

Summary of Policies and Tariff of Selected States for Promotion of Grid Connected Biomass Power Projects (BPP)

| S. No | State | Installed Capacity (MW) as on March 2015 | Name of Policy | Guideline for Allotment of Project | Land Allotment for Plantation | Fiscal & Financial Incentives by State | Existing Electricity Tariff Notified by SERCs (Rs./kWh) | | |
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| | | | | | | | Fixed Cost (FC), Variable Cost (VC), Total Cost (TC), Accelerated Depreciation (AD) and Applicable Tariff (AT) | Remarks | |
| 1. | Andhra Pradesh | 288.0 | No relevant policy on biomass power plants | | | | | Tariff for FY15-16 FC: 1.65 VC: 4.54 TC: 6.19 | Tariff order dated 16.5.2014. |
| 2. | Bihar | | Bihar Policy for Promotion of New and Renewable Energy Sources 2011 | Biomass Power Producer shall submit the application to State Investment Promotion Board (SIPB) along with a pre-feasibility report (including biomass assessment) and applicable processing fee. Allotment of new projects will be done by keeping the area of 25 km radius reserved for the project site. | Not covered | <ul style="list-style-type: none"> Exemption from electricity duty Exemption from entry tax on, equipment, and machinery | Tariff for FY14-15 <u>BPP other than rice straw and Prosopis</u> Water cooled (WC): FC: 2.90 VC: 4.08 TC: 6.98 AD: 0.17 AT: 6.81 Air cooled (AC): FC: 3.08 VC: 4.18 TC: 7.26 AD: 0.18 | Tariff order dated 22.9.2014 with a control period from FY 2012-13 to FY 2016-17. | |

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| | | | | | | | <p>AT: 7.08</p> <p><u>BPP based on rice straw and Prosopis</u></p> <p>Water cooled (WC):</p> <p>FC: 3.40</p> <p>VC: 4.08</p> <p>TC: 7.12</p> <p>AD: 0.18</p> <p>AT: 6.94</p> <p>Air cooled (AC):</p> <p>FC: 3.22</p> <p>VC: 4.18</p> <p>TC: 7.40</p> <p>AD: 0.20</p> <p>AT: 7.20</p> | |
| 3. | Chhattisgarh | 249.9 | Policy Directives on Incentives to Units Generating Power from Non-Conventional Energy Sources | <p>Application needs to be sent to Chief Executive Officer (CEO), CREDA with a copy to Secretary, Chhattisgarh State Electricity Board (CSEB).</p> <p>After approval by CEO, CREDA, the generating unit and the user unit will be required to enter into agreements with CSEB.</p> | Not covered | <ul style="list-style-type: none"> • Exemption from Entry tax on equipment and machinery • Eligible for Grant/Incentive under State Industrial Policy • Government land will be leased out. If private land, land will be procured by government and handed over at no service charges | <p>Tariff for FY13-14</p> <p>FC: 2.16</p> <p>VC: 3.57</p> <p>TC: 5.73</p> | Tariff Order dated 03.05.2013 and 02.07.2013 |

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| 4. | Gujarat | 30.5 | No relevant policy on biomass power plants | | | <p>Tariff for FY15-16</p> <p>Water cooled (WC):</p> <p>FC: 1.77</p> <p>VC: 3.73</p> <p>TC: 5.50</p> <p>AD: 0.28</p> <p>AT: 5.22</p> <p>Air cooled (AC):</p> <p>FC: 1.80</p> <p>VC: 3.88</p> <p>TC: 5.68</p> <p>AD: 0.22</p> <p>AT: 5.46</p> | Tariff order dated 1 August 2013 with a control period from 1 August 2013 to 31 March 2016. | |
| 5. | Haryana | 13.5 | Promoting Generation of Electricity through Renewable Energy Sources | <p>Invitation of proposals from IPPs through competitive bidding route based on tariff (proposed tariff should not be more than the tariff fixed by Haryana Electricity Regulatory Commission (HERC)).</p> <p>Technical Appraisal Committee (TAC) will do the scrutiny of the proposals.</p> <p>Decision on projects upto 5 MW will be made by board of governors of Haryana Renewable Energy Development Agency (HAREDA) within 2 months of TAC recommendation.</p> <p>For project greater than 5 MW, high level committee headed by Chief Secretary, Govt. of Haryana will decide within 2</p> | Not covered | <ul style="list-style-type: none"> • Exemption from local area development tax • Exemption from electricity duty • Eligible for Grant/Incentive under State Industrial Policy | <p>Tariff for FY15-16</p> <p>Water cooled (WC):</p> <p>TC: 8.54</p> <p>Air cooled (AC):</p> <p>TC: 8.62</p> | Tariff order dated 13 August 2014 and 28 May 2015. |

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| | | | | <p>months of TAC recommendation</p> <p>After approval of proposal, MOU with investor for preparation of DPR within a month. After DPR approval, investor would enter into PPA within 2 months.</p> <p>Projects will be permitted in Agrl. Zone without being levied land conversion charges.</p> | | | | |
| 6. | Jammu & Kashmir | | No relevant policy on biomass power plants | | | | <p>Tariff for 2015-16</p> <p>FC: 2.15</p> <p>VC: 4.02</p> <p>TC: 6.18</p> <p>AD: 0.16</p> <p>AT: 6.02</p> | Tariff order dated 13.03.2014 with a control period from FY 2013-14 to FY 2017-18. |
| 7. | Jharkhand | | No relevant policy on biomass power plants | | | | | Not available |
| 8. | Karnataka | 107.5 | <p>Karnataka Renewable Energy Policy 2009-2014</p> | <p>Allotment Committee headed by Principal Secretary, Energy Department, will meet periodically, at least once every quarter, to consider the proposals.</p> <p>A State Level Empowered Committee with the Chief Secretary, Government of Karnataka as Chairman will provide single window clearance for selected proposals.</p> | Not covered | <ul style="list-style-type: none"> • VAT exemption on plant and machinery • Reduction in stamp duty and registration charges • Eligible for Grant/Incentive under State Industrial Policy • Developed lands will be subleased to the developer for a period of 30 years + 5 years extension | <p>Tariff for FY15-16</p> <p>FC: 2.37</p> <p>VC: 2.82</p> <p>AT: 5.19</p> | Tariff order dated 01.01.2015 with a control period up to FY 2018. |
| 9. | Kerala | | <p>Kerala Renewable Energy Policy 2002</p> | Not available | Not covered | <ul style="list-style-type: none"> • Exempted from electricity duty • Eligible for Grant/Incentive | - | Not available |

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| | | | | | | <ul style="list-style-type: none"> • under State Industrial Policy • Exempted from entry tax | | |
| 10. | Madhya Pradesh | 26.0 | <p>Madhya Pradesh Biomass Based Electricity (Power) Project Implementation Policy, 2011</p> | <p>Application in prescribed format to be submitted along with requisite documents, including Pre-feasibility study.</p> <p>If found eligible, non-refundable registration fee of Rs. 1 lakh per MW needs to be deposited within 15 days from notification.</p> <p>Within 3 months of registration, a list of documents needs to be submitted including DPR, biomass assessment report, land related documents, licenses, permits and NOCs (as required). At the time of submission, 1% of total project cost (minus Rs. Lakh/MW submitted earlier) needs to be submitted as performance guarantee valid for a period of 30 months.</p> <p>After evaluation, approval within 1 month.</p> <p>Allotment of new projects will be done by keeping the area of 25 km radius reserved for the project sites registered with the department</p> | <ul style="list-style-type: none"> • Non-forest wastelands may be allocated for biomass production • Maximum allocation – 100 acres per MW for a maximum of 5 MW capacity • If the power plant is 100%, then it would be 150 acres per MW | <ul style="list-style-type: none"> • Exemption from electricity duty and cess for 10 years from COD • Exemption from Entry tax on equipment and machinery • 50% exemption on stamp duty on purchase of private land • Eligible for Grant/Incentive under State Industrial Policy • Permitted to use water at the prevailing rates of Narmada Valley Development Authority or at the rates determined by the State Government. | <p>Tariff for FY13-14</p> <p>AT: 5.64</p> | <p>Tariff order dated 03.05.2013.</p> |
| 11. | Maharashtra | 198.0 | <p>New Policy for Power Generation from Non-Conventional Sources of Energy, 2008</p> | <p>Project proposal to be submitted to Maharashtra Energy Development Agency (MEDA). MEDA will examine the proposal and then submit it to Government along with its recommendations.</p> <p>Infrastructure Clearance letter will be issued after approval</p> | <p>No guidelines</p> | <ul style="list-style-type: none"> • Reimbursement of 50% of the approved expenses on Evacuation Arrangement from Green Energy Fund (as per | <p>Tariff for FY14-15</p> <p>FC: 2.27</p> <p>VC: 4.36</p> <p>TC: 6.63</p> <p>AD: 0.22</p> <p>AT: 6.41</p> | <p>Tariff order dated 07.07.2014.</p> |

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| | | | | <p>from the Government. This letter is essential to avail all allowable benefits</p> <p>Barren land suitable for industrial activities would be granted for 30 years lease period charged per the prime lending rate over current market price.</p> | | availability) | | |
| 12. | Manipur | | State Policy on Renewable Sources 2006 | <p>Applications need to be submitted to Manipur Renewable Energy Development Agency (MANIREDA) Power Department (Grid interfacing), Government of Manipur.</p> <p>After project clearance, power department will enter into an agreement with the application within a period of one month.</p> <p>If at least 10% of total project cost is not incurred within six months, agreement would be terminated and site would be allotted to other applicant.</p> | Not covered | <ul style="list-style-type: none"> Exempted from electricity duty for five years from the Commercial Operation Date (COD). Eligible for Grant/Incentive under State Industrial Policy Exempted from sales tax Exempted from entry tax on equipment and spare parts | - | Not available |
| 13. | Meghalaya | | Policy for Promoting Generation of Power through Non-Conventional Energy Sources | <p>Biomass power plant developer has to submit applications for projects and for grid interfacing to Meghalaya Non-Conventional and Rural Energy Development Agency (MNREDA) and DISCOM.</p> <p>MNREDA State Government to provide clearance within a period of two months from the date of submission of application.</p> <p>An agreement will be entered into with the applicant within a period of one month from the</p> | Not covered | <ul style="list-style-type: none"> Exempted from electricity duty for a period of 5 years. Sales Tax/VAT exemption on plant and machinery | - | Not available |

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| | | | | date of such clearance provided. | | | | |
| 14. | Mizoram | | Policy for power produced through Non-Conventional Energy Sources 2003 | <p>A State Level Advisory Council headed by Minister, Power and Electricity Department coordinates and monitors the progress of Renewable Energy projects.</p> <p>Zoram Energy Development Agency (ZEDA) being nodal agency facilitates clearances of projects, grant of loans through IREDA, subsidies from MNRE etc.</p> | Not covered | <ul style="list-style-type: none"> Exempted from electricity duty. Eligible for Grant/Incentive under State Industrial Policy Sales Tax/VAT exemption on plant and machinery | - | Not available |
| 15. | Odisha | 20.0 | Policy Guidelines on Power Generation from Non-Conventional Energy Sources | <p>Eligible entrepreneurs need to apply to Chief Executive, Orissa Renewable Energy Development Agency (OREDA) in the prescribed format for obtaining Government approval.</p> <p>If Grid interface is required, approval of DISCOMS will be necessary.</p> <p>If the applicant does not take effective steps to implement the project within 6 months from the date of possession of land, the agreement shall be terminated.</p> | Not covered | <ul style="list-style-type: none"> Exemption from electricity duty | <p>Tariff for FY15-16</p> <p>FC: 2.13</p> <p>VC: 3.53</p> <p>TC: 5.66</p> <p>AD: 0.15</p> <p>AT: 5.51</p> | Tariff order dated 14.09.2010. |
| 16. | Punjab | 68.5 | New and Renewable Sources of Energy (NRSE) Policy | <p>Invitation of proposals through competitive bidding route based on tariff. Only BPP up to 25 MW capacity are eligible.</p> <p>Punjab Energy Development Agency (PEDA) to issue letter / sign MoU with initially selected projects. Developer needs to submit DPR within 2 months of issue of letter / MoU. PEDA to review the report within 30 days and pass their comments. Developer needs to finalize the DPR and submit the complete</p> | Energy plantation of fast growing high yielding plant species such as Bambusa balcooa, melia dubia etc. are encouraged | <ul style="list-style-type: none"> Exemption from Electricity Duty Exemption from electricity duty for consumption of power during construction Exemption from Octroi on fuel and equipment & machinery Exemption from entry tax in respect of all supplies | <p>Tariff for FY15-16</p> <p>FC: 2.70</p> <p>VC: 5.06</p> <p>TC: 7.76</p> | Tariff order dated 24.07.2015. |

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| | | | | <p>documents for all clearances with PEDDA, who function as a single window clearance agency.</p> <p>After applicable statutory clearances, the BPP shall enter into an Implementation Agreement with PEDDA within a period of 15 days and enter into a PPA within 30 days with PSERC (if applicable).</p> <p>The project developer shall be required to submit a performance security in the shape of Bank Guarantee of Rs 20 Lakhs per MW for biomass projects.</p> <p>Self-identified projects shall be allocated on the recommendation of the project allocation committee on case to case basis.</p> | | <ul style="list-style-type: none"> Eligible for Grant/Incentive under State Industrial Policy | | |
| 17. | Rajasthan | 101.0 | <p>Policy for promoting generation of electricity from Biomass, 2010</p> | <p>Biomass power projects up to 20 MW shall be eligible.</p> <p>Developer shall submit the application to Rajasthan Renewable Energy Corporation (RREC) in required format along with requisite documents, including Biomass Assessment Report, Prefeasibility Study Report/DPR.</p> <p>RREC to issue acceptance to the project within one month from the date of receipt of complete application with a project registration number (PRN) for a specific area.</p> <p>If application is submitted without DPR and biomass assessment report a time period of 6 months is given after acceptance of project. Beyond</p> | <p>Facility available to power plants that intend to supply 100% to state DISCOM</p> <p>Developer has the responsibility to identify the land</p> <p>Allowable limit: Maximum 500 hectare per MW land</p> <p>Application in prescribed format needs to be submitted to RREC. After due examination, it will forward the same to the concerned District Collector for</p> | <ul style="list-style-type: none"> Land cost at concessional rates of 10% of District Level Committee (DLC) rates. Eligible for Grant/Incentive under State Industrial Policy Single window clearance of projects Reservation of Area for Biomass Power Plants (For 5 MW – 60 km) | <p>Tariff for FY15-16</p> <p>Water cooled (WC):</p> <p>FC: 2.75 VC: 3.82 TC: 6.57 AD: 0.18 AT: 6.39</p> <p>Air cooled (AC):</p> <p>FC: 3.00 VC: 4.12 TC: 7.12 AD: 0.19 AT: 6.93</p> | <p>Tariff order dated 09.09.2015 and 08.07.2015 with a Control period from FY 2015-16 to FY 2018-19.</p> |

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| | | | | <p>this, the application will be cancelled.</p> <p>Security amount (Rs. 1 lakh / MW) needs to be deposited within 2 months from issue of PRN.</p> | <p>consideration of District Level Empowered Committee (DLEC), who will then take a final approval.</p> <p>The price of Biomass produced energy plantation shall be determined by the DLEC.</p> | | | |
| 18. | Tamil Nadu | 211.7 | No relevant policy on biomass power plants | | | | <p>Tariff for FY13-14</p> <p>FC: 1.675</p> <p>VC: 3.188</p> <p>TC: 4.863</p> | Tariff order dated 31.07.2012. |
| 19. | Tripura | | <p>Draft policy for promoting generation of electricity through new and renewable energy sources</p> | <p>Tripura Renewable Energy Development Agency (TREDA) being the nodal agency is responsible for receiving the project proposals.</p> <p>Project Approval Committee to scrutinize the offers and submit to the Government with recommendations/comments for final decision on the project.</p> <p>Decision on selection/award of the project will be communicated within 6 months. After award of the project, PPA should be signed within one month.</p> <p>A State Level Monitoring Committee headed by the Chief Secretary of the state and the Principal Chief Conservator of Forests to monitor the progress and makes recommendations to the State Government.</p> | Not covered | <ul style="list-style-type: none"> Exempted from electricity duty. Infrastructural facilities will be extended to projects located within industrial areas Sales Tax/VAT exemption on plant and machinery | - | Not available |
| 20. | Uttarakhand | | Uttarakhand State Government Policy for Harnessing | A committee consisting of e Secretary, Government of Uttarakhand (GOU), CMD/MD, | Not covered | Not covered | - | Not available |

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| | | | Renewable Energy Sources | Uttarakhand Power Corporation Limited, CMD/MD, Uttarakhand Jal Vidhyut Nigam Limited, CMD/MD, Power Transmission Corporation of Uttaranchal Limited (PTCUL), Vice President, Uttarakhand Infrastructure Projects Company (UIPC) and Director, Uttarakhand Renewable Energy Development Agency (UREDA) will provide requisite clearances in a time bound manner through a single window mechanism. | | | | |
| 21. | Uttar Pradesh | 54.0 | No relevant policy on biomass power plants | | | | Tariff for FY15-16 FC: 2.63 VC: 3.96 TC: 6.58 | Tariff order dated 20.01.2015. |
| 22. | West Bengal | | West Bengal Policy on Co-generation and Generation of Electricity from Renewable Sources of Energy, 2012 | Not covered | Not covered | Green Energy Fund shall be created in order to finance various initiatives for the development of RE | Tariff for FY13-14 FC: 2.06 VC: 3.35 TC: 5.41 | Tariff order dated 22.3.2013 with a control period from FY 2013-14 to FY 2017-18. |

Note: The other state doesn't have relevant biomass policy or have announced electricity tariff for grid connected biomass power plants.

Detailed Policies and Tariff notifications of States are available on Biomass Knowledge Portal launched on 14.05.2015.

Abbreviations

FC - Fixed Cost
VC - Variable Cost
TC - Total Cost
AD - Accelerated Depreciation
AT - Applicable Tariff
BPP - Biomass Power Projects
COD - Commercial Operation Date