

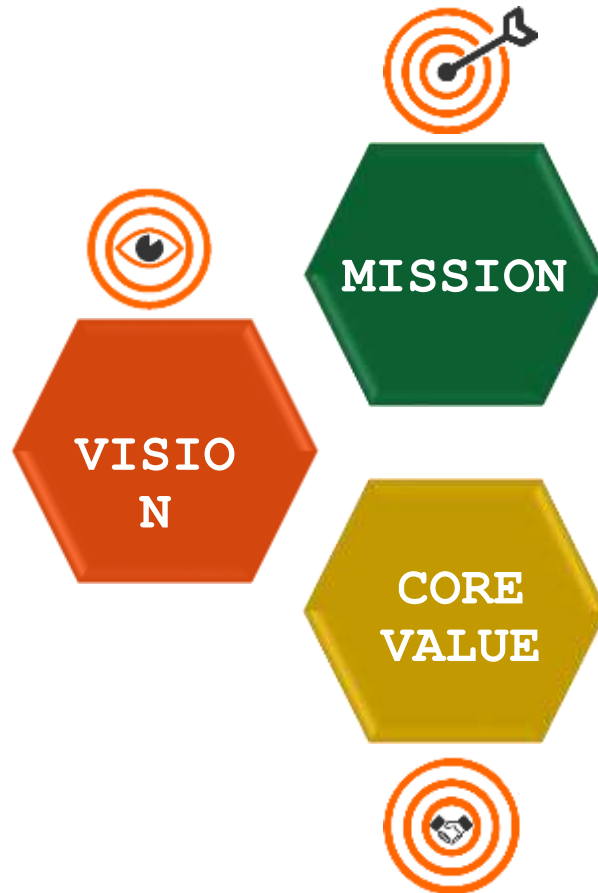


PNP TRANZ SOLUTION

COMPANY PROFILE

VISION , MISSION AND CORE VALUE

To be an organization committed for Customer satisfaction through our product and services which will be the result of our team efforts to achieve guaranteed performance & offering end-to-end solutions to our clients as well as customers.



To be recognized as trustworthy and preferred source for electrical works and related services with high quality and competitiveness.

Quality

TRUST

TEAM WORK

CUSTOMER RELATION

WHY CHOOSE US



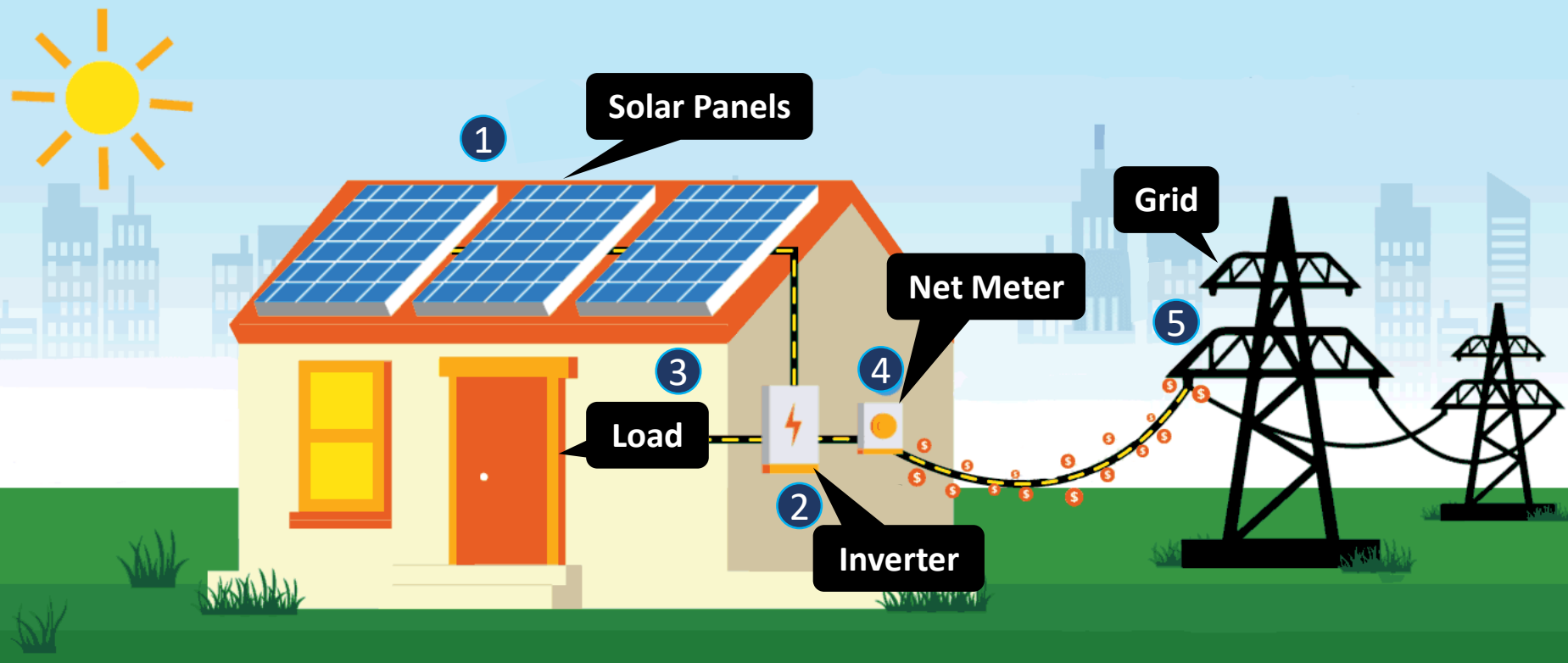
OUR SERVICES

SOLAR

- ❖ **EPC Projects Of Solar Power Plant**
- ❖ **Rooftop Solar Ongrid / Offgrid Systems**
- ❖ **Solar Water Heater**
- ❖ **Solar Street Lights**
- ❖ **Solar Water Pumps**
- ❖ **Maintenance / AMC of Solar System**
- ❖ **ALL TYPE OF ELECTRICAL WORK**

What Is Solar Net Metering ?

Solar energy the heat and light energy that is produced by the **Sun**. This energy can be used actively or passively by humans through activities like the **installing** of **solar panels**.



Using the Sun's Energy to Generate Electricity

Solar Energy Advantages and Disadvantages (Net Metering)

Advantages of Using Solar System Energy(Ongrid) :

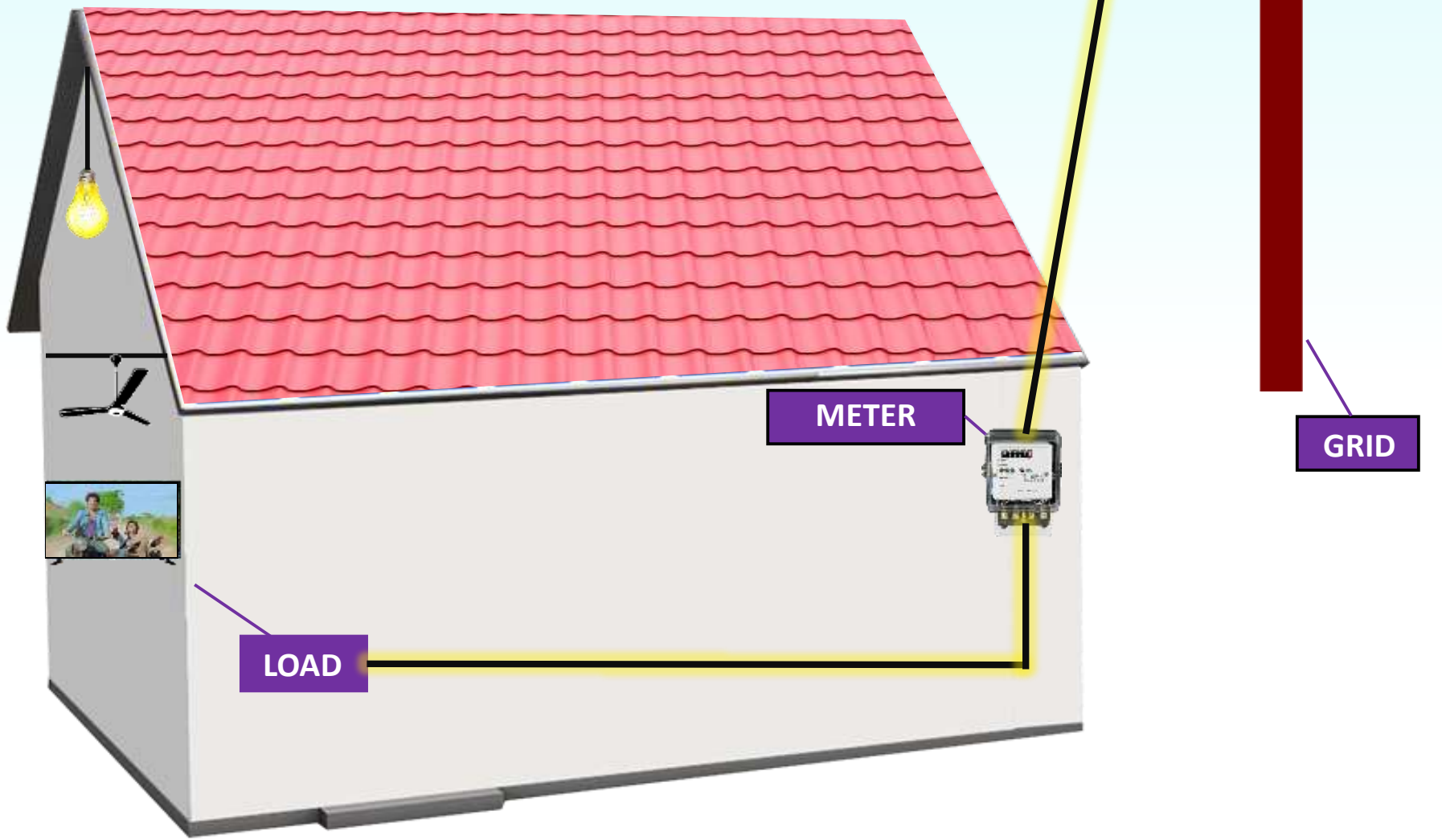
- ❖ Install rooftop solar & make your own electricity.
- ❖ You will start seeing the benefits of solar energy from day one.
- ❖ Excess energy from your solar panel not used goes back to the electrical grid.
- ❖ Protection against rising electricity prices.
- ❖ Long lifespan with low maintenance.
- ❖ Return your investment within 3-4 year.
- ❖ 25 year panel performance warranty.
- ❖ Low Maintenance.
- ❖ It is Renewable.
- ❖ Non – Polluting.

Disadvantages of Using Solar System Energy :

- ❖ Large areas are required for installation of solar panel.
- ❖ High initial cost but it will return within 3-4 year.
- ❖ solar panels should face true south . Usually this is the best direction because solar panels will receive direct light throughout the day.

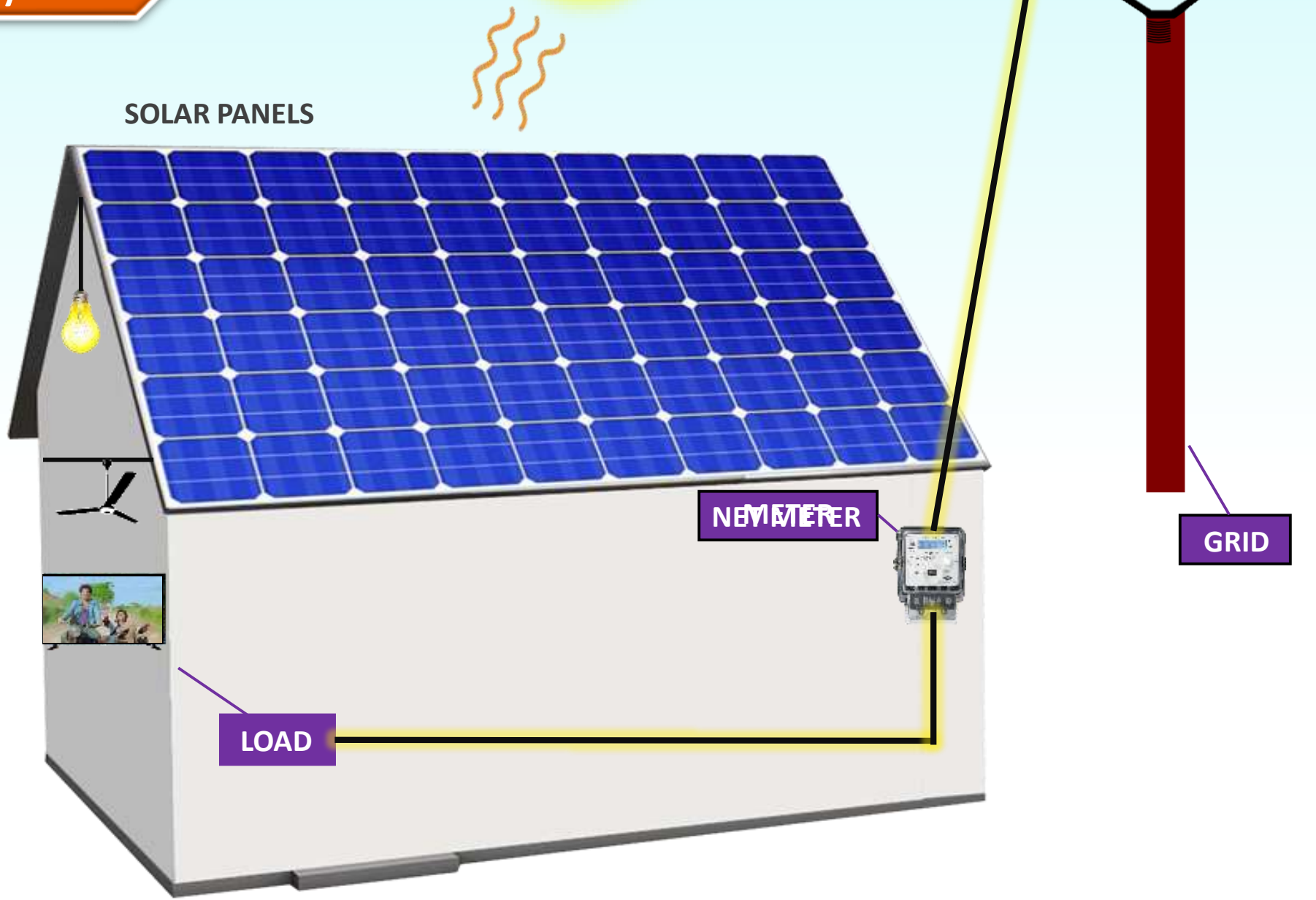
BEFORE NET METERING

Net metering is a mechanism which allows domestic or commercial users who generate their own electricity using solar panels or photovoltaic systems to export their surplus energy back to the grid.



After NET METERING

Day Time :



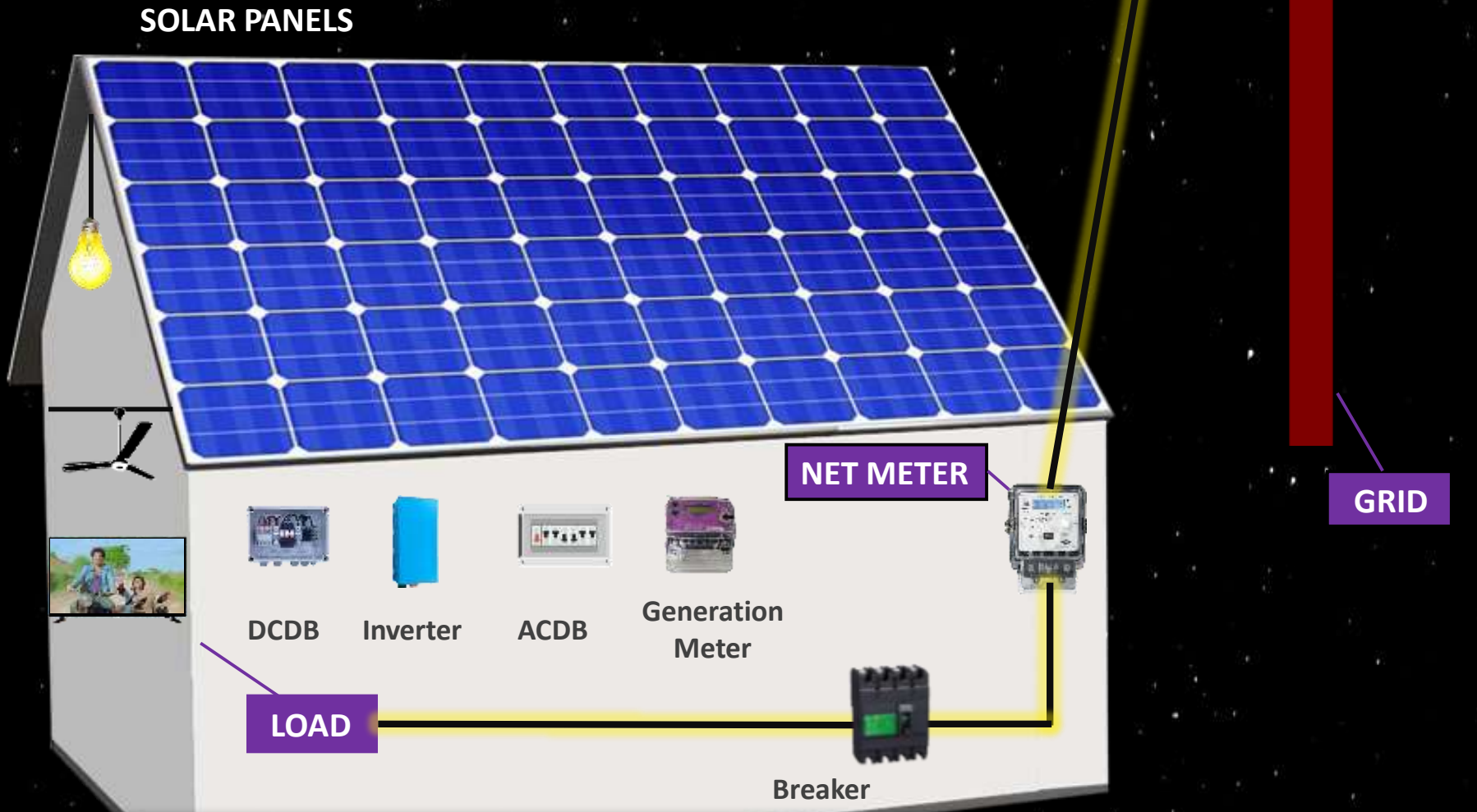
Day Time :

SOLAR PANELS



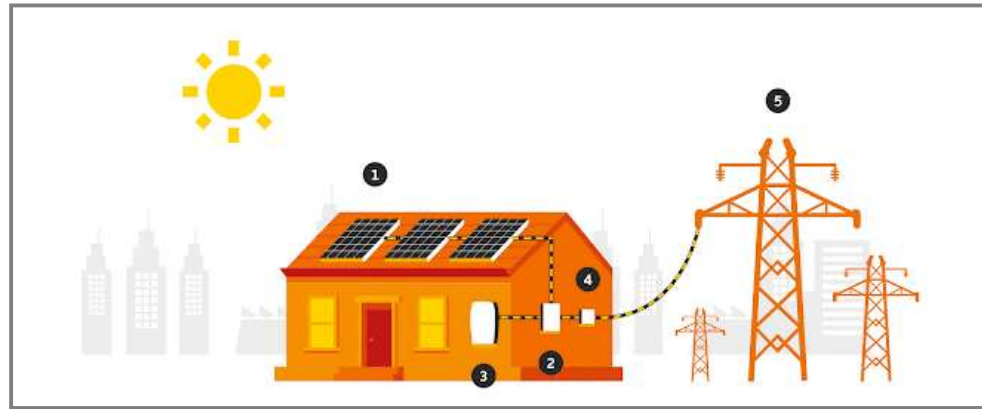
After NET METERING

Night Time :

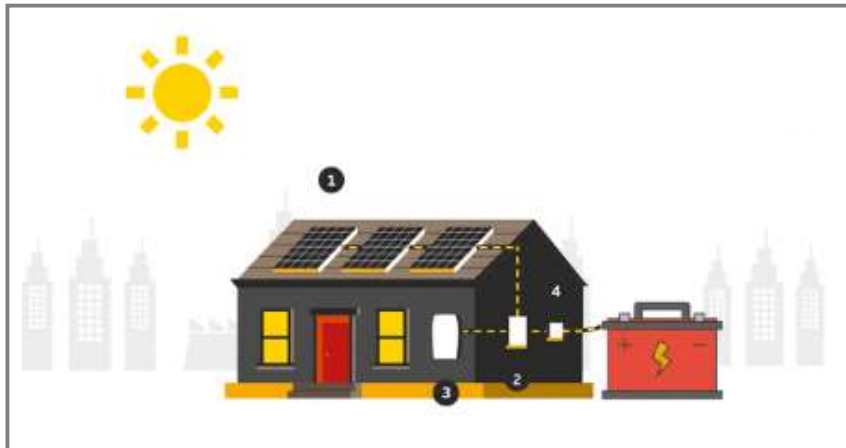


Automatically exported power returns from the electric grid.

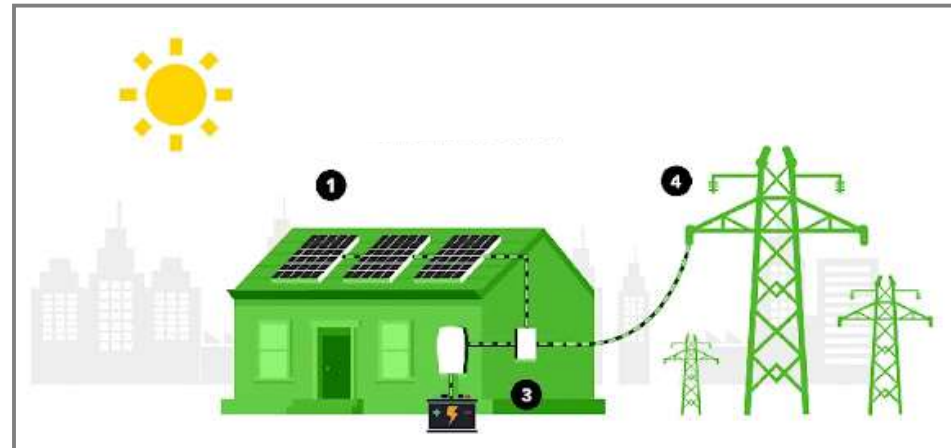
Types of Solar System



On Grid Solar System



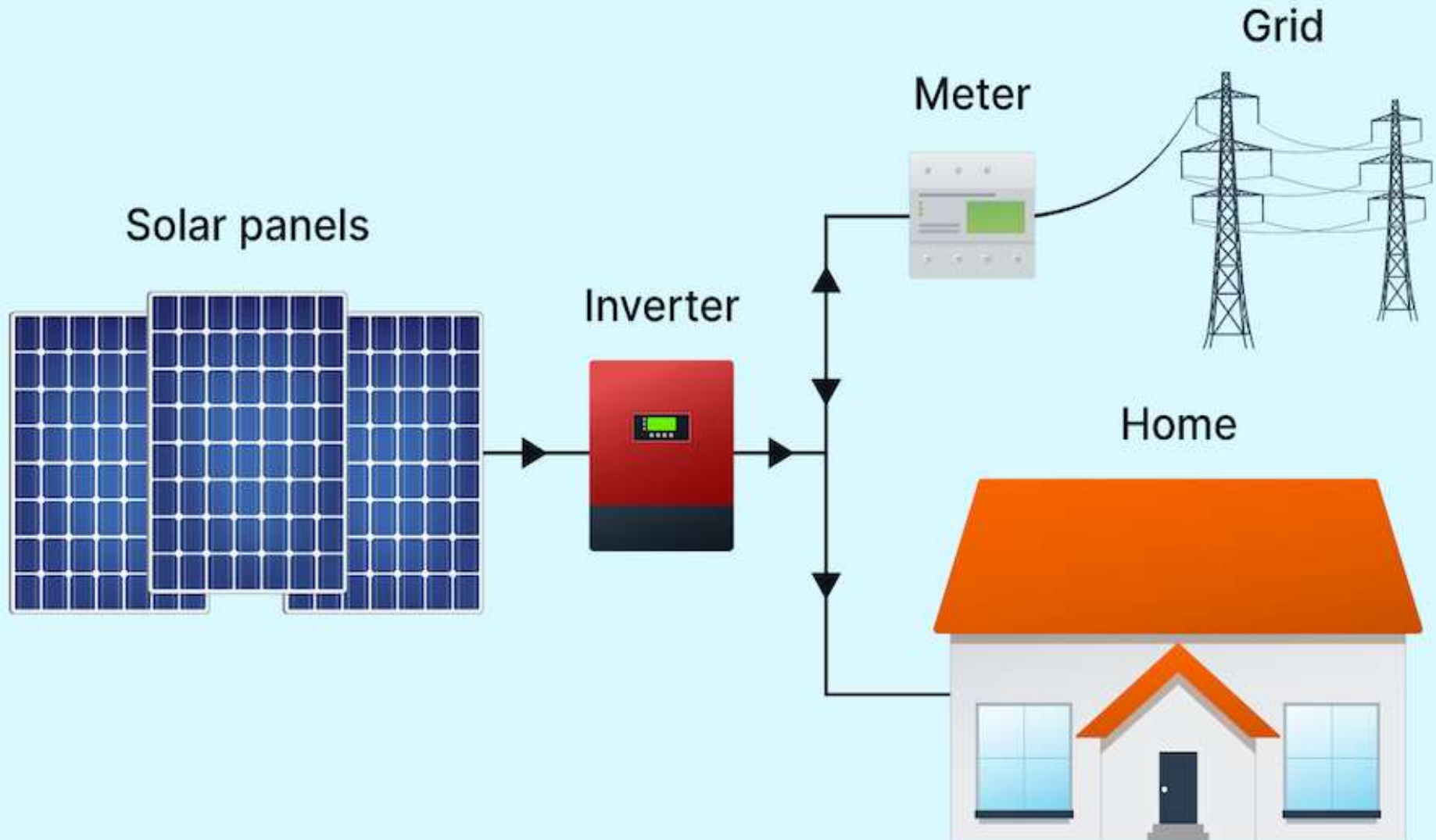
Off Grid Solar System



Hybrid Solar System

On Grid Solar System

On-grid solar power system is a solar power generation system where it is connected to the utility grid.



On Grid Solar System : Advantages and Disadvantages

Advantages of Using On Grid Solar System Energy :

1. **Very affordable** : There is no need to buy batteries and some other equipment.
2. **No need to buy expensive battery storage** : Grid-connected photovoltaic systems are very affordable and easy to build and maintain. Since there is no need to buy a battery, which is the most expensive component, you do not have to worry about damaging the battery by under or over-charging.
3. **Huge reduction in electricity bills** : With net-meter in place, the consumer has to pay only for the surplus electricity he consumes, ensuring the bill generated every month is reduced drastically.
4. **You can use the utility grid as a virtual battery** :
The electric power grid is in many ways also a battery, without the need for maintenance or replacements, and with much better efficiency rates.
5. **Generate your own electricity** : When you live in a solar-equipped home, you are nearly grid-independent and can generate the amount of electricity you need to function every day.
6. **Environmentally-friendly** : You reduce greenhouse gas emissions, lower the demand for fossil fuels, and eventually decrease your own carbon footprint.

On Grid Solar System : Advantages and Disadvantages

Advantages of Using On Grid Solar System Energy :

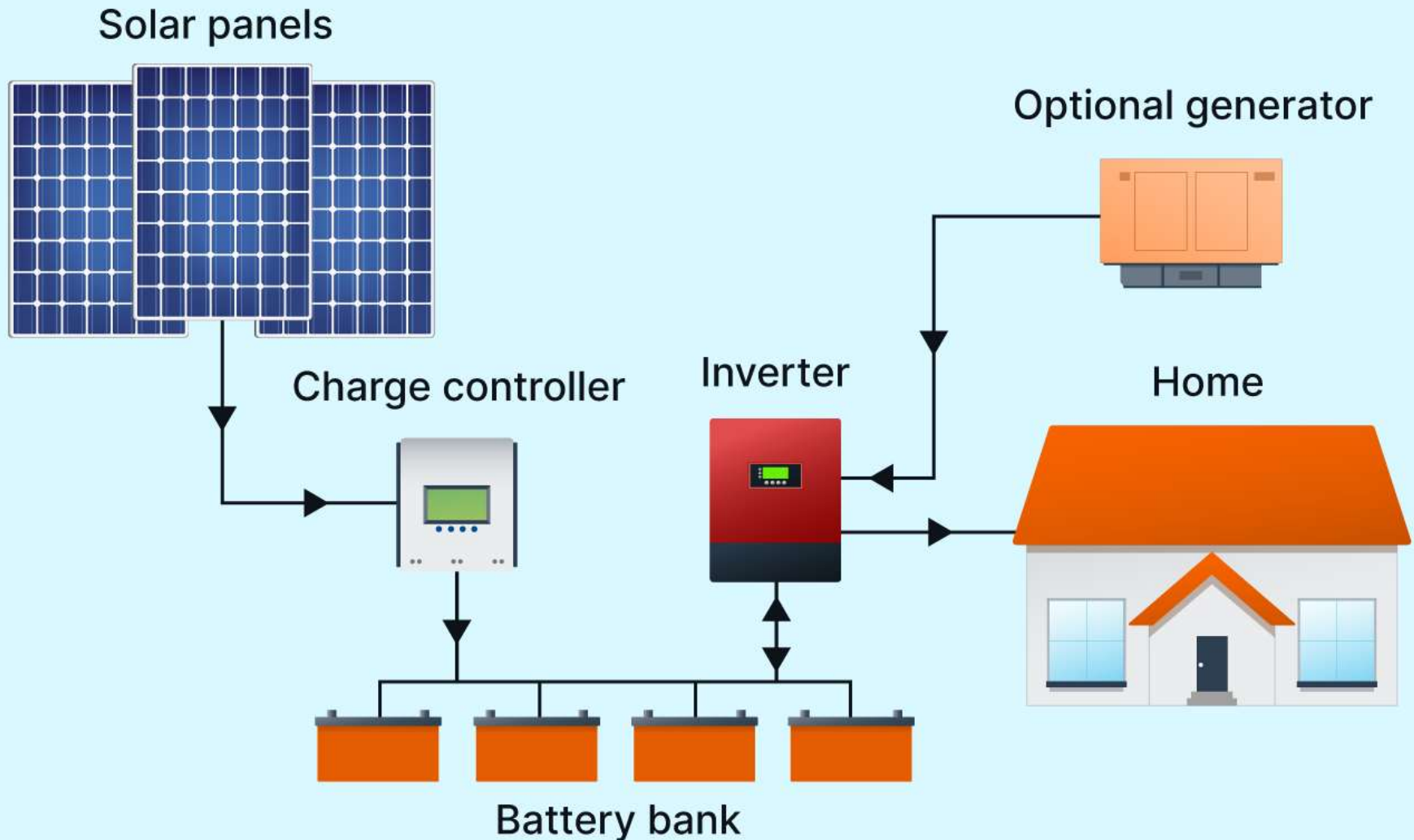
7. **Easy maintenance** : The elimination of batteries in the on-grid system makes the maintenance quite easy. It also eliminates the cost of upkeep of the batteries
9. **Increase your property value** : Did you know that installing solar panels can also increase your property value by 3-4% ? Equipping your home with a solar energy system drives up property values and offers an attractive selling point for real estate agents to market your property.

Disadvantages of Using Solar System Energy :

1. These are battery-less systems, which provide you no backup.

Off - Grid Solar System

Off-grid systems work independently of the grid but have batteries which can store the solar power generated by the system.



Off - Grid Solar System : Advantages and Disadvantages

Advantages of Using Offgrid Solar System Energy :

1. **Environmentally-friendly** : You reduce greenhouse gas emissions, lower the demand for fossil fuels, and eventually decrease your own carbon footprint.
2. **Generate your own electricity** : When you live in a solar-equipped home, you are nearly grid-independent and can generate the amount of electricity you need to function every day.
3. **Lack of Electric Bills** :
Off-grid power systems do not use electricity from the grid and therefore cost you nothing in monthly electric bills.

Disadvantages of Using Solar System Energy :

1. **Batteries Require Maintenance, Have Short Lifespans** :
Not only are batteries a costly initial investment, they also require maintenance and have short lifespans. Typical batteries will last anywhere between 3-4 years and then you will need to purchase replacements.
2. Solar battery systems require **regular maintenance**.

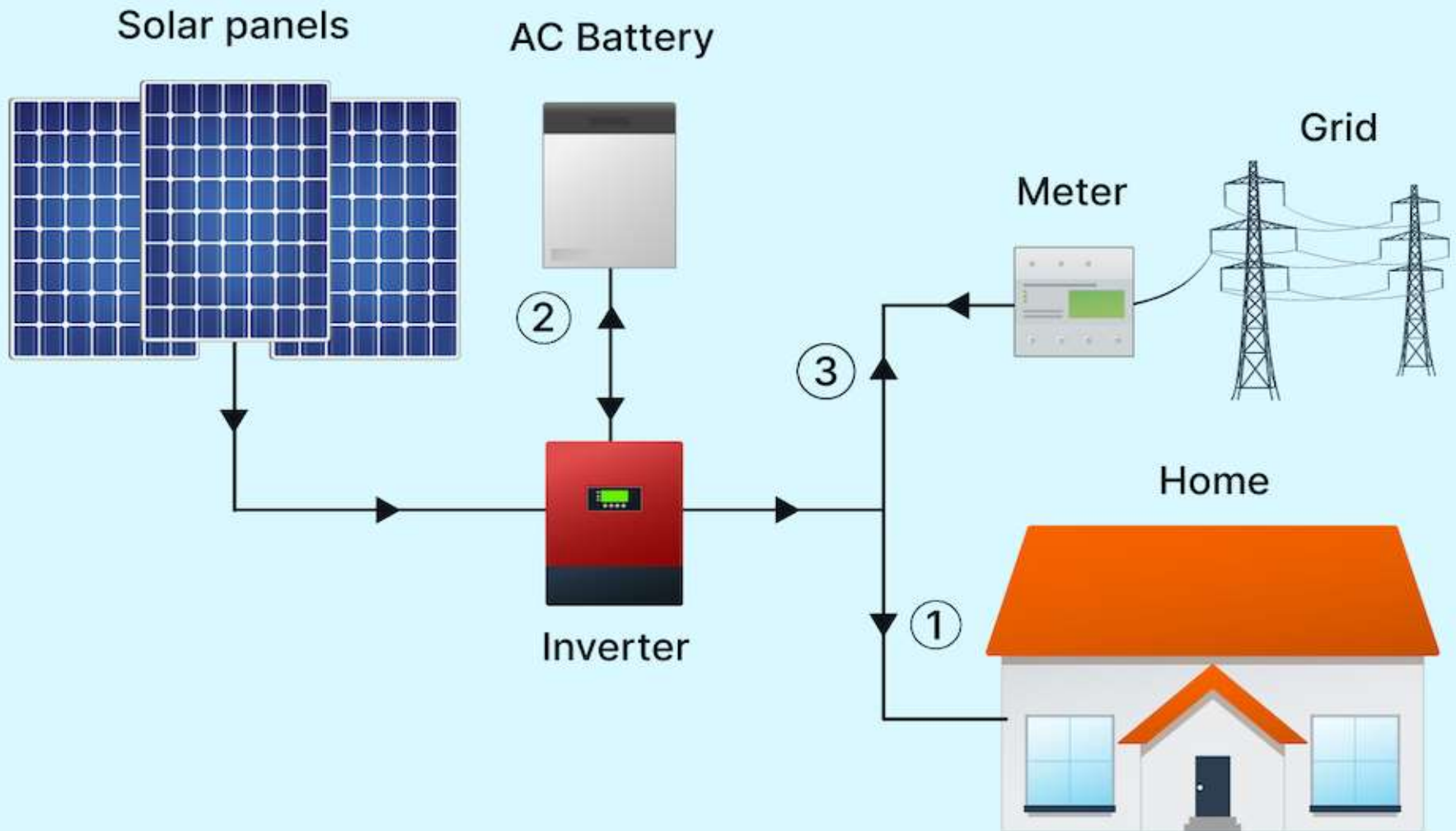
Disadvantages of Off - Grid Solar System

Disadvantages of Using Solar System Energy :

3. **Higher Initial Investment** : While going off-grid eliminates your monthly electricity bill, the initial investment is higher for off-grid solar than grid-tied solar. In addition to the materials list for grid-tied solar, off-grid solar requires a battery bank for storing generated energy. These batteries can account for up to 30-40% of the initial cost of an off-grid system.
4. **INITAL COST** : As an off grid solar system requires larger storage, more [solar panels](#), a larger inverter and in some cases even a generator, they are often double the price of a grid-tied system. This is mainly because your system will have no support from the Grid and therefore will have to be able to store and generate larger capacities.
5. It require the following **extra components**:
 - Solar charge controller
 - Battery bank
 - DC disconnect (additional)
 - Off-grid inverter
 - Backup generator (optional- No use in rainy season)

Hybrid Solar System

A hybrid system is when your solar panels remain connected to the grid's power lines and have a backup battery system to store excess power.



Disadvantages of Hybrid Solar System

1. **Costly Installation :**
The addition of a hybrid inverter plus batteries to your current system is likely to fetch a higher price than installing a grid-tied solution.
2. **Short Battery Life :**
Most battery models have a lifespan of three to four years.
3. **Load Limitations :** can not add more than the rated capacity of solar system.
4. More **complex installation** requires more room and higher install cost.
5. Backup power may **limit** how many **appliances** you can **run** at the **same time** (depending on the type of hybrid inverter and its capability)

THANK YOU

