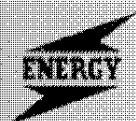


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Cost Economics

4.3 Cost of wind energy in India should be based on following most optimum assumptions:

	Factor	Assumption	Comments
a)	Capital cost per MW	Rs.45 Mill.	This cost would proportionately vary with the efficiency of Wind Electric generator (WEG).
b)	Annual Capacity Utilization Factor (C.U.F)	20%	Majority of sites in India has Wind Power Density (WPD) between 200-250 W/m ² . C.U.F would proportionately vary with the efficiency of WEG and the consequent capital cost. As on date all India average is 15%.
c)	Interest rate	14%	Rate charged by Financial Institutions from average borrower and not preferential rate for top class few Corporates.
d)	Operation & maintenance (O&M) expenses	1% of capital cost with 10% annual escalation	In 20 year life cycle it would match with actual expenses incurred.
e)	Rate of Depreciation	@15.33% of Written Down Value (WDV)	As the loan repayment period would be maximum 10years and repayment is ensured through ploughing back of Depreciation amount, WDV method should be considered instead of straight line method @ 5.28% under which it would take 20 years to repay the loan.
f)	Derating of WEG efficiency	@5% after every 5 years	Due to ageing, maintenance down-time and deposition on blades, this is the most conservative assumption.
g)	Income Tax Liability	Minimum Alternate Tax (MAT)	As per provisions of Section 80 1A of Income Tax Act.
h)	Return on Promoters Equity	@16%	As per privatization policy declared by Govt. of India, this is the assured rate of return.

Comparison of WEGs on the basis of only Capital Cost or CUF does not indicate the true picture. Rational basis should be cost/kWh, which may marginally vary with cost of infrastructure at any particular site.

Based on above mentioned assumptions, the cost of Wind Energy is calculated for 20 years life span and provided in Table -4.1.