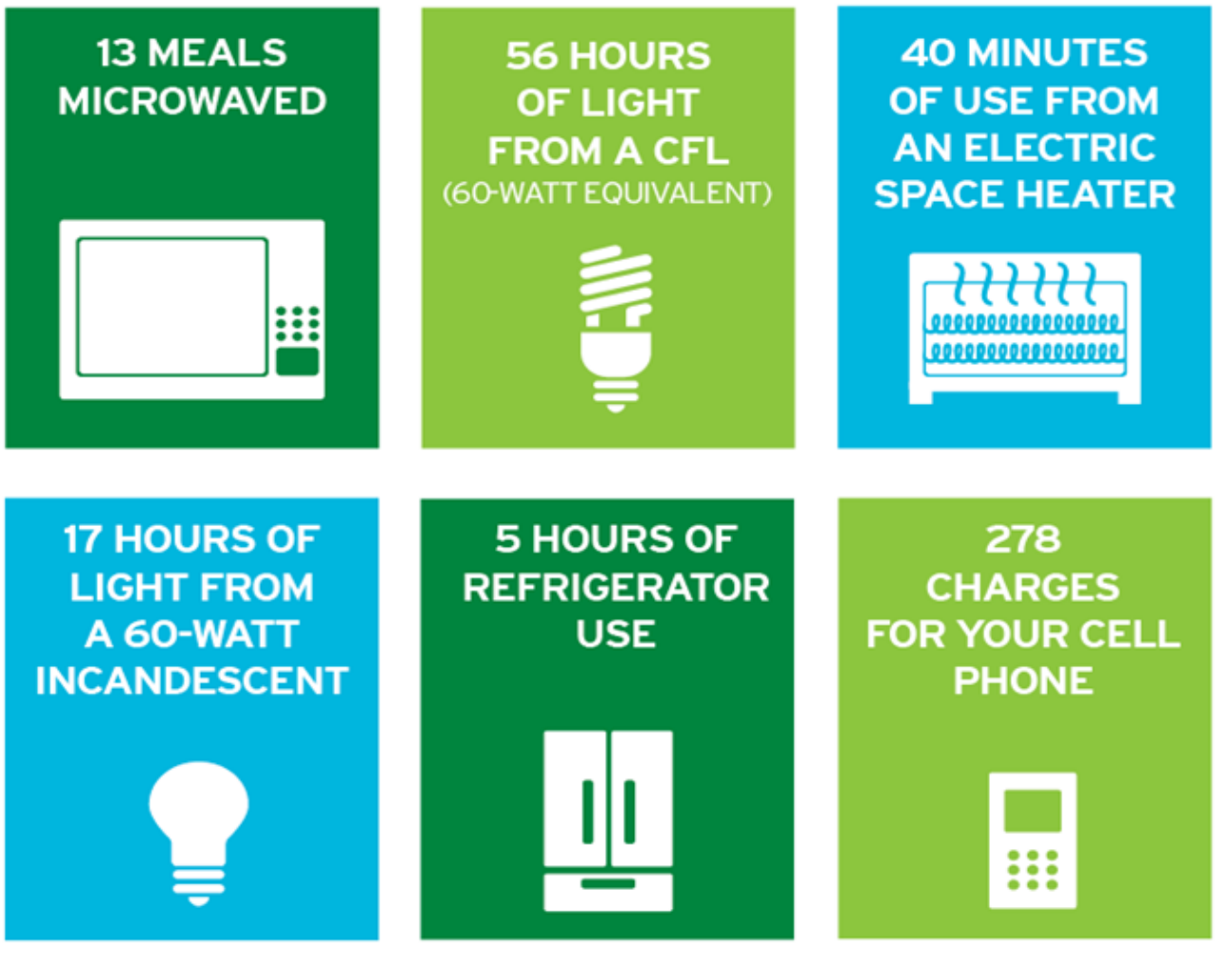


Once solar energy is converted into AC power, it is possible to use this energy to power your appliance, home or even business. If you have an off-grid solar system, then your system will have a rechargeable battery in the loop, right after the inverter. This battery is charged by your solar cells and 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.

What does 1 kWh mean for your home?



ADVANTAGES OF SOLAR SYSTEMS:

- Solar energy is free, supplied by nature itself
- Solar energy systems are environmentally friendly - as an alternative green energysource
- Solar panels (photovoltaic PV panels) can be easily placed in residential areas(residential solar panels) in, on or off grid installations
- On grid solar store 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 inthe future; this means that PV panels will gradually become economically more viablenot in need of any subsidy incentives
- Solar Photovoltaic (PV) panels constitute a mature technology; PV panels are a reliable technology

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