

ESSEL MINING & INDUSTRIES LIMITED

Regd. & Head Office : "INDUSTRY HOUSE" 10 CAMAC STREET, KOLKATA-700 017

Phone : 2282-8339 / 6378 / 6398, Fax : (91-33) 2282 4998

E-mail : hgiho@adityabirla.com / esselmines@adityabirla.com

**EXTRACT OF THE MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF
THE COMPANY HELD ON MONDAY, THE 27TH SEPTEMBER 2004 AT 2.00 P.M. AT
ADITYA BIRLA CENTRE, S.K.AHIRE MARG, DR. A.B.ROAD, WORLI, MUMBAI – 400 025**

Undertaking new business activity of generation and distribution of wind Power.

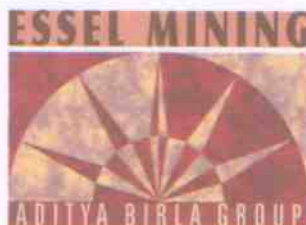
Shri H. C. Daga informed the Board that the Company has been exploring various business opportunities for investment and the investment in Wind Power Project has been found to be meeting the company's commitment towards environmental well being and particularly climate change mitigation.

He further informed that the project in consideration is proposed for 75 MW in Dhule district, Maharashtra.

He further informed that under Kyoto Protocol, this project can fetch additional revenues by sale of Carbon Credits under "Clean Development Mechanism (CDM)". In order to offset the financial risk and make the project viable as an investment option, CDM revenue have to be earned.

After discussion, it was :

"RESOLVED that the company be and is hereby authorized to take up 75 MW wind power project to be set up in Dhule district in Maharashtra, in a phased manner, with a total investment not exceeding Rs. 400 crores and also take into consideration the CDM revenues arising from the project"



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Mr. Daga further informed that the first phase would initially be of 15 MW and the remaining 60 MW project would be commissioned subsequently.

He then submitted the following particulars of the first phase before the Board for consideration and approval of the project :

Sl. No.	Particulars	
1	Installed Capacity	15 MW
2	Site Location	District: Dhule in the State of Maharashtra
3	No. of Wind Mills	12 No.s, each of 1.25 MW
4	Estimated Cost of Project (Rs. Lacs)	7664.98

After discussion, it was:

"RESOLVED that the Company be and is hereby authorized to make investment in 15 MW Wind Power Project to be set up at Dhule District of Maharashtra with a total investment of Rs. 76.65 Crores."

"FURTHER resolved that SHRI H.C.DAGA, SR. PRESIDENT; SHRI R. P. PANSARI, SR. PRESIDENT AND CFO; SHRI RAMESH AGGARWAL, SR. VICE PRESIDENT (F& C); SHRI RAJESH BOTHRA, DEPUTY GENERAL MANAGER (COMMERCIAL); and SHRI NIRAJ MAHESHWARI, DEPUTY GENERAL MANAGER, PLANNING AND BUSINESS DEVELOPMENT; of the Company, be and are hereby severally authorized to negotiate and



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finalize the orders with the suppliers of equipment, follow up with statutory and non statutory bodies / corporations and to sign any legal document, deed, agreement, etc, required to be signed / completed in connection with the approval and setting up of the project."

"**FURTHER** resolved that SHRI H.C.DAGA, SR. PRESIDENT; SHRI R. P. PANSARI, SR. PRESIDENT AND CFO; SHRI RAMESH AGGARWAL, SR. VICE PRESIDENT (F& C); SHRI RAJESH BOTHRA, DEPUTY GENERAL MANAGER (COMMERCIAL); AND SHRI NIRAJ MAHESHWARI, DEPUTY GENERAL MANAGER, PLANNING AND BUSINESS DEVELOPMENT; SHRI RAVI BANSAL, VICE PRESIDENT, FERRO CHEM DIVISION; SHRI S. S. PAREEK, DEPUTY GENERAL MANAGER (COMMERCIAL), FERRO CHEM DIVISON, of the Company be and are hereby authorized to sign / execute all agreements, undertakings, indemnities, Documents and Declarations, Affidavits, Deeds, Writings to sign Certificates and to do all such acts, deeds, things, representations and all documents, papers for obtaining all relevant consents, sanctions, permissions, approvals, other approvals under various Rules, Act and Statues and other actions as may be required on behalf of the Company for giving effect to the purchase of land for setting up of 12 No.s of Wind Mills at Dhule District."

"**FURTHER** resolved that MR.NILESH DHANANI, MR. JAYANT WAMAN BHOSALE, MR. SURESH VAKHERIA, MR. BALUBHAI PATEL and MR. SHANKAR NIKAM, be and are hereby authorized to purchase the land required for 15 MW project and to do all such acts, deeds, things representations and to sign all documents, papers for obtaining all relevant consents, sanctions, permissions, approvals, other approvals under various Rules, Act and Statues and other actions as may be required on behalf of the Company for giving effect to the purchase of land for setting up of 12 No.s of Wind Mills at Dhule District."



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EXPLANATORY NOTE ON FINANCIAL ANALYSIS RELATING TO WIND POWER PROJECT :

The financial viability assessment of the project with and without CDM benefits, as presented to the Board, is set out below :

Site location	Maharashtra
Machine supplier	Suzlon Energy Ltd
Project capacity	75 MW
Capacity of machines	1250 kWh
Installation Cost	INR 50 million / MW
D E ratio	1.5 : 1
Interest rate on loans	10.50 %
Plant load factor	20% (based on MERC order)
Transmission losses	5%
Tariff	INR 3.50/kWh with annual escalation of INR.0.15/year till 13 years
Annual O&M Expenditure	INR 0.80 million
% escalation of O&M charges	5%
Insurance charges	INR 0.080 million /MW
Income tax rate (inc. surcharge)	36.60 %
CERs	131400
Rate / CER	USD 10
Equity IRR :	
- Without CDM	14.28%
- With CDM	17.05%
DSCR :	
- Without CDM	0.93
- With CDM	1.06
Payback period :	
- Without CDM	9.4 yrs
- With CDM	8.7 yrs

The equity IRR with CDM crosses our internal benchmark of 16.90 %

SD/-

CHAIRMAN

CERTIFIED TO BE TRUE COPY
For ESSEL MINING & INDUSTRIES LIMITED

Authorised Signatory