

# Kerala Solar Energy Policy, 2013, Dated: 25.11.2013

Sl. No.	Description	Summary
1.	<b>Nodal Agency</b>	ANERT (Agency for Non-Conventional Energy and rural Technology)
2.	<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. Increase the installed capacity of the solar sector in the State to 500MW by 2017 and 2500 MW by 2030;</li> <li>2. Contribute to long term energy security of the State of Kerala as well as ecological security by reduction in carbon emission;</li> <li>3. Define end users who can adopt solar in a big way and target them;</li> <li>4. Adopt a multi-pronged approach in targeting different groups of consumers;</li> <li>5. Deploy package of incentives and disincentives for identified groups;</li> <li>6. Adapt solar to trigger a paradigm shift in the usage of energy at the micro and macro levels;</li> <li>7. Generate large direct and indirect employment opportunities in solar and allied industries;</li> <li>8. Create skilled and semi-skilled man power resources for installation and maintenance of the solar systems through promotion of technical and other related training facilities;</li> <li>9. Promote entrepreneurs / startups industries / institutions in the State that are engaged in the development of innovative solar based systems.</li> </ol>
3.	<b>Operative Period</b>	The Policy will come into operation with effect from the date of publication and will remain in force until superseded or modified by another Policy.
4.	<b>Strategy of implementation</b>	<p><b>Supply side intervention</b></p> <ol style="list-style-type: none"> <li>1. Promoting conversion of existing inverter installations to solar power by way of providing suitable incentive schemes.</li> <li>2. Grid connected systems partly meeting requirements at demand points and feeding to the grid.</li> <li>3. Off site generation at locations like canals, reservoirs (floatovoltaic), waste lands, quarries, etc.</li> <li>4. Off shore generating plants - primarily solar-thermal systems.</li> </ol>
5.	<b>Promotion of Solar Thermal Collectors</b>	<p><b>Solar Water Heating System (SWHS)</b></p> <ol style="list-style-type: none"> <li>a) All Industrial buildings where hot water is required for processing.</li> <li>b) All Government/Private Hospitals and Nursing homes.</li> <li>c) All Hotels, Resorts, Motels, Banquet halls, Catering Units and Industrial Canteens.</li> <li>d) Individual Residential buildings with an area of</li> <li>e) Health Centres, Sports Complex.</li> <li>f) All weather swimming pools.</li> </ol> <p><b>Solar Steam Systems</b></p> <ol style="list-style-type: none"> <li>a) Community cooking in residential institutions/ industrial mess/Hotels /Barracks/ Mid day meal program/Hospitals etc.</li> <li>b) Industrial application of steam in process industries such as Textile/Food industry etc.</li> <li>c) Laundries</li> </ol> <p><b>Industrial Applications</b></p> <ol style="list-style-type: none"> <li>a) Process requirements of hot water.</li> </ol>

		<ul style="list-style-type: none"> <li>b) Process requirements of steam.</li> <li>c) Pre-heating applications in variety of Industries.</li> <li>d) Drying applications.</li> <li>e) Steam press and laundry units</li> <li>f) Solar steam cooking applications in industrial mess/hotels etc.</li> </ul>
6.	<b>Financing the Projects</b>	<ul style="list-style-type: none"> <li>1. For off-grid systems the policy seeks to ensure bank finance at attractive rates and provide generation based incentives rather than capital subsidies to ensure that the systems are installed, maintained and continue to remain functional. The existing capital subsidies shall be restructured appropriately for the same.</li> <li>2. For grid - connected systems in non-Government buildings / premises the incentives shall be on the basis of net metering, feed-in tariff and Renewable Energy Certificate mechanism, the appropriate tariff system being decided by following due procedure.</li> <li>3. For logistically difficult and technically challenging options like off-shore generating plants, projects shall be structured on the basis of competitive bidding in IPP mode.</li> </ul>
7.	<b>Building Transmission and Distribution Infrastructure</b>	<ul style="list-style-type: none"> <li>1. Integrating with no load shedding campaign.</li> <li>2. Creation of mechanisms like Battery banks, centralized banking of energy etc for decentralized distributed generation of infirm energy.</li> </ul>
8.	<b>Industry tie-ups</b>	<ul style="list-style-type: none"> <li>1. In the case of grid-tie systems, only components complying with national or international standards as approved by CEA can be used.</li> <li>2. But in the case of non-subsidised off-grid systems, there are currently no such regulations.</li> <li>3. For industries from outside the State, channel-partner status or recognition of MNRE (Govt. of India) would be mandatory.</li> </ul>
9.	<b>Solar Purchase Obligation (SPO)</b>	<ul style="list-style-type: none"> <li>1. Solar Procurement Obligation (SPO) will be mandated for Commercial consumers with more than 20kVA connected load, LT Industrial with more than 50kVA connected load and for all HT &amp; EHT consumers in a phased manner. All HT/EHT consumers shall have to procure 0.25% of their energy consumed through SPO till March 2015 with 10% increase every year.</li> <li>2. The same shall be made applicable for high consuming domestic consumers i.e. more than 500 units per month at a later stage.</li> </ul>
10.	<b>Premises Limit</b>	<ul style="list-style-type: none"> <li>1. All new domestic buildings having a floor area in between 2000 sq.ft to 3000 sq.ft should install at least 100 litres solar water heater and 500 W solar PV system. All the buildings above 3000 sq.ft should install 100 litre solar water heater and at least 1000W solar PV system.</li> <li>2. In the case of residential flats/ apartments 5% of the energy usage for common amenities should be from Solar</li> <li>3. In the potential categories to be notified like star hotels, hospitals, residential complexes, with more than 50 kVA total connected load, the use of solar water heating system shall be made mandatory.</li> </ul>
11.	<b>'Feed-in-Tariff', 'Net Metering' and Pooled Cost of Energy' of the Utility Applicable to Solar Energy</b>	<ul style="list-style-type: none"> <li>1. Kerala State Electricity Regulatory Commission (KSERC) will notify the normative Feed-in-Tariff of solar power for procurement by KSEB in case of offsite commercial installations.</li> <li>2. However for consumers with monthly consumption of 30 units and below efforts shall be made involving welfare departments of Government and LSGIs to solar enable them and in such cases a special feed-in tariff</li> </ul>

		scheme shall be notified.
12.	<b>Request for connectivity</b>	Plants requiring grid connectivity shall make application to the utility as per the standards in place and the utility shall provide connectivity if found feasible as per the interconnection standards in practice, after collecting a processing fee.
13.	<b>Procurement Policy on Grid Connected Solar Plant</b>	KSEB will have first right of refusal for the power from the plants established in private lands / premises, except in cases of self/captive use. In such cases the sale of power to KSEB shall be as at a tariff decided by KSERC or at the pooled cost of the power purchase of the utility or net metering.
14.	<b>Reservation of Land for the Renewable Project</b>	For tribal lands, in addition to the lease rentals, a revenue (not profit) sharing mechanism for the land owner is envisaged as follows: a) The willingness of the land owner is mandatory. b) The land owner will have the right to use land for agricultural purpose. c) Revenue (not profit) sharing based on the power generated, possibly in the range not below of 5% is envisaged. d) The payment of share of revenue shall be made directly to the bank account of the land owner. For this purpose a tripartite agreement has to be entered into among the developer , the land owner and the KSEB
15.	<b>Settlement of Energy charges</b>	All settlement associated with the energy charges for the grid connected plant between the developer and the utility shall be settled on a monthly basis.
16.	<b>Evacuation Facility</b>	KSEB shall create necessary evacuation facility beyond the pooling station for the projects with capacity less than or equal to 10MW. For higher capacity plants, KSEB shall construct the evacuation facility on deposit work basis.
17.	<b>Open access Charges</b>	There shall be no open access charges for solar projects for wheeling the power within the state.
18.	<b>Wheeling charges and T&amp;D losses</b>	Wheeling charges and T&D losses will not be applicable for the Captive Solar generators within the state.
19.	<b>Electricity Duty</b>	Exempted
20.	<b>Banking facility</b>	Conditional Banking facility shall be available to captive generators after considering system constraints.
21.	<b>Facilitating for subsidies from MNRE</b>	ANERT being the nodal agency for the non conventional energy in the state, shall act as a facilitator for the developer for making available the subsidy from MNRE or any other central agency.