

Wind Power Profile of Madhya Pradesh



State Profile

With a geographical spread of 308,244 sq. Km now, the State was bifurcated to Chhattisgarh in the year 2000. Madhya Pradesh is a land-locked state surrounded by the states of Maharashtra, Uttar Pradesh, Chhattisgarh, Gujarat, Odisha, Andhra Pradesh and Rajasthan. With a vast stretch of land defining the transitional zone between the Gangetic lowlands in the north and the high dry Deccan Plateau to the south, the state has the Malwa, Central India, Bundelkhand, Rewa and Panna, Narmada-Sone Valley, Satpura and Maikal and Eastern (Baghelkhand) plateau as natural regions. It is a part of peninsular plateau of India lying in north central part, whose boundary can be classified in the north by plains of Ganga-Yamuna, in the west by Aravali, east by the Chhattisgarh plain and in the south by the Tapti valley and the plateau of Maharashtra.

The State has a sub-tropical climate with hot dry summer from April to June followed by monsoon rains from July to September and a cooler and drier winter. The annual average temperature ranges from 22.5^o C to 25^o C. The average rainfall varies from 800-1800 mm. While the western and north western districts receive 1000mm or less rainfall, the south eastern districts have the highest rainfall some of them receiving as much as 2150mm.

Wind Power Installable Potential as per Wind Atlas 2015 by NIWE

Wind Potential @100m Hub Height	Rank I	Rank II	Rank III	Total
Type of Land \Rightarrow	Waste Land	Cultivable Land	Forest Land	
Potential in MW	2216	8259	9	10484

Rank I	Waste Land	NRSC Level –II Classification Values	12, 13, 15, 19
Rank II	Cultivable Land	NRSC Level –II Classification Values	2, 3, 4, 5, 6, 10, 18
Rank III	Forest Land	NRSC Level –II Classification Values	7, 8, 9

Installable Potential assessed by NIWE earlier was 920MW at 50m Hub Height and 2931MW at 80m Hub Height.

Wind Monitoring Stations Established in the State as on 31.03.2017: 93

Number of Stations having $WPD \geq 200 W/m^2$: 7

The highest $WPD \geq$ of 371 W/m^2 is at Nagda 2.

Demonstration Wind power Projects Funded by the Government in the State as on 31.03.2017

Number of Wind Turbines: 6

Capacity installed: 0.590MW

Sites Suitable for Wind Power Generation in the State

Jomgodrani and Nagda in Dewas District, Kukru in Betul District, Mahuriya in Shajapur District, Mamatkheda in Ratlam District, Bariyalpani in Barwani district and Sendhwa in Sendhwa District

Wind Power Installed capacity as on 30th June 2019: 2519.89MW

**Installed Capacity (n MW) of Power Utilities in Madhya Pradesh
Including Allocated Shares In Joint & Central Sector Utilities**

Sl. No.	Category	Installations
1	Coal	14961.38
2	Lignite	0.00
3	Gas	357.00
4	Diesel	0.00
5	Nuclear	273.00
6	Hydro	3223.66
7	Renewable Energy Sources	4716.45
	Grand Total	23531.49

Installed Capacity of Grid Interactive Renewable Power as on 30.06.2019

Sl. No.	Energy Source	Capacity in MW
1	Small Hydro Power	95.91
2	Wind Power	2519.89
3	Bio Power	
	BM Power/Bagasse Cogen. (Grid Interactive)	93.00
	BM Cogen. (Non-Bagasse/Captive Power)	12.35
	Waste to Energy	15.40
	Bio Power Total	120.75
4	Solar power	
	Ground Mounted	1956.53
	Roof Top	39.34
	Solar Total	1995.87
	Total Capacity	4732.42

Some Wind Farms in Madhya Pradesh

Name of Power Developers	Site	Capacity (MW)
M/s MP Winfarm Ltd., Bhopal	Jamgodrani, Dist.Dewas	13.05
M/s Kalani Industries Ltd., Indore	Dewas, Dist.Dewas	1.84
M/s Goetze Financial Services, New Delhi	Jamgodrani Dist.Dewas	5.98
M/s Suzlon Energy Ltd., Pune	Nagda, Dist. Dewas	6.25
M/s Suzlon Energy Ltd., Pune	Nagda, Dist.Dewas	6.25
M/s Suzlon Infrastructure Ltd. Pune	Nagda, Dist.Dewas	3.05
M/s Dhar Automotives Pvt. Ltd., Indore	Jamgodrani Dist.Dewas	0.230
M/s NEPC India Ltd./M/s Southern Wind Farms Ltd., Chennai	Sujapur, Dist.Ratlam	4.95
M/s SE Energy Park Ltd., Pune	Jaora, Dist.Ratlam	4.8
M/s Enercon India Ltd., Mumbai	Nagda, Dist.Dewas	9.6
M/s Pioneer Wincon Ltd., Chennai	Jaora, Dist.Ratlam	4.00

M/s MP Winfarm Ltd., Bhopal	Nagda, Dist.Dewas	15
M/s Enercon India Ltd., Mumbai	Ratedi, Dist.Dewas	Proposed 91.2
M/s Suzlon Energy Ltd., Pune	Palsodi, Dist.Ratlam	32.7
Demo Project	Kheda Distt Dhar	0.59
Suzlon Energy Ltd	Palsodi Ratlam	9.6
Southern wind farms Ltd.	Ratlam	6.00
M/s Suzlon Energy Ltd	Ratlam	10.2
M/s Suzlon Energy Ltd	Palsodi Ratlam	6.00
M/s Suzlon Energy Ltd	Mahuria Shajapur	22.50
MP Windfarms Ltd.	Dewas	14
Orange Renewable	Ratlam	50
Orange Renewable	Mamatkheda	100.5

RPO Compliance Report of Madhya Pradesh for FY 2017-18

Total Energy Consumed, (MU)	Solar RPO Obligation, (%)	Solar RPO Obligation, (MU)	Non Solar RPO Obligation (%)	Non Solar RPO Obligation, (Mu)	Total Obligation, (%)	Total Obligation, (MU)
1	2	3	4	5	6	7
69608	4.75	3306.4	9.5	6612.8	14.25	9919.1

RPO Compliance Report For FY 2017-18 -Continued

Actual Compliance Of Solar RPO, (%)	Actual Compliance Of Solar RPO, (MU)	Actual Compliance Of Non Solar RPO (%)	Actual Compliance Of Non Solar RPO, (MU)	Total Compliance, (%)	Total Compliance, (MU)	Category
8	9	10	11	12	13	14
2.75	1911.7	6.29	4381.2	9.04	6292.9	63.43%

Wind Power Policies in Madhya Pradesh

Sl. No.	Policy Parameters	Madhya Pradesh
1	Policy Date & Link	
2	Tariff Order Date & Link	17th March 2016
3	Capital Cost (in lacs/MW)	575
4	Capacity Utilization Factor (CUF)	23.00%
5	Feed in Tariff competitive Bidding in Rs./kWh	4.78
6	Tariff if AD Aailed	4.32
7	Valid up to	Extended till the new order comes
8	APPC Rs./kWh	2.83

State Energy Agencies and Addresses

Madhya Pradesh Electricity Regulatory Commission (MPERC)

Metro Plaza, 3rd & 4th Floor, E-5, Arera Colony, Bittan Market, Bhopal – 462 016.

Phone : 0755-2463585/2464643

Fax:0755-2766851

Email: mperc@mperc.org, secretary@mperc.nic.in

Website: www.mperc.org

Energy Minister

Minister for Energy, New & Renewable Energy, Mineral Resources and Public Relations

Office Address: Vallabh Bhawan, Bhopal

Website: <http://mpenergy.nic.in/>

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Energy Department, Government of Madhya Pradesh

The Principal Secretary,

Vallabh Bhawan, Bhopal

Website: <http://mpenergy.nic.in/>

Phone: 0755- 2441424, Email: secyenergy@mp.gov.in

New & Renewable Energy, Government of Madhya Pradesh,

The Principal Secretary

Vallabh Bhawan, Bhopal

Website: <http://mpnred.com/>

Phone: 0755- 4251330, Email: cmpuvn@bsnl.in

Madhya Pradesh Urja Vikas Nigam Limited

Managing Director Office Address: Urja Bhawan, Link Road No-2, Shivaji Nagar, Bhopal. (MP)

Tele: +91-755- 2556566, 2556526 (O), Email: mdurjanigam@rediffmail.com

Website: <http://www.mprenewable.nic.in/>

M.P. Power Management Co. Ltd.

Managing Director, Office Address: Shakti Bhawan, Rampur, Jabalpur – 482008

Website: <http://www.mppmcl.com/>

Phone: 0761- 2660909

M.P. Power Transmission Co. Ltd.

Managing Director, Shakti Bhawan, Rampur, Jabalpur – 482008

Website: <http://mptransco.nic.in/>

md@mptransco.nic.in

0761- 2661234 (O)

M.P. Power Generating Co. Ltd.

Managing Director, Office Address: Shakti Bhawan, Rampur, Jabalpur – 482008

Website: <http://www.mppgenco.nic.in/>

Phone: 0761- 2666150, Email: mppgcl@mp.nic.in

M.P. Paschim Kshetra Vidyut Vitran Co. Ltd.

Managing Director, Office Address: Pologround, Indore

Website: <http://www.mpwz.co.in/>

Phone: 0731- 2421414, Email: cmdwz.indore@gmail.com

M.P. Madhya Kshetra Vidyut Vitran Co. Ltd.

Managing Director Office Address: Nishtha Parisar, Govindpura, Bhopal 462023

Phone: 0755- 2588377, Email: md@mpcz.co.in

Website: <http://www.mpcz.co.in/>

M.P. Poorva Kshetra Vidyut Vitran Co. Ltd.-

Managing Director, Office Address: Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur (M.P.) - 482008

Website: <http://www.mpez.co.in/>

Phone: 0761-m2661795, Email: cmdeast@hotmail.com

M. P. State Load Despatch Centre

Office Address: MP Power Transmission Co. Ltd. Nayagaon, Rampur, Jabalpur, 482008

Website: <http://www.sldcmpindia.com/>

