



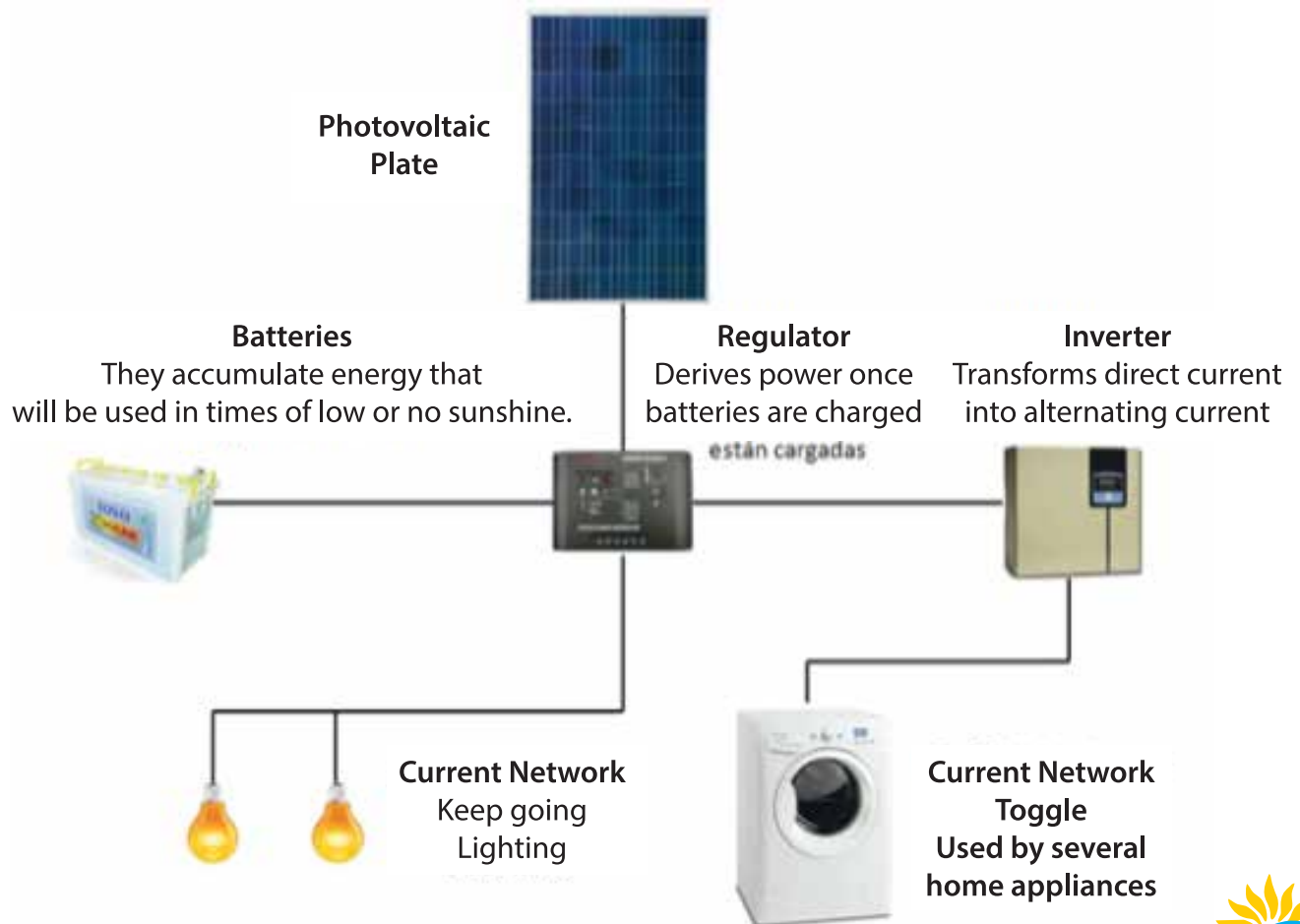
OFF-GRID SOLAR PHOTOVOLTAIC ENERGY



WHAT IS THE PHOTOVOLTAIC ENERGY?

- Photovoltaic solar energy transforms solar radiation into electrical energy.
- A photovoltaic plate or panel is made up of solar cells that are responsible for generating electricity.

WHAT COMPONENTS DOES AN ISOLATED PHOTOVOLTAIC INSTALLATION NEED?



WHERE CAN AN INSTALLATION BE SET UP?



HOW MANY SOLAR PANELS DO I NEED TO POWER MY HOUSE?

- The first step in any isolated photovoltaic installation is to know the energy demand of each home (Total Energy) and that it is nothing other than the consumption of all the electrical devices that we have at home.
- Once this value is known, all the components of the installation are calculated (boards, inverter, batteries, etc.) in order to guarantee sufficient energy to cover the needs of the home.
- There are solar panels of different powers from 40Wp to 650Wp. Generally working with 400Wp plates.

CAN PHOTOVOLTAIC PANELS WORK ON CLOUDY DAYS?

- Photovoltaic panels generate electricity even on cloudy days, although their performance decreases.

SO IF THERE ARE SEVERAL CLOUDY DAYS IN A ROW, COULD I RUN OUT OF POWER?

- No. Off-grid installations are oversized precisely for that. The batteries store energy, in such a way that the photovoltaic panels charge them and the installation consumes the batteries themselves. An autonomy of 2 or 3 days is calculated in case of cloudy days.

HOW LONG DOES IT TAKE TO INSTALL?

- It depends on the size of the installation but generally for private homes between 1 and 3 days.

WHAT IS THE USEFUL LIFE OF PHOTOVOLTAIC SOLAR PANELS?

- The main manufacturers of solar modules offer guarantees on their products of around 20 or 25 years.

WHERE SHOULD THE BATTERIES BE INSTALLED?

- You should look for a place where the temperature is warm, avoiding closed or poorly ventilated places.
- The number of batteries depends on the installation but a standard installation requires an approximate space for the batteries of 1 x 1 m.



WHAT MAINTENANCE DOES A PHOTOVOLTAIC SYSTEM REQUIRE?

- Photovoltaic installations require minimal and simple maintenance, which is reduced to the following operations:
 - Plates: require little or no maintenance. Periodic cleaning with a cloth.
 - Batteries: this is the element of the installation that requires the most attention; Its duration will largely depend on its correct use and good maintenance.