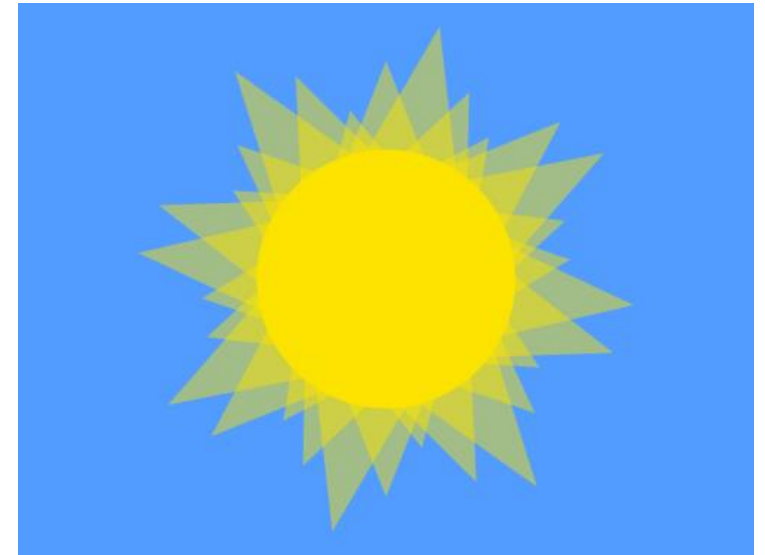


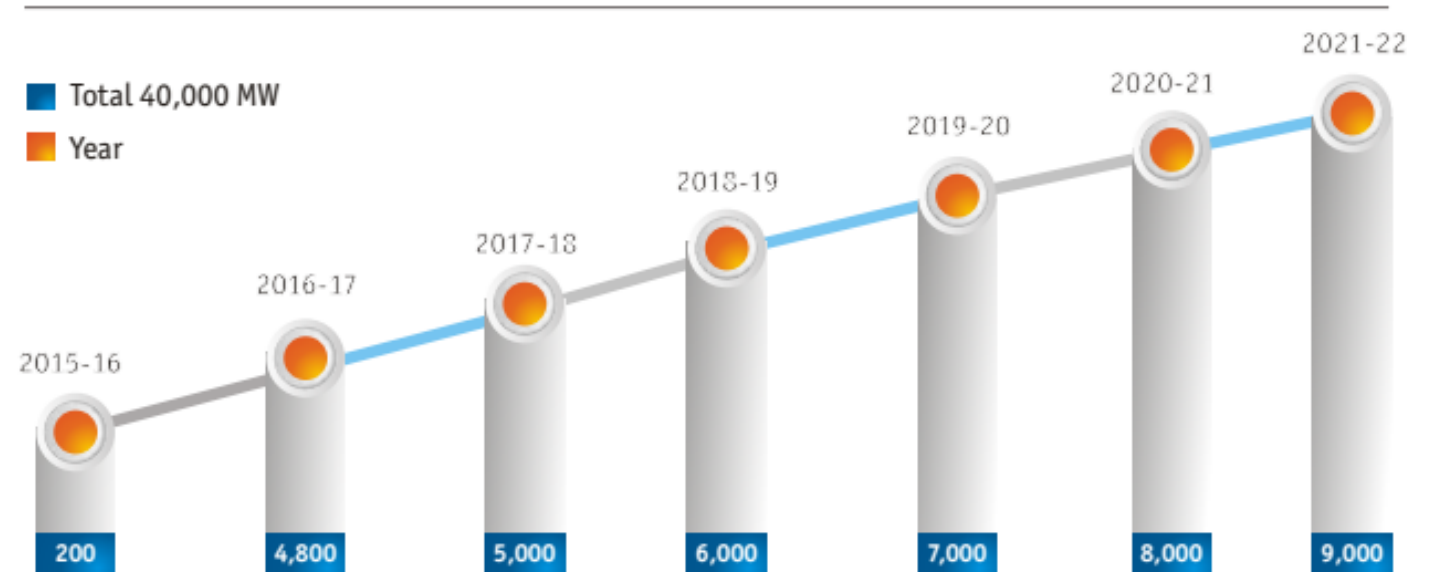
# Solar Rooftop Programme In India



# Solar Rooftop Programme by Government of India



Year – wise target (MW)



Government of India has taken an ambitious target of 100,000 MW of solar power by 2022 out of which 40,000 MW is to be achieved through Rooftop Solar power plants as per clean climate commitments.



International financing partners play a catalytic role in financing the investments and launch the market. MNRE has been liaising with World bank, ADB, New development bank for concessional loans to roof top solar power development through Bank/FI's

<u>Financing agency</u>		<u>Sector</u>	<u>Tenure</u>	<u>Loan amount</u>
World Bank (IBRD)	IBRD (International Bank for Reconstruction and Development)	Grid connected Solar Rooftop	20 years	USD 500 mio
	CTF (Clean Technology Fund)	Grid connected Solar Rooftop	40 years	USD 120 mio
Asian Development Bank (ADB)	ADB( Asian Development Bank) OCR (Ordinary Capital Resources)	Grid connected Solar Rooftop	20 years	USD 330 mio
	ADB CTF (Clean Technology Fund)	Grid connected Solar Rooftop	40 years	USD 170 mio
New Development Bank	(NDB) New Development Bank	Renewable Energy Sector	20 years	USD 250 mio
<b>Total</b>				<b>USD1370 mio</b>

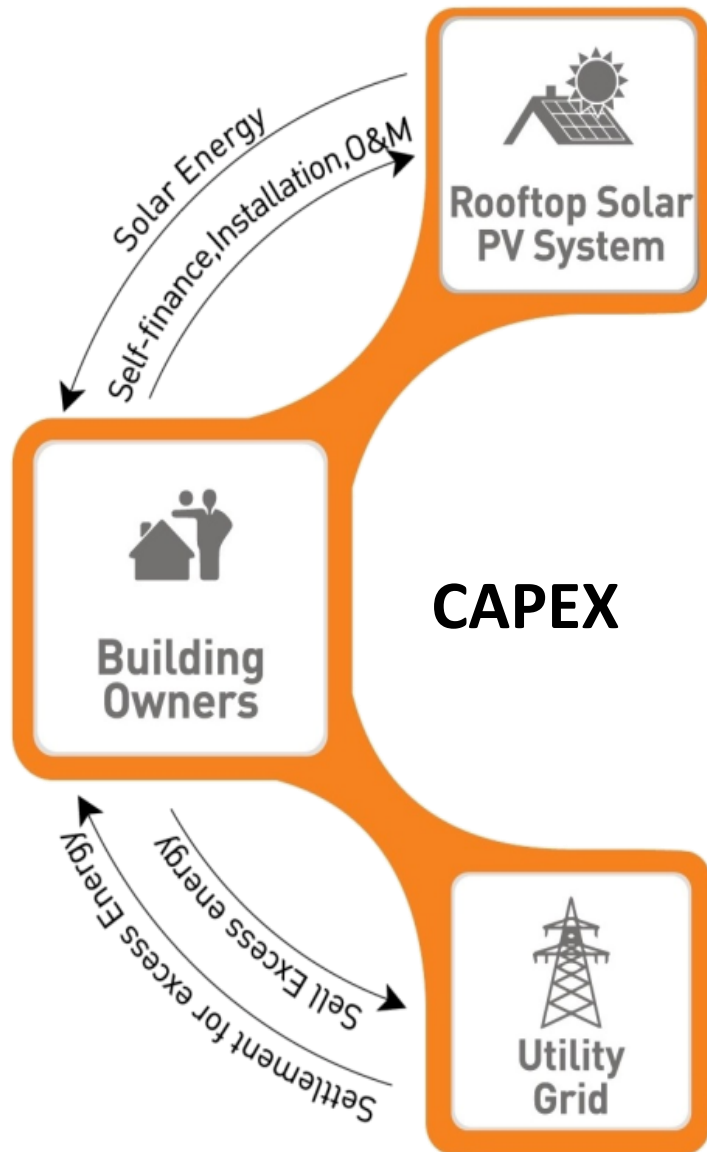


The main objective of ADB PNB loan programme for solar rooftop is to support the implementation of MNRE grid connected rooftop programme with a focus on financing solar rooftop systems on Commercial and Industrial buildings on standalone or aggregate basis **without GOI/State Govt. subsidy.**

**Three tranches:**

S no.	Year	Amount (mn \$)
1.	2017	100
2.	2019	150
3.	2021	250

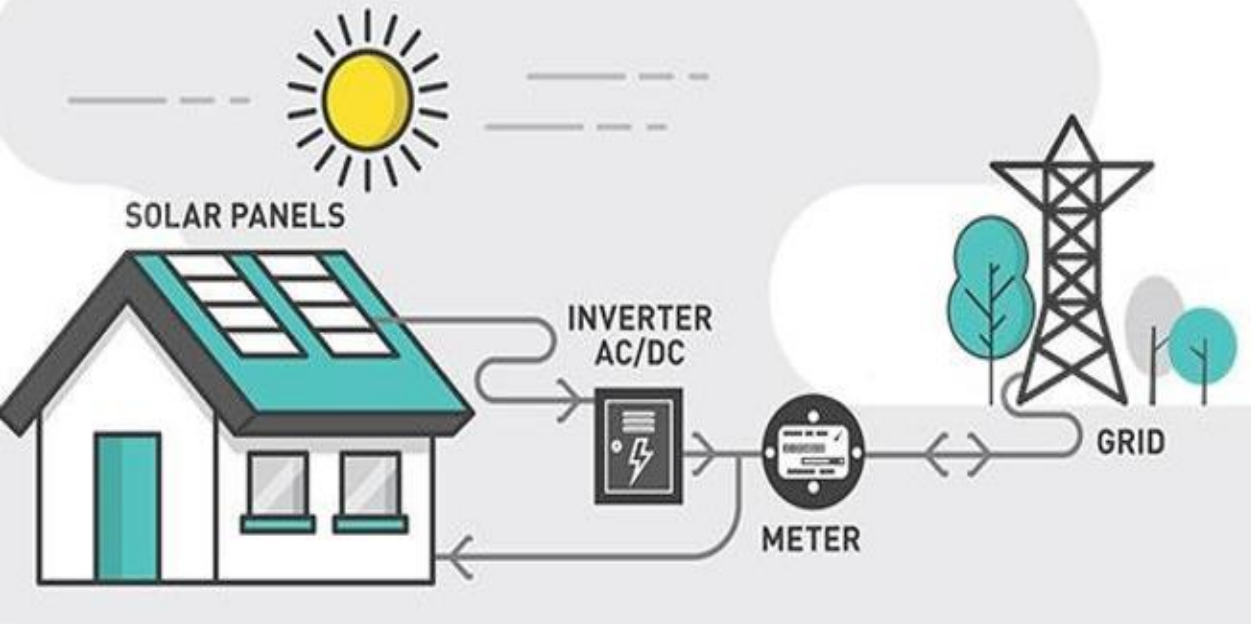
# Types of Business models



## Metering Arrangements

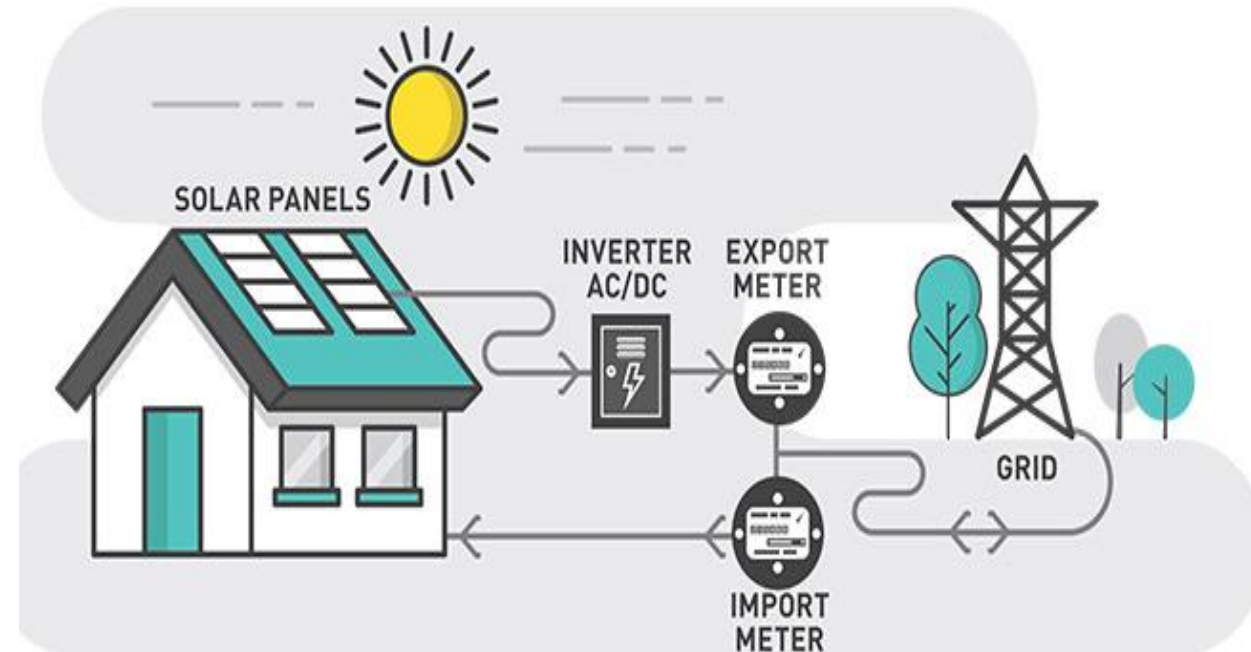
### **Net Metering:**

The energy generated by the solar rooftop plant is first allowed for self-consumption and the excess energy is injected to the grid.



### **Gross Metering:**

The total energy generated by the solar rooftop plant is to be injected into the grid without allowing the generated solar energy to be consumed directly by the consumer.



Minimum technical losses.

Utilization of available vacant roof space

Loss mitigation by utilization of grid through net metering.

**Benefits**

No transmission and distribution losses.

Low gestation period

Energy and ecological security by reduction in carbon emission.

# Salient Features Of the Scheme

Financing shall be available for Grid Connected Roof Top Solar PV projects at commercial, Industrial and Institutional buildings having unutilized rooftop space- Both Public and Private or any other structure (excluding subsidy linked projects).







The present Benchmark cost for installation of Grid Connected Solar Rooftop projects is between Rs.45,000 to Rs.60,000 per KW. The cost of Grid Connected Solar Rooftop may further vary depending upon cost of modules, inverter and mounting structure for the specific roof or as per latest notifications issued by Ministry of New & Renewable Energy (MNRE).



**TARGET  
GROUP**

Sole proprietorship firms, partnership firms including LLP, Limited companies, Private Limited companies, Trusts, Associations, SPV, NBFCs and registered societies.



To finance Grid Connected Solar Rooftop PV projects under CAPEX and RESCO models

**Margin-** Minimum 30% with a suitable upfront contribution of the required margin.

Three black silhouettes of people in business attire are positioned on the left side of the slide. The tallest silhouette is on the far left, the medium-height one is in the center, and the shortest one is on the right. Each silhouette has a speech bubble pointing towards it from the right.

**Rate of Interest:**  
One year MCLR  
plus spread is  
competitive in the  
market.

**REPAYMENT PERIOD:** Door to Door  
tenor of maximum 15 years which  
comprises construction / installation,  
moratorium and repayment period.

**MORATORIUM:**  
1 year after 1<sup>st</sup> disbursement or  
4 months from COD, whichever  
is earlier.

marketing

PNB & ADB also participated in a sensitization and awareness programme organised by Ranchi Smart City Corporation Limited (RSCCL) on 22<sup>nd</sup> December 2017. The Event was chaired by the dignitaries from State Govt., Mayor Ranchi, RSCCL, PNB, ADB, JREDA & JBVNL. A good number of EPC Contractors/RESCO Companies and General Public attended the programme for addressing their queries.



On the eve of Lohari, Pongal & Makar Sankranti, PNB & ADB have arranged vide Media Publicity of it's financing scheme to the public through Local News Papers as per approval of TA funds given by the Sub-steering Committee (ADB/MNRE/PNB) .

efforts

PNB and ADB have also carried out first round of PNB's customers and staff sensitization program in all zonal offices / key circle offices of PNB (except in Jaipur, Meerut and Lucknow zones).

## Sanction/disbursement of project in the year 2018

(Amount in Crores)

Name of Customers	Project Cost	Amount Financed	Disbursement in Quarter 1	Disbursement in Quarter 2	Disbursement in Quarter 3	Disbursement in Quarter 4	Total Disbursement	Remarks
			Mar'18	Jun'18	Sept.'18	Dec'18		
DCM Textile Pvt Ltd	4.72	3.3	3.3	0	0	0	3.3	Sanctioned & disbursed
Satia Industries	10.81	7.57	7.57	0	0	0	7.57	Sanctioned & disbursed
Other Sanctioned & Disbursed Projects	13.9	9.7	5.6	4.1			9.7	Sanctioned & disbursed
Amplus Solar	143	100	0	44	28	28	100	Sanctioned
Cleanmax	135	101.25	0	47.6	29.5	24.15	101.25	Under Process
Adani Solar	270	200	0	74	59.2	66.8	200	Under Process
Kalthia Group	155	105	0	35	35	35	105	Under Process
Amp Solar	50	35	0	17.5	17.5	0	35	Under Process
Enerparc Solar Power Pvt. Ltd	6.5	4.55	0	4.55	0	0	4.55	Under Process
Other CAPEX Projects	100	70	0	0	0	70	70	Under Process
<b>Total</b>	<b>888.93</b>	<b>636.37</b>	<b>16.47</b>	<b>226.75</b>	<b>169.2</b>	<b>223.95</b>	<b>636.37</b>	



*Thank  
you*

