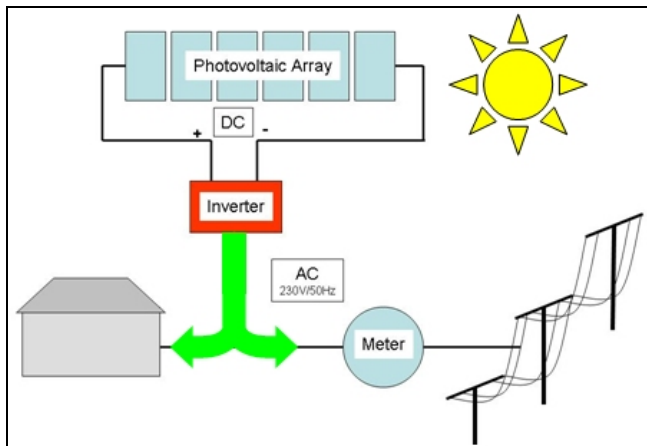
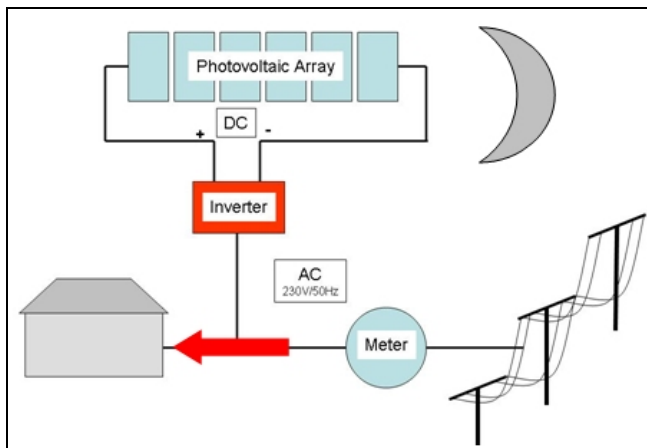


How does a Grid-connected system work?



During the day, the production of the SE system is usually **higher** than the consumption in the house.

As a consequence, the excess electricity is fed into the power line, i.e. one gives electricity to the public power company (Grenlec) – the meter spins backwards.



During the night, the SE system produces no electricity.

The required electricity is now taken from the power line, i.e. one gets back electricity from the public power company – the meter spins forwards.

At the end of the month the electricity bill is reduced by the amount of electricity generated by the solar system – and that translates directly into savings.

The system consists of:

- **Photovoltaic Array** (solar panels), usually installed on roof
- **Inverter**, which converts the DC (direct current) to AC (alternating current)

Advantages:

- least expensive
- most environmental friendly (no batteries)
- one-to-one net-metering, i.e. giving and taking electricity to and from the power company at the same price
- size of system is variable and can be designed according to desired saving on electricity bill

Disadvantages:

- no electricity, when power-outage occurs, due to safety measures