

Odisha Renewable Energy Policy, 2016, Dated: 25.11.2016

Sl. No.	Description	Summary																																																							
1.	Renewable Purchase Obligation	All Obligated Entities in the State are required to purchase quantum of renewable energy as prescribed by OERC in its Regulations.																																																							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Financial Year</th> <th style="text-align: center;">State Energy Consumption</th> <th colspan="2" style="text-align: center;">RPO Percentage (%)</th> <th colspan="2" style="text-align: center;">Requirement in MU</th> <th colspan="2" style="text-align: center;">Requirement in MW</th> </tr> <tr> <th style="text-align: center;">(MU)</th> <th style="text-align: center;">Solar</th> <th style="text-align: center;">Non-Solar</th> <th style="text-align: center;">Solar</th> <th style="text-align: center;">Non-Solar</th> <th style="text-align: center;">Solar</th> <th style="text-align: center;">Non-Solar</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2015-16</td> <td style="text-align: center;">23478</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">2.5</td> <td style="text-align: center;">118.74</td> <td style="text-align: center;">593.7</td> <td style="text-align: center;">91</td> <td style="text-align: center;">136</td> </tr> <tr> <td style="text-align: center;">2016-17</td> <td style="text-align: center;">24550</td> <td style="text-align: center;">1.5</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">368.25</td> <td style="text-align: center;">736.5</td> <td style="text-align: center;">283</td> <td style="text-align: center;">168</td> </tr> <tr> <td style="text-align: center;">2017-18</td> <td style="text-align: center;">25500</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">4.5</td> <td style="text-align: center;">765</td> <td style="text-align: center;">1147.5</td> <td style="text-align: center;">588</td> <td style="text-align: center;">262</td> </tr> <tr> <td style="text-align: center;">2018-19</td> <td style="text-align: center;">26500</td> <td style="text-align: center;">4.5</td> <td style="text-align: center;">5.0</td> <td style="text-align: center;">1192.5</td> <td style="text-align: center;">1325</td> <td style="text-align: center;">917</td> <td style="text-align: center;">303</td> </tr> <tr> <td style="text-align: center;">2019-20</td> <td style="text-align: center;">27500</td> <td style="text-align: center;">5.5</td> <td style="text-align: center;">5.5</td> <td style="text-align: center;">1512.5</td> <td style="text-align: center;">1512.5</td> <td style="text-align: center;">1163</td> <td style="text-align: center;">345</td> </tr> </tbody> </table>	Financial Year	State Energy Consumption	RPO Percentage (%)		Requirement in MU		Requirement in MW		(MU)	Solar	Non-Solar	Solar	Non-Solar	Solar	Non-Solar	2015-16	23478	0.5	2.5	118.74	593.7	91	136	2016-17	24550	1.5	3.0	368.25	736.5	283	168	2017-18	25500	3.0	4.5	765	1147.5	588	262	2018-19	26500	4.5	5.0	1192.5	1325	917	303	2019-20	27500	5.5	5.5	1512.5	1512.5	1163	345
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3.	Targets Envisaged	The Government of Odisha envisage to achieve the following targets for addition of renewable energy capacity in the State by the year 2022:																																																							
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4.	Capacity Utilisation Factor	15-17%																																																							
5.	Solar	<p>In order to develop the targeted capacity in the State, solar capacity will be added mainly through the following four areas/means:</p> <ol style="list-style-type: none"> 1. Land Based Solar Projects : <ol style="list-style-type: none"> a) IDCO has identified large chunks of land under its Land Bank Scheme. b) GEDCOL as Nodal Agency will facilitate allotment of the land on lease as per the provisions of IPR-2015 for developing solar projects. c) The project developer may utilize the energy generated for self-consumption or sell power generated from such projects within or outside the State to any Procurer. 2. Projects Utilizing Water Bodies: 																																																							

		<p>a) Areas covered under water bodies such as reservoirs, lakes, canals and storage ponds can be considered for development of solar projects. Solar PV panels can be mounted on structures on canal tops.</p> <p>b) Floating solar technologies can be considered, wherein solar panels can be mounted on floats and placed on water bodies.</p> <p>c) GEDCOL shall be the Nodal Agency for development of solar projects utilizing water bodies.</p> <p>d) GRIDCO shall have the first right of refusal to procure power from the solar projects developed on water bodies at the tariff discovered during the competitive bidding process and approved by OERC.</p> <p>3. Projects on Consumer Side of Meter</p> <p>a) Investors/consumers who want to develop rooftop PV projects can set up their facility by connecting to the grid either at 33 kV /11 kV three phase lines or at 440/220 Volt three/single phase depending on the size of the system. However, it shall be the responsibility of the project developer to arrange land required, if any, for the project.</p> <p>b) OREDA shall be the nodal agency for the projects of below 1 MW capacity on the consumer side of the meter.</p> <p>c) The projects of 1 MW and above capacity will be implemented by GEDCOL.</p> <p>d) The net-metering facility will be extended to all the project developers who intend to set-up solar photovoltaic plants on their rooftops.</p> <p>e) Project developers shall follow the net metering Orders issued by the OERC from time to time.</p> <p>4. Solar Parks</p> <p>There will be two modes of implementation of the Solar Parks depending upon the implementation agency, namely, GEDCOL Solar Parks and Private Park Developer model.</p> <p>a) GEDCOL Solar Parks:</p> <ul style="list-style-type: none"> • Under this model, GEDCOL shall develop all infrastructure facilities. • The developers shall pay the per MW facilitation charges as determined by GEDCOL. GEDCOL will provide the land to project developers on 30 years lease at a pre-determined lease/rent and other charges as per the agreed terms & conditions. • The share of land in the solar park allotted to the solar manufacturing capacity shall be limited to maximum of 10% of the allotable land. • The ratio of solar generation, in energy terms, should be at least 60% of total electricity generated in a hybrid project. • The minimum capacity that can be allotted to any individual solar power developer' shall be 10 MW. The maximum capacity allocated to a single developer shall be 30% of the Solar Park capacity. However, GEDCOL may relax the capacity norms on 'case to case' basis. <p>b) Private Park Developer Model</p> <ul style="list-style-type: none"> • A maximum 5 acre/MW of land shall be leased out for solar park development. • In case, 80% of the project capacity is not developed within a period of 5 years, penalty shall be imposed by GEDCOL. • For every 1 MW shortfall in capacity, the solar park developer shall be liable to pay 3 times the lease rent for every year until 80% of the capacity is developed.
6.	Small Hydro	<p>The Engineer-in-Chief (EIC) (Electricity) shall be the nodal agency for small hydro projects.</p> <p>1. Process of Selection of Developer and Allotment/Cancellation of Projects</p> <p>Self-identified small hydro projects shall not be allowed. The nodal agency shall</p>

		<p>prepare the DPRs and place the recommendations of the State Technical Committee (STC) for Small Hydro-Electric Projects to the Government of Odisha for approval.</p> <p>2. Sale of Power</p> <p>a) GRIDCO shall have the first right of refusal in case of all small hydro projects developed in Odisha, which it shall exercise at the time of scrutiny of the project by the STC. Where GRIDCO will procure power, such projects will be allocated on tariff based competitive bidding.</p> <p>b) In case of sale of power to entities other than GRIDCO, the project will be allocated on competitive bidding on the basis of maximum free power to be supplied by the developer to the State.</p>
7.	Wind	<p>OREDA shall be the nodal agency for wind power development in the State.</p> <p>1. Wind Resource Assessment</p> <p>a) Wind Resource Assessment (VVRA) is carried out by OREDA at various places including at hill tops. NIWE gives the co-ordinates of locations for WRA studies. Acquisition of land for setting up met masts (measurement towers) at these locations will be done by OREDA.</p> <p>b) The Government land required for setting up of wind monitoring station shall be allotted on temporary basis to the Developer for a maximum period of 3 years at the rate to be decided by the District Level Committee.</p> <p>c) Purchase and acquisition of private land, if any shall be the responsibility of the Developer.</p> <p>2. Process of Selection of Developer and Allotment of Projects</p> <p>a) Applicants may apply to the nodal agency to set up the wind power project on the Government land or private land.</p> <p>b) If more than one application is received for setting up project at the same site on the Government land, then the allotment of project shall be done on competitive bidding on the basis of site premium amount.</p> <p>c) The projects shall be allocated to applicants on private land in accordance with their proposal.</p> <p>3. Sale of Power</p> <p>a) The project developer may utilize the energy generated for self-consumption or sell power generated from such projects within the State or outside the State to any Procurer in accordance with the relevant regulations of the OERC.</p> <p>b) To kick start the wind power development in the State, GRIDCO shall purchase initial wind power capacity up to 50 MW at the generic tariff to be determined by OERC from time to time.</p>
8.	Biomass	<p>OREDA shall be the nodal agency for development of Biomass based power projects in Odisha.</p> <p>1. Identification of Biomass Catchments</p> <p>2. Process of Selection of Developer and Allotment of Projects If GRIDCO agrees to procure power, the selection of project developer will be based on a tariff based competitive bidding.</p> <p>3. Land Waste and fallow lands may also be allocated to the eligible developers for raising energy plantations so as to meet up to 20% of the annual biomass fuel requirement.</p> <p>4. Sale of Power The project developer may utilize the energy generated for self-consumption or sell power generated from such projects within the State or outside the State in accordance with the relevant regulations of OERC. GRIDCO shall have the first right of refusal. OERC shall determine the tariff for such projects from time to time.</p>

9.	Waste to Energy	<p>OREDA shall be the nodal agency for development of Waste to Energy, mainly Municipal Solid Waste (MSW), Industrial and Agricultural Waste based power projects in Odisha.</p> <ol style="list-style-type: none"> 1. Process of Selection of Developer and Allotment of Projects The Urban Local Body (ULB) will select the project developer and allot the WTE projects. 2. Availability of Solid Waste <ol style="list-style-type: none"> a) It is the responsibility of the ULB to collect solid waste, process it and destroy the same. b) To make this process less cumbersome and environmentally sustainable, it is appropriate that costs associated with collection and processing of solid wastes are borne by the ULB. 3. Land The ULBs would make land available at suitable location to the project developer for projects based on WTE as per the norms set in the IPR-2015. 4. Sale of Power GRIDCO shall purchase the power from such projects at the generic tariff to be determined by OERC.
10.	Decentralized Renewable Energy Applications	<p>Types of Applications</p> <p>ORFDA shall be the State Nodal Agency to execute and co-ordinate all projects under decentralized applications of Renewable Energy such as:</p> <ol style="list-style-type: none"> a) All RE based small/mini/micro grids up to 1 MW b) Roof top Solar Projects c) Solar water pumping for irrigation, drinking water supply etc. d) Wind-solar hybrid projects e) Micro/Pico hydro projects f) Biomass gasifier for power generation and thermal applications g) Solar thermal projects h) Biogas based projects for domestic application & power generation i) Improved cook stoves j) All new and innovative energy options
11.	Odisha Renewable Energy Development Fund (OREDF)	<ol style="list-style-type: none"> 1. The State Government will create a Odisha Renewable Energy Development Fund (OREDF) within six (6) months of issuance of this policy for accelerated development of renewable energy in the State. 2. Independent / private developer shall contribute 5 paise per unit of Renewable Energy sold outside the State towards generating financial resources for this Fund. 3. The State Government shall provide a corpus of Rs. 250 crore spread over 5 years for creation of OREDF, which will be released by the Government in suitable tranches every year.
12.	Land	<ol style="list-style-type: none"> 1. Exemption from the ceiling on land holdings as per the Land Reforms Act (1960) of Odisha and its amendments shall be applicable for renewable energy projects. OREDA/ GEDCOL shall facilitate clearance to this effect for renewable energy project developers from the competent authority. 2. Developers may rope in private land owners willing to lease out their land for renewable energy projects on long term lease basis for a minimum period of 30 years at the lease rates as will be mutually decided by the project developer and the private land owner.
13.	Inter-connection Arrangement	<ol style="list-style-type: none"> 1. Infrastructure required to connect the project till inter-connection point shall be developed and maintained by the Developer at his own cost. 2. GRIDCO and OPTCL shall work in close co-ordination with the Nodal Agencies to ensure that requirements of the renewable energy generation are factored into while

		<p>finalizing their transmission and distribution network plans.</p> <ol style="list-style-type: none"> The main and check meters would be installed by the Developer at the interconnection point of OPTCL/DISCOMs Substation. It shall be the responsibility of DISCOM (or in case of STU with projects 132 KV and above) to ensure that all the infrastructure required beyond inter-connection point is created in a timely manner for projects at 11KV and 33KV. The DISCOM shall claim the cost incurred on such development under its ARR (Annual Revenue Requirement).
14.	Transmission & Sale of Power	<ol style="list-style-type: none"> Any person generating electricity from renewable energy sources, irrespective of installed capacity, shall have open access to any licensee's transmission system and/or distribution system, as the case may be. For projects on consumer side of the meter, inter-connection arrangements as specified under the Net-metering Regulations/Orders and their amendments from time to time shall be followed. Charges regarding wheeling, banking, cross subsidy surcharge and additional surcharge for Open Access consumers as notified by OERC from time to time will be applicable. Presently, procurement of power through third party sale from Renewable Energy sources is exempted from the Cross Subsidy Surcharge and only 20% wheeling charge is payable by the consumers drawing power from Renewable Energy source through Open Access excluding Co-generation & Biomass power plants. All renewable energy power systems shall be treated as 'Must Run' power plants and shall not be subjected to Merit Order Rating (MOR)/Merit Order Dispatch (MOD) principles subject to the applicable regulations of OERC and provisions of the relevant PPA.
15.	Concessions in Taxes & Duties and Other Benefits	<ol style="list-style-type: none"> No stamp duty will be required to be paid in respect of land allotted by the Government/IDCO to Solar Park Developers. All new renewable energy projects developed under this policy who come into commercial production within the stipulated period shall be exempted from paying Electricity Duty for self-consumption for a period of 5 years from the date of achieving commercial operation as certified by the nodal agency.
16.	Exemptions from Certificates, Fees & Charges	<ol style="list-style-type: none"> Testing charges of FIC would be waived for all new and renewable energy projects. Supervision charges shall not be levied by DISCOM/OPTCL for projects under this Policy. No clearance from State Pollution Control Board, Odisha would be required for Renewable Energy projects except Biomass and Municipal Solid Waste Projects.
17.	Special Incentives for Renewable Energy Manufacturing Units	<ol style="list-style-type: none"> Any kind of RE manufacturing facility / hub shall be treated as Priority Sector as per IPR-2015. The relevant provisions under the Industrial Policy Resolution-2015 under priority sector shall be applicable to the entrepreneurs setting up manufacturing units of Solar PV Panels, other RE equipment and associated devices/equipment in Odisha with minimum investment and employment limits as Rs. 10 crore and 20 persons respectively for both category 'A' and category 'B' districts. The benefits of category 'A' & category 'B1', as applicable, would be made available as per IPR-2015. IPICOL shall act as facilitator in regard to allotment of land in Industrial Estates/Solar Parks to set up such units by private entrepreneurs and also for other clearances/concessions.