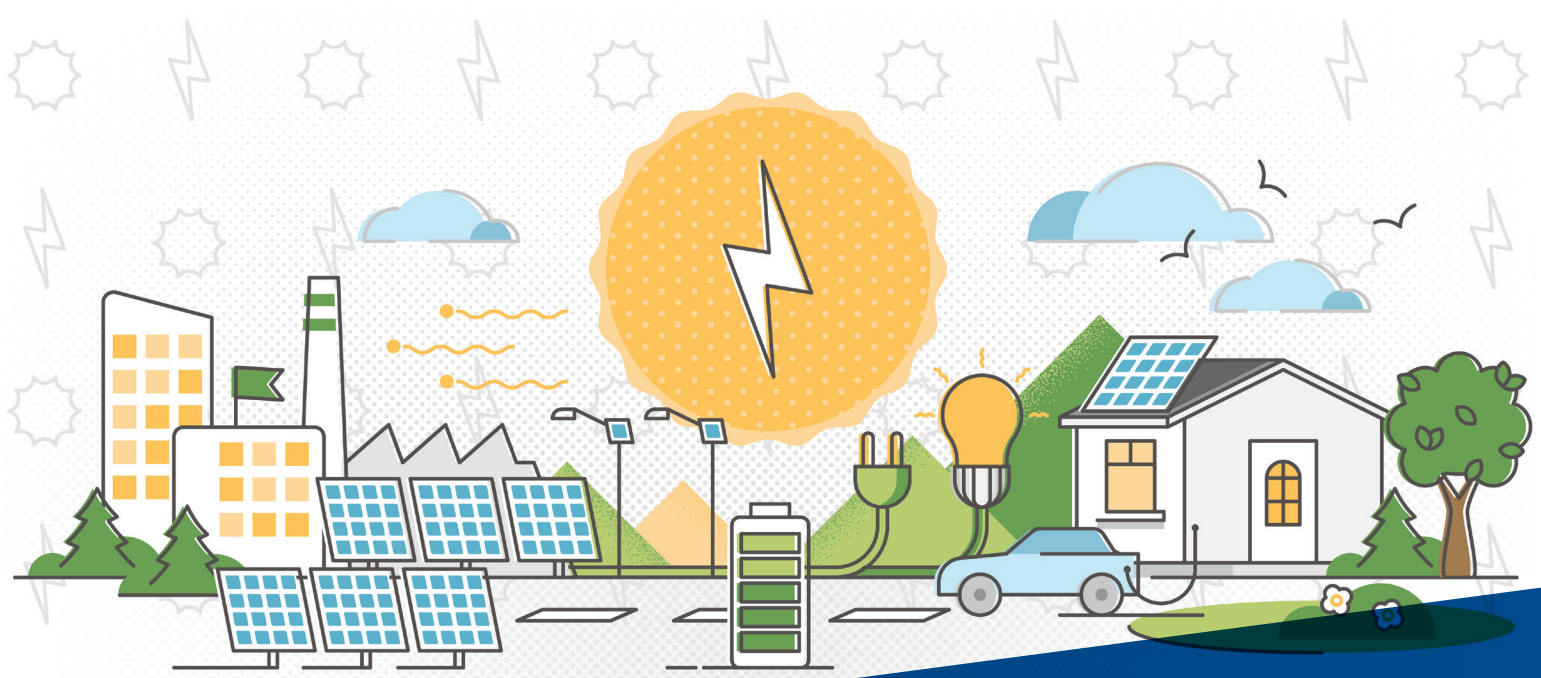




GRID-CONNECTED ROOFTOP SOLAR SYSTEM

FOR RESIDENTIAL CONSUMERS



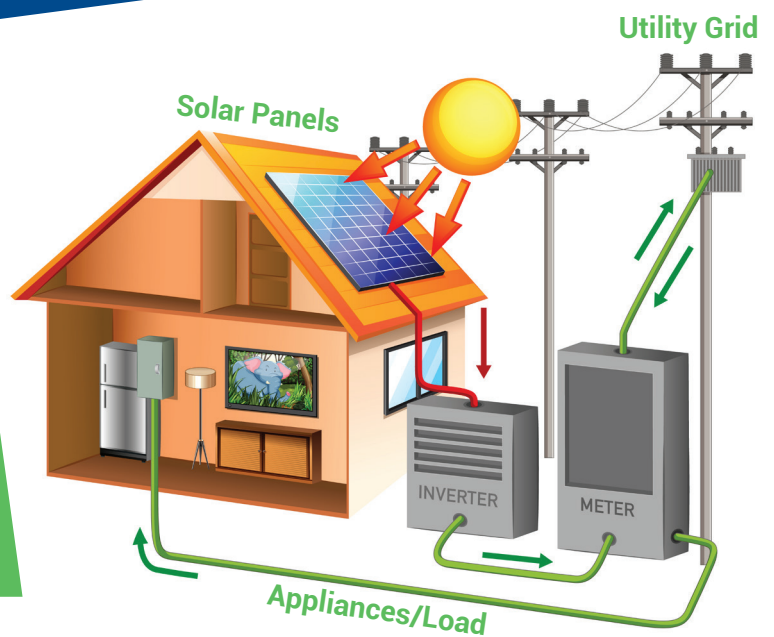


ABOUT THE ROOFTOP SOLAR SYSTEM

In a grid-connected rooftop solar (RTS) system, the DC power generated from solar panels is converted to AC power using a power conditioning unit/Inverter and is fed to the grid.

A 1 kW rooftop solar system generally requires **10 sq. meters of shadow-free area**. However, actual area requirements may vary depending on the efficiency of solar module, their placement, etc. On a clear sunny day, a 1 kWp RTS system can generate 4 to 5.5 units of electricity.

Install RTS system by applying online at www.solarrooftop.gov.in



SUBSIDY SCHEMES

Central Government Subsidy/ Central Financial Assistance (CFA) is available exclusively to residential sector grid-connected rooftop solar projects. The details of the subsidy for residential consumers are provided below:

Plant Capacity	Applicable Subsidy
1kW – 2 kW	₹ 30,000 to ₹ 60,000/-
2kW – 3 kW	₹ 60,000 to ₹ 78,000/-
Above 3 kW	₹ 78,000/- fixed

State Government Subsidy for the residential sector-Uttar Pradesh Government will provide a subsidy of **₹ 15,000/kW to a maximum of ₹ 30,000, which will be over and above the Central Government Subsidy provided.**

POCKET-FRIENDLY SYSTEM

The rooftop solar system has a direct impact on the monthly electricity bill of each consumer. With the subsidy provided by the Central and State Government, the effective cost of the system reduces significantly. The average monthly generation from a 2kW system is 270 units in Uttar Pradesh. The detail of monthly calculation and saving is provided below:

Parameter	Unit	Value
Capacity	kWp	2
Cost per kWp (Tentative)	₹	60000
Cost of system	₹	120000
Total Subsidy (Central + State)	₹	90000
Net Cost of the system	₹	30000
Units' generation per month	kWh	270
Average unit cost	₹	6
Savings from Electricity monthly	₹	1620
Payback (Tentative)	Year	1.5
Life of Plant	Year	25

VIEWS OF SOLAR CHAMPIONS

Dr. Bipin Kumar is a proud owner of an 8kW capacity rooftop solar system installed at his home. Dr. Bipin followed the simple procedure mentioned in this brochure and the installation of his rooftop solar system was completed in just 15 days. He is also set to receive twin-benefits of Central and State subsidies. Previously, Dr. Bipin received a hefty electricity bill of ₹14,000/month. With the rooftop solar system in place, he is able to save more than 50% of the bill amount by sending power to the grid. He had a hassle-free experience with the system and found the maintenance easy with no additional cost. Dr. Bipin urges residents of Uttar Pradesh to reap the benefits from installing rooftop solar systems and join him to become Solar Champions of their Solar City.



SOCIO-ENVIRONMENT BENEFITS

- **Reduces air pollution-** Electricity generation from fossil fuels can generate harmful carbon dioxide and methane gases that lower the quality of the air we breathe. A rooftop solar system uses solar energy which doesn't produce harmful gases.
- **No extra land requirement-** Rooftop solar system doesn't require any separate piece of land for the installation. It can be designed in a manner where consumers can use the roof space for the solar plant.
- **Reducing our reliance on fossil fuels-** With the use of rooftop solar system, we can reduce the dependence on imported fossil fuels, making India '**atmanirbhar**'.



WHO IS THE NODAL AGENCY?

Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) is the designated implementing agency for grid-connected RTS system in the State.

WHO CAN INSTALL ROOFTOP SOLAR SYSTEM?

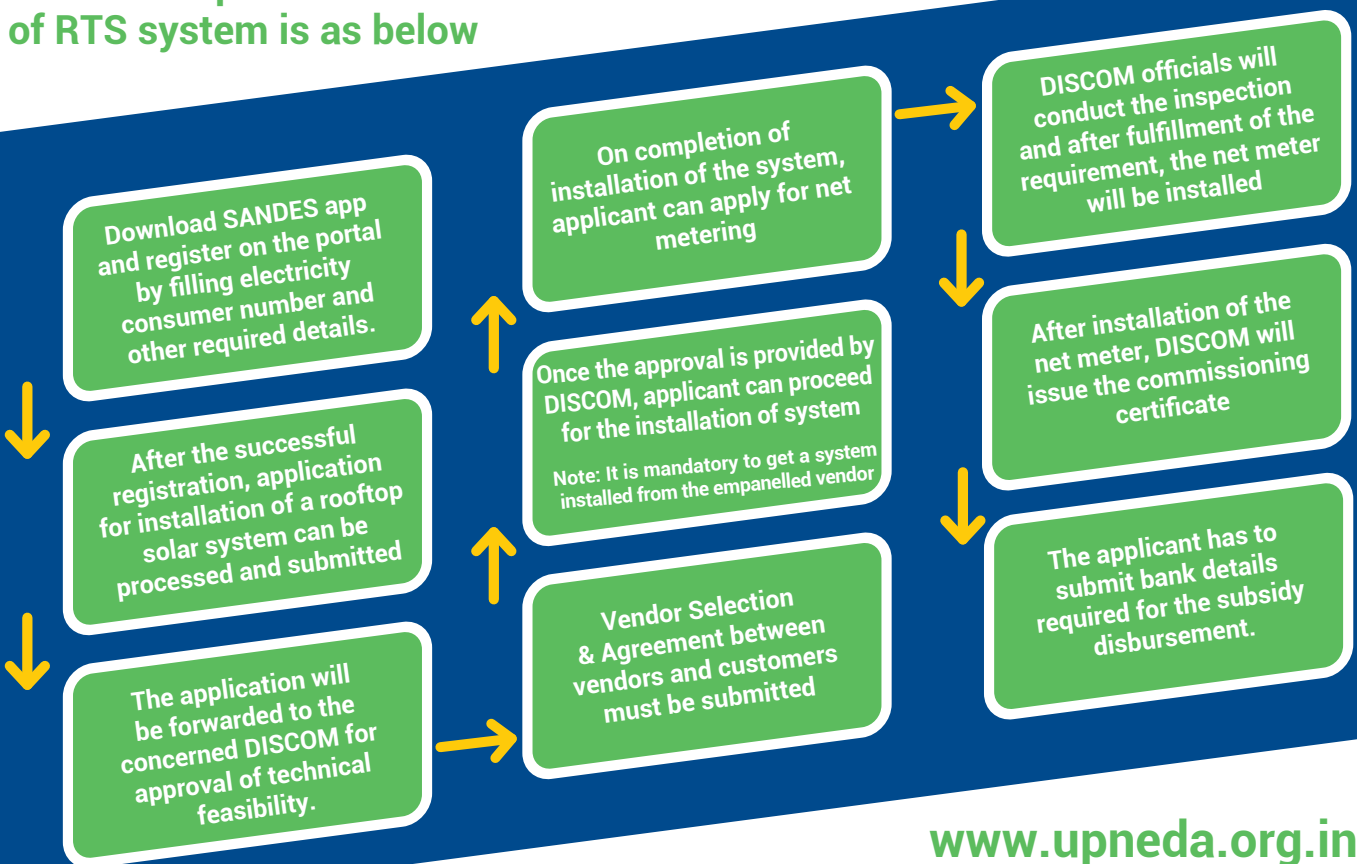
All residential consumers of electricity in the area of supply of designated power distribution utilities can install a rooftop solar system.

HOW TO INSTALL ROOFTOP SOLAR SYSTEM?

The consumers can apply via **PM - Surya Ghar : Muft Bijli Yojana National Portal** for processing the applications for RTS systems.

Apply online at **www.pmsuryaghar.gov.in**. All the required details can easily be found on this portal.

The overall process flow for the installation of RTS system is as below



www.upneda.org.in



UTTAR PRADESH NEW AND RENEWABLE ENERGY DEVELOPMENT AGENCY

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