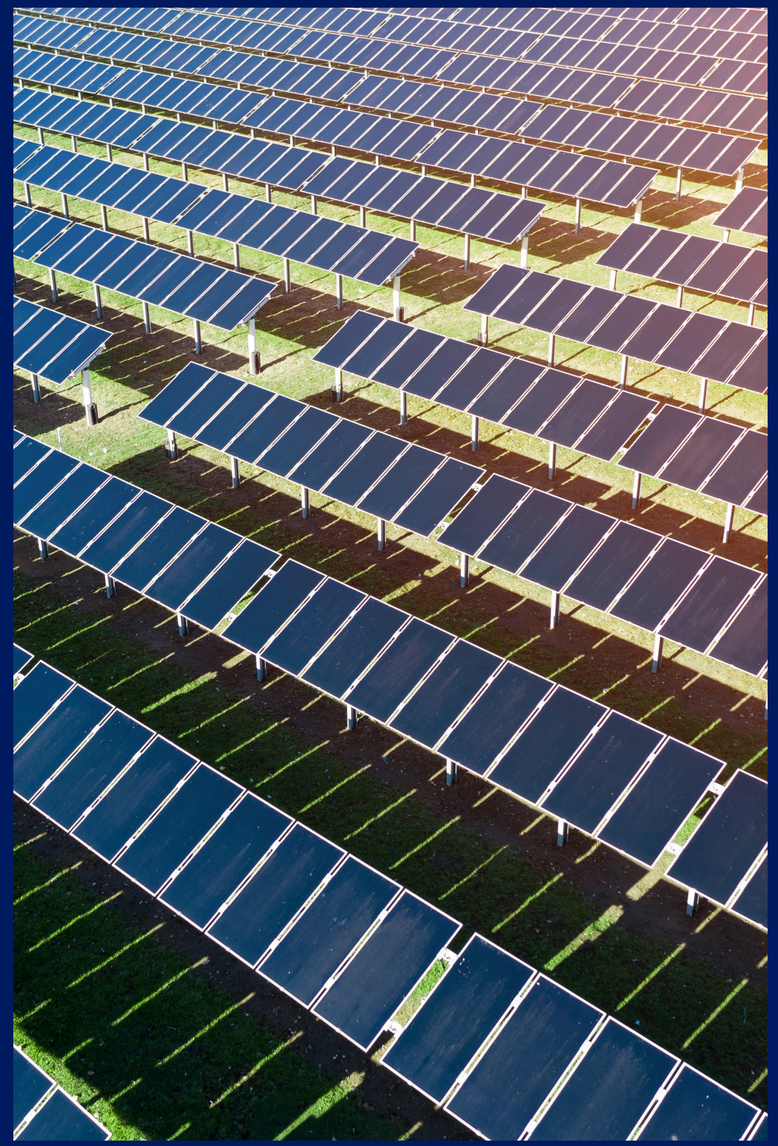
Battery Bank: Off-grid systems include a battery bank that stores excess energy generated during the day. The energy stored in the batteries is then available for use during periods of low solar production, such as at night or on cloudy days.

Inverter: The DC electricity stored in the battery bank needs to be converted into alternating current (AC) electricity for use by electrical appliances and equipment. An inverter is used for this purpose.

Electricity Consumption: The AC electricity produced by the inverter powers electrical devices and equipment within the building or system.

Backup Generator (Optional): In some off-grid systems, a backup generator may be included to provide additional power during extended periods of low solar production or when the battery bank is depleted.



Key Features of OF-Grid :

- Energy Independence
- Remote and Rural Applications
- Environmentally Friendly
- System Autonomy
- Cost of Energy Storage
- Energy Storage

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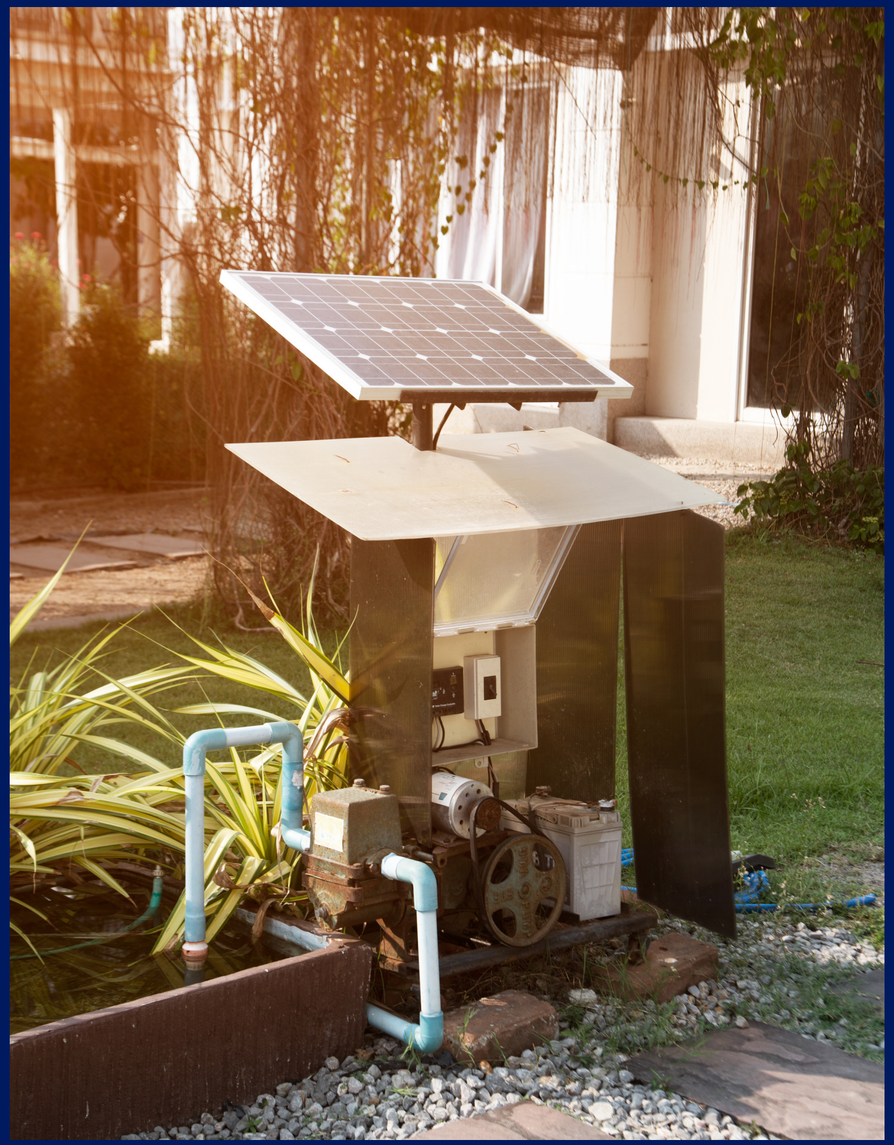

Solar Water Pump

Solar Panels: Solar water pumping systems consist of solar panels that capture sunlight and convert it into direct current (DC) electricity.

Water Pump: The DC electricity generated by the solar panels is directed to a water pump, typically a submersible pump or surface pump. The water pump's role is to draw water from a source, such as a well, borehole, or surface water, and deliver it to a desired location, like a storage tank or irrigation system.

Water Storage: In many cases, a solar water pumping system includes a water storage component, such as a water tank or reservoir, to store water for later use or irrigation.

Controller: A controller or pump inverter manages the operation of the water pump. It controls the speed and flow of the pump to match the available solar energy and the water demand, ensuring efficient and consistent operation.