

**SUBSIDY SCHEME FOR GRID CONNECTED AND OFF GRID SOLAR SYSTEMS
AT IOCL PETROL PUMPS**

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1. ABOUT THE PROGRAM

With the massive target of the Solarisation of petrol pumps, Indian Oil has recently launched a subsidy program for which Firstgreen Consulting is an empanelled EPC partner to IOCL.

Under the proposed scheme consumer has to pay only 35% of the project cost and balance 65% is paid to the beneficiary petrol pump owner by IOCL as subsidy for the solar PV system.

2. ABOUT FIRSTGREEN

Firstgreen Consulting is a leading solar PV EPC service provider. We have been working for IOCL, BPCL and HPCL for solarisation of the petrol pumps. We have a team of highly qualified and experienced professionals of the solar industry. We have extensive experience in solar PV ranging from kW scale project to MW scale solar project. Our activities in Solar Projects- have been related to identification of site, land procurement, assessment of power evacuation feasibility, technology selection, detailed engineering design, finalizing contracts for supply and implementation, Project identification and development support, etc. We also provide our services during implementation phase (Owner's Engineer), as quality management, site management, expediting and staff training

Key Strengths

1. Successfully handled over 500 MW of solar advisory projects to various projects to some of the leading solar project developers.
2. In-house capacity of conducting the detailed engineering and design of solar power projects with strong team of over 25 design experts.
3. Over 5 years of experience in design, engineering and project management of large solar power projects as well as solar rooftop projects.
4. Project management expertise and strong technological knowhow on handling the solar power projects.
5. Successful track record of executing large solar rooftop project up to capacity of 3 MW under challenging climatic conditions.
6. Firstgreen blog is one of the largest technological know-how resources to solar professionals (www.firstgreen.co/blog). Our daily footfall is over 11000.
7. MNRE Channel partnership for new entrepreneurs. Firstgreen is also a SETNET partner to National Institute of Solar Energy (NISE) for conducting the solar PV training programs to the solar professionals.

8. Excellent relationship with the financial institutions and Banks for arranging the financial closure to our clients.

3. System Overview

The proposed scheme is for 3KW/5KW/7KW/10 KW/15 kW solar PV systems for grid connected as well as for off grid applications. The proposed system will consist of poly crystalline solar modules arranged in series and parallel combination meeting PCU/Inverter voltage and current requirement.

The DC output from the solar Panel is directly converted to Grid Compatible AC Output using Grid Tied String Inverters which is synchronized with the LT side of the Distribution Panel. In case of off grid systems, battery back is provided to meet the electricity requirements as power back up. All the energy generated through solar panels will be fed to the various loads of petrol pump.

4. IOCL SUBSIDY SCHEME

Table1: Off grid system (with batteries)

System capacity in kWp	Cost of Solar Panel (in Rs)	Inverter capacity in kVA	Cost of Inverter and Battery (in Rs)	Total cost of the system	% subsidy proposed for different capacity	Celling of subsidy (in RS) rounded off
3	160000	5	175000	335000	55	185000
5	260000	5	175000	435000	60	260000
7	365000	10	265000	630000	60	380000
10	510000	10	265000	775000	65	500000
15	760000	15	400000	1160000	65	755000

Table2: On- grid system (without batteries)

System capacity in kWp	Cost of Solar Panel (in Rs)	Inverter capacity in kVA	Cost of Inverter (in Rs)	Total cost of the system	% subsidy proposed for different capacity	Celling of subsidy (in RS) rounded off
3	160000	5	87500	247500	55	135000
5	260000	5	87500	347500	60	210000
7	365000	10	132500	497500	60	300000
10	510000	10	132500	642500	65	420000
15	760000	15	200000	960000	65	625000

Note: - Subsidy is available to institutions registered as Non for Profit

5. SPV POWER PLANT OUTLOOK

PV Module Type	Poly Crystalline
Tilt Angle	As per Site
Inverters	String Inverters
Project Completion Time	1-2 Months

6. BILL OF QUANTITY

S.No.	Component	Specification	Make
1	Modules-320Wp	As per Design	Vikram Solar/Sova Solar
2	Inverters	As per Design	Delta/Phocos/Fronius for On-grid system Statcon/Sukam/equivalent for Off-grid systems
5.	AC & DC Cables	As per Design	Siechem Technologies, Polycab or equivalent
8.	ACDB	As per Design	As per Firstgreen design
9.	Earthing	As per Design	Traditional
10.	Cable Tray	As per Design	Armored Firstgreen vendor

Note: - Cable Length and BOS mentioned above are used as per actual site conditions. This BOQ may be used for reference but actual BOQ may differ as per the detailed engineering.

7. TERMS & CONDITIONS

Price Basis: The quoted price is for at site, including Freight & Transit Insurance.

Tax & Duties: Duties and Taxes are inclusive.

System Warranty: Solar PV Modules shall carry a warranty of 25 years from the date of supply by manufacturer and the inverter warranty is for 5 years. Battery warranty is for 3 years.

8. Payment Terms for CAPEX

S.NO	Milestone	Payment (%)
1.	Issue of Purchase Order	30
3.	Supply of Modules	40
4.	Supply of Inverter	20
5.	commissioning	10

9. Delivery and Execution Period

1-2 months as per submitted schedule subject to force majeure conditions from the date of technically and commercially clear order along with advance & handing over the site to us and IOCL approval.

10. Scope of work

For Firstgreen Consulting Pvt Ltd

- Design, Engineering, Procurement & Supply of Solar power system as per specification & BOM given in our offer.
- Installation & Commissioning of Solar Power Plant up to LT Panel including synchronization with Grid supply.
- Supply of Solar Meter, Net Meter are in the scope of supplier while all fees and deposits and electrical components required for Net Metering would be paid by customer
- Providing after sales service during warranty period.

For Customer

- The Design, Fabrication and Installation of the Super Structure will be in the scope of the client.
- Providing shadow free area on roof on each Roof for installation of solar modules as proposed in layout
- Providing safe Storage place for Material during installation & Commissioning period
- Customer will provide necessary documentation for Net Metering.
- The regular cleaning of SPV system

11. Offer Validity

The offer is valid for your acceptance for a period of 30 days from the date of submission of Bid.