## **KARNATAKA**

## Karnataka Renewable Energy Development Limited (KREDL) Karnataka Solar Energy Policy 2014-2021

SI. No.	Description	Summary									
1.	Order	<ul> <li>Order No. EN 61 NCE 2011 dated 01-07-2011 for the period 2011-2016</li> <li>Amendment Order No. EN 21 VSC 2014 dated 22-05-2014 Issued by Energy Department, Govt. of Karnataka.</li> </ul>									
2.	Title	The Karnataka Solar Policy 2014-2021. This supersedes the Policy 2011-2016 issued on 01.07.2011.									
3.	Nodal Agency	<ul> <li>Karnataka Renewable Energy Development Limited (KREDL) to be the nodal agency.</li> <li>KREDL shall facilitate developers with necessary support namely issue of facilitation letters to Deputy Commissioners, KPTCL and others.</li> <li>KREDL shall invite tenders to allot projects for procurement of energy by ESCOMs under preferential tariff.</li> </ul>									
4.	Enforcement & Operative Period	The policy will come into effect from 2014 and shall remain in force until 2021 or till such time any changes are made by the State Government.									
5.	Objective	<ul> <li>To add Solar generation of minimum 2000 MW by 2021 in a phased manner.</li> <li>To encourage public private participation in the sector.</li> <li>To promote Solar Roof Top Generation and Technologies.</li> <li>To encourage decentralized generation &amp; distribution of energy where access to grid is difficult.</li> <li>To promote R &amp; D and innovations, skill development in the sector.</li> </ul>									
6.	Eligibility	<ul> <li>Grid connected utility scale projects.         For the development of Solar power projects under this policy any Individual/ Firm / Society/ Institution/ Registered Company including Public utilities shall be eligible to apply.     </li> <li>Grid connected, roof top projects         All individuals residential/ commercial/ Institutional. Govt. building owners, Industrial units are eligible to set up Solar power plant within the prescribed capacity limit. In addition interested Firms/ Registered Companies including public utilities shall be eligible to set up roof-top projects on third party roofs.     </li> <li>Off Grid projects         Any individual shall be eligible to set up off Grid projects     </li> </ul>									
7.	Target Capacity	The Government of Karnataka in its endeavor to achieve minimum of 3% Solar energy out of total projected consumption, proposes to install 2000 MW Solar power by 2021. It is proposed to meet the Solar targets under different segments as below:  Grid connected projects:  It is proposed to achieve minimum 1600 MW of grid connected utility scale Solar power generation projects for sale of power to state ESCOMs, 3rd party sale and captive consumption.  Grid connected rooftop projects:  It is proposed to achieve minimum 400 MW of grid connected roof top solar generation projects in the state by 2018  The minimum targets proposed for the policy period is as below:  Segment 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 2020-21  Utility scale 350 150 150 150 200 200 200  Roof top 100 100 100 100 Solar PV project (grid connected and off grid)									

SI. No.	Types of Solar Generation Projects	Summary				
8.		<ul> <li>Grid connected projects.</li> <li>Utility scale grid connected</li> <li>Under this segment 6 categories of projects are proposed</li> <li>Projects to promote distributed generation by land owning farmers throughout the state.</li> <li>Projects selected based on competitive bidding process for capacities more than 3 MWp.</li> <li>Projects under Renewable Energy Certificates (REC) Mechanism.</li> <li>Projects under Captive/ Group Captive Generation.</li> <li>Project under Independent Power Producer.</li> <li>Projects under Bundled Power.</li> <li>Grid connected Solar rooftop projects and metering.</li> <li>The GoK to promot grid connected Solar rooftop projects on public buildings, domestic, commercial and industrial establishments through net meeting and gross metering methods based on tariff orders issued by KERC from time to time.</li> <li>Net metering: Net metering arrangements are proposed (At multiple voltage levels) to focus on self-consumption of energy generated from roof top PV.</li> <li>Solar Off- Grid and Decentralized Distributed Generation (DDG).</li> <li>To provide access to electricity where transmission and distribution systems are difficult to establish, Solar powered off-grid solutions are encouraged.</li> <li>GoK shall encourage options like Solar street lights (through local bodies), roof top SPV systems with battery storage *Through ESCOMs and NGO's) and other in both rural and urban area for the purpose of reducing dependency on grid.</li> <li>Use of Solar powered Irrigation pump (IP) sets.</li> </ul>				
		<ul> <li>Grid tied canal corridor projects.</li> <li>Grid connected "Solar with other renewable hybrid projects"</li> </ul>				
9.	Grid Connectivity and Evacuation Facility	<ul> <li>The developer shall be responsible for connecting the generating station to the nearest grid sub-station or inter-connection point with the grid.</li> <li>KPTCL/ESCOMs may at the request of developer, take up work of construction and maintain the same on cost borne by the developer.</li> <li>KPTCL/ESCOMs shall not collect any network augmentation charges towards system augmentation beyond inter-connection point.</li> <li>Generating Sub- Station- the generating plant sub-station shall be developed and maintained by the developer as per the grid code applicable form time to time and the entire cost for this will be borne by them.</li> <li>Receiving Sub-Station and metering</li> <li>a) Developer in consultation with KPTCL shall finalize the location of receiving sub-station through which the electricity intended to be evacuated at voltage levels-400/220/110/66/33/11kV sub-station.</li> <li>b) LT Connected Solar Plant- ESCOMs shall allow interconnection of solar power plants at 11kV and below voltage level as per standard/ norms fixed by Central Electricity Authority/ guidelines of MNRE relevant KERC order.</li> <li>c) The metering shall be done by project developer as per the standards specified by the KPTCL/ ESCOM</li> </ul>				
10.	Land for Grid Connected Project	<ul> <li>GoK contemplates to facilitate deemed conversion of land for Solar projects by amending section 95 of land reforms ACT</li> <li>GoK contemplates time bound permissions and for vesting Deputy Commissioners with full powers to approve purchase of agriculture lands U/s 109 of Land Reforms Act for development of Solar projects.</li> <li>Developers will be allowed to start project execution without waiting for formal approval on filing application for conversion of agricultural land for setting up of Solar power projects on payment of specified fees.</li> <li>A separate dedicated cell with staff drawn from revenue dept shall be created in KREDL, to ensure creation of Govt. Private land banks for development of Solar projects on lease basis including formulation of modalities, fees, etc.</li> <li>Solar PV projects shall be exempted from obtaining clearances of pollution control board.</li> </ul>				

SI. No.	Description	Summary			
11.	Fees & Charges to be Borne by the Developers	Fees and charges applicable for the year 2014-15 across various categories of utility scale and roof top projects are as per policy.			
12.	Solar Purchase Obligation (SPO)	GoK intends to bring various HT categories of consumers with connected load of more than 50 kVA under Solar Purchase Obligation (SPO) with the consent of KERC.			
13.	Incentives	<ul> <li>Tax concessions in respect of entry tax stamp duty and registration charges shall be as per Karnataka Industrial Policy.</li> <li>The Industrial Consumers opting to buy Power under category like Projects under Renewable Energy Certificates (REC) Mechanism, Projects under Captive/ group Captive Generation and Projects under Independent power Producer shall be allowed corresponding pro-rata reduction in contract demand on a permanent basis but subject to the decision of KERC in this regard.</li> </ul>			
14.	Wheeling, Banking and Cross Subsidy Charges	Charges shall be applicable as determined by KERC form time to time.			
15.	Reactive Energy Charges	In case of drawl of Reactive Power for the project, necessary charges shall be payable at the rates prescribed by KERC.			
16.	Regulatory Frame Work	<ul> <li>The Electricity Act 2003 mandates Karnataka Electricity Regulatory Commission to decide tariffs for renewable energy &amp; to issue regulations regarding percentage of renewable purchase obligation to ESCOMs and decide charges with respect to wheeling, banking, cross subsidy charges. Conditions for getting accreditation to avail Renewable Energy Certificates shall be governed by CERC and KERC regulations.</li> <li>Orders/ regulations or any other dispensation issued by the State Commission from time to time shall be applicable to the provisions of this policy including the Acts passed by GOI.</li> </ul>			
17.	High Level Project Approval Committee	<ul> <li>Specially constituted by the GoK for the purpose of approval and overseeing project progress, of capacities larger than 50 MW.</li> <li>The committee constituted under the Additional Chief Secretary/ Principal Secretary Energy Department as Chairman.</li> <li>All projects of capacity more than 1MW under RECM, IPP and captive generation project shall be approved by the Government.</li> </ul>			
18.	Power to amend & interpret the policy.	<ul> <li>Government of Karnataka will have power to amend/ Review/ Relax/ interpret any of the provision under the policy as and when required.</li> <li>The HLPAC is authorized to issue clarifications as well as interpretations to such provisions in case of any difficulty.</li> </ul>			