

Project 1 : WIND POWER ASSET BASED OUT OF GUJARAT

OVERVIEW:

- Wind Power asset in Jamnagar, Gujarat.
- The assets have been recently commissioned.
- 6 Wind Turbine Generators (WTGs) of 0.85 MW capacity each.
- Windmill is of Gamesha make and Operations & Maintenance are done by the same group.

ASSET SUMMARY:

Sl. No.	Particulars	Details
1	Number of WTGs	6 Nos.
2	Capacity in MW	5.1 MW
3	Model	G 58
4	Land	It is under sub-lease arrangement
5	Comissioning	March 2011
6	Tariff as Power Purchase Agreement (PPA): Rs. per Unit	Fixed at Rs. 3.56 / unit
7	PPA Tenor	25 Years
8	O&M Cost	Starting at around Rs. 9.0 Lacs. per WTG per annum with escalation of 10% per annum. It is for a tenor of 10 years.
9	PLF (%)	18.0%
10	CDM Status	Not done.

HIGHLIGHTS:

- Average Generation of 13.00 Lacs. units per WTG per annum. The asset is around 3 years old. In the first and third year the average generation as been around 13.0 Lacs. units per annum per WTG. In the second year there was exceptional generation of around 17.0 Lacs. units per annum per WTG.
- Gujarat is one of the oldest states with regard to windmills.
- The tariff is fixed but it comes with reasonable assurance of peace of mind, in terms of track record of payment.
- There do not seem to be any case of local issues in that area.

- The PPA is for 25 years. In a way the revenue and returns are more or less assured / on predictable lines.

GENERATION TRACK RECORD:

SL NO	DoC(EB)	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
1	31-Mar-11	53740	207770	265400	158520	130150	72760	51220	66130	131200	120550	116920	74090	1448450
2	31-Mar-11	54590	199730	260990	148990	122510	66450	49540	67850	124980	116520	115380	74860	1402390
3	31-Mar-11	58870	228500	263880	177880	144050	77000	62010	76390	150160	133840	129880	92140	1594600
4	31-Mar-11	46030	223530	267020	176980	82070	76360	59540	67900	108670	113350	118590	91730	1431770
5	31-Mar-11	46870	212980	259900	172790	138430	74970	53440	67630	123920	113270	115270	84740	1464210
6	29-Sep-11							25317	65272	134787	119290	113468	77403	535537
Average		52020	214502	263438	167032	123442	73508	50178	68529	128953	119470	118251	82494	1312826

SL NO	DoC(EB)	Mar-12	Apr-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Total
1	31-Mar-11	90080	161900	256500	276340	203080	71850	46320	69490	123340	125630	93990	109920	1628440
2	31-Mar-11	86990	156320	245260	264200	195030	73440	48010	70580	120100	122470	93450	109100	1584950
3	31-Mar-11	103540	184130	268690	301620	225420	85930	59240	79450	152430	131130	109880	123270	1824730
4	31-Mar-11	97860	177260	275890	296990	220890	83710	58030	71320	117790	118970	107710	118480	1744900
5	31-Mar-11	94600	172020	262690	288750	217300	83370	51340	68030	129500	122240	99200	116260	1705300
6	29-Sep-11	100308	195042	279353	321038	236811	81697	45269	66007	132361	116708	92195	111225	1778014
Average		95563	174445	264731	291490	216422	80000	51368	70813	129254	122858	99404	114709	1711056

SL NO	DoC(EB)	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Total
1	31-Mar-11	101830	177230	111310	164740	116630	101870	36450	79800	92800	133550	69210	80494	1265914
2	31-Mar-11	101590	174040	103860	158950	108760	100730	36460	77170	88900	129520	66390	76990	1223360
3	31-Mar-11	113010	193360	112230	181130	125040	115340	42900	82910	93090	128460	81140	90188	1358798
4	31-Mar-11	107850	184310	118210	174430	119990	98830	12870	63600	76440	123200	76097	87787	1243614
5	31-Mar-11	108990	181670	120490	178040	126500	104670	37060	78330	85260	119580	74120	82958	1297668
6	29-Sep-11	111190	208597	132222	209113	143261	128462	37592	78188	85607	125517	66660	78320	1404729
Average		107410	186535	116387	177734	123364	108317	33889	76666	87016	126638	72270	82790	1299014

The overall average generation per WTG is around 13.00 Lacs. units per annum.

- Asking Price: Rs. 19.5 Crs plus transfer related expenses to be borne by buyer.

Project 2 : WIND POWER ASSET BASED OUT OF RAJASTHAN

OVERVIEW:

- Wind Power asset in Jodhpur, Rajasthan
- The assets are owned by an entity engaged in Manufacturing / Trading. They are looking to get out of non-core business.
- 1 Wind Turbine Generators (WTGs) of 1.50 MW capacity.
- Windmills are of Suzlon make and Operations & Maintenance are done by the same group.

ASSET SUMMARY:

Sl. No.	Particulars	Details
1	Number of WTGs	1 No.
2	Capacity in MW	1.5 MW
3	Model	S 82 V3
4	Commissioning	March 2008
5	Tariff as Power Purchase Agreement (PPA): Rs. per Unit	Starting at Rs. 3.48 / unit with escalation of 2 paise per annum for 1st 10 years and escalation of 1 paise per annum for the second 10 years
6	PPA Tenor	20 Years
7	O&M Cost	The charges for FY 2013-14 was around Rs. 21.3 Lacs, there is escalation of 5% per annum
8	PLF (%)	20.6%
9	CDM Status	Not Registered

HIGHLIGHTS:

- Average Generation of 27.0 Lacs. units per annum. The worst generation so far has been around 23.50 Lacs. units per annum and the best generation so far has been around 32.7 Lacs. units per annum.
- Rajasthan is one of the matured states with regard to windmills. If you are already having existing portfolio of windmills / solar projects it can add to your existing capacity.
- Escalation tariff structure is more like a slow and steady one. There may be chance of revision in between.
- There have been local issues of cable theft some time back. During that period the machines were down. The process of restoration is under way.

- The PPA is for 20 years. The investor gets an opportunity of increasing income for residual tenor of around 14 years.

GENERATION TRACK RECORD:

Year	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
2008-09	82915	458740	417688	372864	253693	212629	178105	187451	216525	258395	156518	234625	3030148
2009-10	306517	438529	396503	266888	322642	303516	142601	177388	269690	185248	184856	277554	3271932
2010-11	295639	433663	361318	192645	103216	103149	121266	99094	150330	199880	171214	208804	2440218
2011-12	212032	439905	386781	225875	136909	166156	121101	53148	175096	213248	255115	250563	2635929
2012-13	217811	340558	484967	332188	197378	68491	51532	91090	184042	120013	224392	180800	2493262
2013-14	172767	331014	322311	219583	172310	176898	108851	110049	139902	220509	190812	189637	2354643
2014-15	177654	236288	407183	253681	16096								1090902

- Expected Price: Rs. 4.5 Crs. (Negotiable)

Project 3 : WIND POWER ASSET BASED OUT OF RAJASTHAN

OVERVIEW:

- Wind Power asset in Jaisalmer, Rajasthan.
- The assets are owned by an entity engaged in Mining Business. They are looking to get out of non-core business.
- 2 Wind Turbine Generators (WTGs) of 1.50 MW capacity.
- Windmills are of Suzlon make and Operations & Maintenance are done by the same group.

ASSET SUMMARY:

Sl. No.	Particulars	Details
1	Number of WTGs	1 No.
2	Capacity in MW	1.5 MW
3	Model	S 82 V3
4	Comissioning	March 2011
5	Tariff as Power Purchase Agreement (PPA): Rs. per Unit	Rs. 4.08 / unit
6	PPA Tenor	20 Years
7	O&M Cost	Around Rs. 37.50 Lacs. units with escalation matrix structure
8	PLF (%)	The windmills were commissioned in 2011. First year is stabilisation period. The second and third year have been run properly. The windmills were down also. Currently one of them is up and running and the other one is expected to be up shortly.
9	CDM Status	Not Registered

HIGHLIGHTS:

- Average Generation of around 21.0 Lacs. units per annum per WTG in the first year. The windmills were commissioned in 2011. Usually the first year is stabilisation period. In the second and third year the windmills have not run properly. It may be noted that in the second year (FY 2012-13) the machines operated for about 9 months. In the third year the machines have been down for the entire year (FY 2013-14). Currently one of them is up and running and the other one is expected to be up shortly. Hence, given such background it may not be fair to assess returns on the basis of past data. Based, on due diligence and discussion with the O&M team one should take a judgment of future generation.

- Rajasthan is one of the matured states with regard to windmills. If you are already having existing portfolio of windmills / solar projects it can add to your existing capacity.
- Tariff of Rs. 4.08 / unit is fixed. There is no element of uncertainty.
- There have been local issues of cable theft some time back. During that period the machines were down. The process of restoration is under way.
- The PPA is for 20 years. The investor gets an opportunity of increasing income for residual tenor of around 17 years.

GENERATION TRACK RECORD:

Lacs. units per annum.

Year	WTG 1	WTG 2
2011-12	22.90	19.40
2012-13	16.70	20.30
2013-14	-	-

It is controller level data. The machines were down for a long time. One of them is already up and the other one is expected to be up shortly.

- Expected Price: Rs. 5.25 Crs. per WTG.

Project 4 :WIND POWER ASSET BASED IN GUJARAT

OVERVIEW:

- Captive Wind Power asset in Jamnagar, Gujarat.
- The assets were commissioned on September 27, 1994.
- 4 Wind Turbine Generators (WTGs) of 200KVcapacity each.
- Windmillis of Nordex-BHEL make and Operations & Maintenance are done by local service provider.

ASSET SUMMARY:

Sl. No.	Particulars	Details												
1	Number of WTGs	4 Nos.												
2	Capacity in MW	0.8 MW												
3	Model	-												
4	Land	It is under sub-lease arrangement with GEDA. It is about to get over. It will be renewed for 5 years and can be extended again.												
5	Commissioning	September1994												
6	Wheeling Arrangement	The new owner will be subject to Wheeling charges of 10%.												
7	Tenor of Agreement	To be Renewed for 5 Years												
8	O&M Cost	<table><tr><th>Year</th><th>O & M Cost & Repairs [Rs. In Lacs]</th></tr><tr><td>FY 2013-14</td><td>9.93</td></tr><tr><td>FY 2012-13</td><td>11.01</td></tr><tr><td>FY 2011-12</td><td>5.68</td></tr><tr><td>FY 2010-11</td><td>6.11</td></tr><tr><td>FY 2009-10</td><td>8.71</td></tr></table>	Year	O & M Cost & Repairs [Rs. In Lacs]	FY 2013-14	9.93	FY 2012-13	11.01	FY 2011-12	5.68	FY 2010-11	6.11	FY 2009-10	8.71
Year	O & M Cost & Repairs [Rs. In Lacs]													
FY 2013-14	9.93													
FY 2012-13	11.01													
FY 2011-12	5.68													
FY 2010-11	6.11													
FY 2009-10	8.71													
9	Energy Banking	New owner will not be permitted energy banking												
10	PLF (%)	13.5%												
11	CDM Status	Not done.												

HIGHLIGHTS:

- Average Generation of 9.49 Lacs. units per annum. The asset is around 20 years old. In the last ten years the worst generation that has been observed is around 8.0 Lacs. units per annum and the best generation that has been observed is around 11.0 Lacs. units per annum.
- Gujarat is one of the oldest states with regard to windmills and there do not seem to be any case of local issues in that area.
- The generation from the windmills will help in saving the cost incurred on account of power generation from the factory. Based on past performance it would be reasonable to say that there would be good track record of settlement of bills.
- The wheeling agreement for new owner would be for 5 years. The wheeling charges are expected to be 10% (in line with new policy).
- Energy Banking will not be permitted for the new owner.
- The land is on lease agreement from GEDA. It can / will be extended in slab of 5 years each.

GENERATION TRACK RECORD:

Year	Controller Data	SLDC
2004-05	1,236,062	1,118,499
2005-06	1,107,659	1,010,616
2006-07	1,102,221	1,018,735
2007-08	1,027,930	919,079
2008-09	1,162,825	1,022,257
2009-10	1,069,932	910,977
2010-11	821,797	798,164
2011-12	948,097	895,040
2012-13	1,009,716	926,682
2013-14	956,803	871,890
Total Generation	10,443,042	9,491,939
Avg. Generation	1,044,304	949,194

The overall average generation per WTG is around 9.49 Lacs. units per annum.

- Asking Price: Rs. 1.5Crs plus transfer related expenses to be borne by buyer.