

# Draft of Jharkhand State Solar Rooftop Policy 2017

Sl. No.	Description	Summary																
1.	<b>Nodal Agency</b>	Jharkhand Renewable Energy Development Agency (JREDA)																
2.	<b>Applicability</b>	This policy would be applicable to grid connected solar rooftop power plant and ground mounted small power plants (upto 500kWp) within the premises of electricity consumers and as per this policy solar rooftop power plants also implies ground mounted small power plants.																
3.	<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. To contribute to solar capacity addition and energy security.</li> <li>2. To optimally utilize the available solar energy resource in the State.</li> <li>3. To encourage development and promotion of environment benign solar energy generation contributing to sustainable development.</li> <li>4. To reduce the cost of power and ensure community participation in promotion of green energy.</li> <li>5. To maximize the utilization of the state's energy distribution infrastructure.</li> <li>6. To encourage sustainability of economically weaker classes through innovative business models.</li> <li>7. To promote a robust investment climate that enables multiple financial models, from self-owned (CAPEX) to third-party owned (RESCO) models. Also facilitate access to loans at preferential interest rates through various schemes that may be introduced from time to time, whether through public or private channels.</li> <li>8. To enhance skills and create employment opportunities.</li> <li>9. To spread environmental awareness amongst the people of Jharkhand.</li> </ol>																
4.	<b>Operative Period</b>	<ol style="list-style-type: none"> <li>1. The policy shall come into effect from date of notification and shall remain applicable till such time a new policy is issued.</li> <li>2. Rooftop solar photovoltaic power plants installed &amp; commissioned during the operative period shall become eligible for the incentives declared under this policy, for a period of five (05) years from the date of commissioning.</li> </ol>																
5.	<b>Eligible Entities</b>	Any person, which shall include any company or body corporate or association or body of individuals, whether incorporated or not, shall be eligible to set up rooftop solar photovoltaic power plant and approach Jharkhand Renewable Energy Development Agency for implementation of such power plants.																
6.	<b>Target</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Description</th> <th style="text-align: center;">Unit</th> <th style="text-align: center;">FY 2017-18</th> <th style="text-align: center;">FY 2018-19</th> <th style="text-align: center;">FY 2019-20</th> <th style="text-align: center;">FY 2020-21</th> <th style="text-align: center;">FY 2021-22</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Rooftop Solar Power Plant*</td> <td style="text-align: center;">MW</td> <td style="text-align: center;">50</td> <td style="text-align: center;">75</td> <td style="text-align: center;">100</td> <td style="text-align: center;">125</td> <td style="text-align: center;">150</td> <td style="text-align: center;">500</td> </tr> </tbody> </table> <p>*The minimum size of the Rooftop solar PV power plant at single location shall be 1 KW.</p>	Description	Unit	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	Total	Rooftop Solar Power Plant*	MW	50	75	100	125	150	500
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7.	<b>Implementation Plan for Grid Connected Rooftop Solar</b>	<ol style="list-style-type: none"> <li>1. The modalities for implementing the solar rooftop policy including metering, billing, settlement, payment &amp; technical aspects shall be issued by Discom (Distribution Company) in consultation with JREDA within 30 days from the date of issue of this policy.</li> </ol>																

	<b>Photovoltaic Power Plants:</b>	<p>2. The State shall encourage implementation of the minimum target specified for rooftop solar photovoltaic power plants, connected with electricity system, under below mentioned segments:</p> <ol style="list-style-type: none"> <li>a) Generation and Sale of Electricity to the Distribution Licensee of the State</li> <li>b) Generation and Sale of Electricity to a Person/entity other than Distribution Licensee (RESCO Model)</li> <li>c) Generation, Captive Consumption and injection of surplus Electricity under Net Energy Metering Mechanism <ul style="list-style-type: none"> <li>• <b>Group Net Metering</b> The purpose of this provision is to help maximize the utilization of rooftop space for solar energy generation for consumers with multiple buildings and service connections.</li> <li>• <b>Virtual Net Metering</b> To give access to the Solar Net Metering facility for consumers who do not have a suitable roof for installing a solar system (e.g. residential consumers who live in apartments, consumers with shaded rooftops) there will be the facility of Virtual Net Metering.</li> <li>• The State shall encourage implementation of grid interactive rooftop solar photovoltaic power plants as under: <ul style="list-style-type: none"> <li>❖ Government/Public Institutions</li> <li>❖ Private Institutions</li> </ul> </li> </ul> </li> </ol>
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8.	<b>Installation Capacity for Different Areas</b>	<b>Category of Building/ area</b>	<b>Capacity of Solar Rooftop Power Plant to be installed</b>
		All residential buildings built having built up area size of 3000 sq. ft. and above falling within the limits of Municipal Corporations, Municipal Council, Municipal Committees, Urban Development Authorities, Industrial and Infrastructure Development Authorities and corporations	Minimum 10% of connected load Or 1 kWp, whichever is higher
		All private Educational Institutes, Schools, Colleges, Hostels, Technical/ Vocational Education Institutes, Universities etc. having connected load of 30 kW and above	Minimum 10% of connected load Or 5 kWp, whichever is higher
		All Government Buildings and Offices, Government Colleges, District Institute of Education and Training (DIET), Government Educational Institutions, Universities having connected load of 30 kW and above	Minimum 10% of connected load Or 5 kVA/p, whichever is higher
		All private Hospitals and Nursing Homes, Industrial Establishment, Commercial Establishments, Malls, Hotels, Motels, Banquet Halls and Tourism Complexes having connected load of a) 50kW to 1000 kW ( Premises	a) Minimum 10% of connected load Or 10 kWp, whichever is higher b) Minimum 5% of connected load Or 50kWp, whichever is higher c) Minimum 10% of connected load Or

		<p>without Diesel Genset)</p> <p>b) Above 1000 kW (Premises without Diesel Genset)</p> <p>c) 50kW to 1000 kW ( Premises with Diesel Genset)</p> <p>d) Above 1000 kW (Premises with Diesel Genset)</p>	<p>Capacity equivalent to Diesel Genset, whichever is higher</p> <p>d) Minimum 5% of connected load</p> <p>Or</p> <p>Capacity equivalent to Diesel Genset, whichever is higher</p>
		<p>All new Housing Complexes, developed by Group Housing Societies, Builders, Housing Boards, on a plot size of:</p> <p>a) 0.5 Acre to 1 Acre</p> <p>b) More than 1 Acre to 2 Acre</p> <p>c) More than 2 Acre to 5 Acre</p> <p>d) More than 5 Acre</p>	<p>a) Minimum 10 kWp</p> <p>b) Minimum 20 kWp</p> <p>c) Minimum 30 kWp</p> <p>d) Minimum 40 kWp</p>
		<p>All water lifting/pumping stations of Water Resource Department and Drinking Water and Sanitation Department having connected load of 100kW and above</p>	<p>Minimum 5% of connected load</p> <p>Or</p> <p>10 kWp, whichever is higher</p>
9.	<b>Subsidy</b>	<p>State Nodal Agency Jharkhand Renewable Energy Development Agency shall facilitate in availing Government of India subsidy, as applicable for implementation of such plants, to both Public and Private Institutions/organizations.</p>	
10.	<b>Conversion Charges</b>	<p>Exempted</p>	
11.	<b>Height of the Module Structure</b>	<p>The height of the module structure carrying rooftop solar panels, in addition to the building height, shall not be counted towards total height of the building under the building bye laws.</p>	
12.	<b>Third Party Sale</b>	<p>Third Party sale within the State of Jharkhand will be allowed as per Electricity Act 2003 and the Orders and /or Regulations issued by JSERC from time to time.</p>	
13.	<b>Clean Development Mechanism benefits</b>	<p>CDM benefits to the solar power project Developers / Investors shall be as per the provisions specified by JSERC.</p>	
14.	<b>Pollution Clearance</b>	<p>Solar PV Power Projects will be exempted from obtaining any NOC/consent for establishment, consent to operate and public hearing under the pollution control laws from Jharkhand State Pollution Control Board.</p>	
15.	<b>Renewable Energy Certificate (REC)</b>	<p>All projects developed with the above incentives will be eligible for REC benefits subject to applicable regulations/orders of the appropriate commission. Deemed injection into the grid for in-house solar generation will also be eligible for REC benefits subject to applicable guidelines.</p>	
16.	<b>Deemed Approvals</b>	<p>All approvals / clearances shall be disposed by respective DISCOMs within 15 days from the date of application or otherwise considered as deemed approval</p>	
17.	<b>Role of Nodal Agency</b>	<ol style="list-style-type: none"> <li>1. Announcement of Scheme</li> <li>2. Allotment of the Solar Rooftop Power Capacities</li> <li>3. Facilitation in Development of Solar Rooftop Power Plant</li> <li>4. Support in establishing Protocols/Procedures for easy adoption of Solar</li> </ol>	

		<p>Rooftop Power Plant</p> <ol style="list-style-type: none"> <li>5. Support in establishing Protocols/Procedures for easy adoption of Solar Rooftop Power Plant</li> <li>6. Support in establishing Protocols/Procedures for easy adoption of Solar Rooftop Power Plant</li> <li>7. Amendment in Bye-Laws</li> <li>8. Capacity Building &amp; Awareness</li> <li>9. Strategy for the development of Solar rooftop power Segment</li> <li>10. Coordination with MNRE for Technical Specification</li> <li>11. Rate Contracts for Solar Rooftop Power Plants</li> <li>12. REC Accreditation</li> </ol>	
18.	<b>Metering and Billing Arrangement</b>	The metering and billing arrangement should comply with JSERC Net Metering Regulations and Guidelines, Central Electricity Authority (Installation and Operation of Meters) Regulations and its amendments, as applicable.	
19.	<b>Capacity of Transformer</b>	The capacity of solar rooftop power plant installation to be allowed in the area fed from the distribution transformer or any other transformer from which power is fed to the eligible consumer shall not exceed 100% of the rated capacity of such transformer(s).	
20.	<b>Evacuation Voltage</b>	<b>Capacity of System</b>	<b>Evacuation Voltage</b>
		Below 5 kW	Single Phase, 230 V
		>5 kW- 50 kW	Three Phase, 415 V
		>50 kW-1.0 MW	6.6 kV/ 11 kV
21.	<b>Interconnectivity with the Electricity System</b>	The licensee within one (1) month, from the date of publication of this policy under official gazette, shall establish the procedure for interconnectivity of solar power plants its electricity system.	
22.	<b>Creation of Green Fund</b>	The State Government shall devise creation of a Green Fund through suitable strategy and methods. The fund so created shall be utilized for organizing capacity building and training programme, creating awareness, offsetting the upfront capital cost, interest subvention through Banks and any other aspect deemed necessary for the easy adoption of solar rooftop power plants in the State.	