

COSTAL ENERGEN PVT. LTD. ENTERPRISE VALUATION

ECONOMIC **ASSET** **TRADE** UNDERPRICING
REAL ESTATE **MARKET** TRANSACTION PERCEPTION
STANDARD **PRICE** ESTIMATED
OVERPRICING **VALUE** **AMOUNT**
BUSINESS **SELLER** **BUYER** **TOOL**
INVESTMENT



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Executive Summary: -

Coastal Energen Private Limited, established on May 29, 2006, is a private company operating in the energy sector with a primary focus on the production, collection, and distribution of electricity. Registered at the Registrar of Companies in Chennai, the company operates as a non-government entity.

Board of Director:

Directors of Coastal Energen Private Limited are Mr. Ahmed Buhari and Mr. Melarcode Krishnaswamy Parameswaran.

Corporate Information:

Corporate Identification Number (CIN): U40102TN2006PTC060009
Registration Number: 60009
Financial Structure:

Authorized Share Capital: Rs. 2,250,000,000
Paid-up Capital: Rs. 2,109,042,350

Date of Incorporation: May 29, 2006

Financial and Legal Status:

Insolvency Process: Coastal Energen underwent the Corporate Insolvency Resolution Process (CIRP) on 04/02/2022, as mandated by the National Company Law Tribunal (NCLT) Mumbai, under the order CP 757 (IB)/2019).

Adjusted Business Value:

With all assumptions and available information, the adjusted business value considered lower than derived enterprise (business value) which is INR 3343/- Crores, This report contains all working, basis, assumptions, risk factors and caveats. The reader of report should read with all such assumptions, caveats.



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Scope of Work:

The State Bank of India (lead consortium member of ZLM) has given the following scope of work for deriving business (enterprise) value,

1. Initiation:

We have to undertake a comprehensive evaluation of the Company's business value, specifically focusing on its coal-based Thermal Power Plant operations.

2. Data Gathering:

We will collect pertinent data related to the current business structure for the valuation exercise. This involves collating information from management, industry sources, and economic/market data.

3. Management Consultation:

Engage in discussions with management to gain a deeper understanding of the business's intricacies and operational nuances.

4. Environmental Assessment:

Conduct an in-depth analysis of the economic and competitive environments in which CEPL business operates, identifying external factors impacting its valuation.

5. Business Plan Review:

Evaluate current business plans and future financial projections, considering the potential for future debt repayments.

6. Identification of Valuation Parameters:

Determine key valuation parameters and assumptions that will serve as the foundation for our valuation methodologies.

7. Future Business Potential Analysis:

Assess the future potential of the business, taking into account the value that may be generated through the implementation of our management business plan.

8. Valuation Approaches Implementation:

Apply generally accepted valuation approaches, such as the Discounted Cash Flow (DCF) method, Historical Transaction method, Book Value Method, and EV EBITDA method.

9. Valuation Report Preparation:

Our team will compile a detailed report outlining recommendations for the potential fair value of the business. This report will meticulously document the methodologies used and assumptions made during the analyses.

Condition and Major assumptions:

Conditions:

The historical financial information about the Company presented in this report is included solely for the purpose to arrive at value conclusion presented in this report, and it should not be used by anyone to obtain credit or for any other unintended purpose. Because of the limited purpose as mentioned in the report, it may be incomplete and may contain departures from generally accepted accounting principle prevailing in the country. We have not audited, reviewed, or compiled the Financial Statement and express no assurance on them.

This report is only to be used in its entirety, and for the purpose stated in the report. No third parties should rely on the information or data contained in this report without the advice of their lawyer, attorney, or accountant. We acknowledge that we have no present or contemplated financial interest in the company. We have no responsibility to modify this report for events and circumstances occurring subsequent to the date of this report.

We have, however, used conceptually sound and generally accepted method, principle and procedures of international valuation standard issued by IVSC in determining the value estimate included in this report. The valuation analyst, by reason of performing this valuation and preparing this report, is not to be required to give expert reference to the matters contained herein, unless prior arrangement has been made with the analyst regarding such additional engagement.

Assumptions:

The Opinion of value given in this report is based on information provided in part by The Management of the company and other sources as listed in the report. This information is assumed to be accurate and complete.

We have relied upon the representation contained in the public and other documents in my possession concerning the value and useful condition of the transaction, and any other assets or liabilities except as specifically stated to contrary in this report. We have not attempted to confirm whether or not all assets of the business have good title to all the assets. We have been informed by the management that there are no environmental or Infringement of brand, trade or patent or any significant lawsuits, or any other undisclosed Contingent liabilities that may potentially affect the Value, except as explicitly stated in this report.

Nature and source of information used or relied upon:

I have received following information and documents, and relied upon it:

- Annual reports for the year 2020-2021, 2021-2022 and 2022-23 of the company,
- Basic Information of the company,

- Balance Sheet as on 30th September, 2023,
- Excel Sheet of Plant Performance October 2023,
- Excel Sheet of Plant Performance of last 5 years

Valuation Approaches and its application:

By its nature, valuation work cannot be regarded as an exact science, and given the same set of facts and using the same assumptions; expert opinion may differ due to the number of separate judgments, and decisions, which have to be made. Therefore, there can be no standard formulae to establish an indisputable value, although certain appropriate formulae are useful in establishing reasonableness.

Business valuation determines the value of a business enterprise or ownership interest. Valuation estimates the economic benefits that arise from combining a group of physical assets with a group of intangible assets of the business as a going concern.

When valuation is done with the purpose of merger or purchase, it estimates the price that prospective informed buyers and sellers would negotiate at arm's length for an entire business or partial equity interest. There are various methods adopted for valuation of share. Each approach proceeds on different methods adopted for valuation of share. Each method proceeds on different fundamental assumptions which have greater or lesser relevance and at times even no relevance to a given situation. The methods used for the theoretical valuation arrived at has to be perfected with market criteria, as the final purpose is usually to determine potential market prices. The various methods are discussed hereunder:

Income Approach (Discounted Cash Flow Method):

The Income Approach measures the value of an asset by calculating the present value of its future economic benefits. When used to determine Equity value, the Income Approach develops an indication of value by discounting forecasted cash flows to their present value at a rate of return that incorporates the risk-free rate for the use of funds plus the expected rate of inflation and the risks associated with the particular investment. The discount rate applied to these expected cash flows is generally based upon rates of return available from alternative investments of similar type and quality. Another discounting method calculates the company's Weighted Average Cost of Capital ("WACC") from its cost of debt and cost of equity. Forecasts typically cover three to five years, but the reliability of forecasts for valuation purposes in early-stage enterprises depends upon many factors, such as the company's vulnerability to advances in technology, actions by competitors, changes in end-user requirements, and the availability of financing. Selecting the forecast period requires my judgment.

The Income Approach works best when development stage companies have progressed to Stage five Resource Maturity Stage of a company in which company has the staff and financial

resources to engage in detailed operational and strategic planning. Typically, companies in prior stages have limited operating histories and cash flow forecasts. Using the Income Approach when a company has not achieved profitability or positive cash flow, and therefore has negative flows/losses during some or all of the forecast years, results in an equity Value that consists mostly (if not entirely) of the Terminal Value ("TV" is the estimate of the Company's future value at the end of the forecast period). Due to these limitations, either the Income Approach is employed in conjunction with the Market Approach or some other sanity checks are needed to be performed.

Market Approach:

The Market Approach measures the value of an asset through an analysis of recent sales of comparable property compared to the property being valued. When applied to the valuation of an equity interest, consideration is given to the financial condition and operating performance of the subject company compared to either publicly traded companies with similar lines of business or recent corporate acquisitions ("Guideline Companies"). Typically, the companies selected for comparison are subject to economic, political, competitive, and technological factors that correspond with those confronting the Company. The Market Approach is conceptually preferable to the other two approaches both because it uses direct comparisons to similar enterprises and because the analysis is based upon actual market transactions. However, comparable that fit perfectly rarely exist. Privately held companies are compared to publicly traded ones that are typically further along in their stage of development, have superior access to capital, and have common stock that is readily marketable.

Often historical results of public companies are being compared to projected results for the private company being valued. In order to reflect these differences, data from the Guideline Companies must be appropriately adjusted. Selecting the market multiple to apply to the Company requires judgment.

Asset Approach:

The general principle behind asset-based valuation methods is that the value of an enterprise is equal to the Fair market value of its assets less the Fair market value of its liabilities. The Fair market values of the component assets and liabilities may themselves be obtained or estimated using a variety of methods, including market-based or income-based methods. The asset-based approach is most useful when applied to tangible assets and to companies whose assets consist primarily of tangible assets. This approach establishes value based on the cost of reproducing or replacing each asset, less depreciation from physical deterioration and functional obsolescence.

The asset-based approach is applied primarily to enterprises in Stage 1 and some enterprises in Stage 2, before the company is likely to have built substantial intangible value. There is limited or no basis to apply a market- or income-based approach, since there are unlikely to be comparable market transactions, and the

company has virtually no financial history and therefore is unable to use past results to reasonably support a forecast of future results.

Rationale for Choice of Valuation Method:

In determining the fair value of Coastal Energen Private Limited, the Discounted Cash Flow (DCF) method has been selected as the most appropriate valuation approach. The rationale for opting for DCF over the Assets Approach and Market Approach is outlined below:

1. Reliance on Future Cash Flows:

- Coastal Energen's valuation requires a forward-looking approach, considering its dynamic business environment. The DCF method, relying on projected future cash flows, aligns seamlessly with the company's operational nature, providing a comprehensive evaluation of its intrinsic value.

2. Robust Analysis of Financial Projections:

- Despite the potential absence of detailed historical financial data, the DCF method allows for a meticulous examination of future cash flow projections. This is crucial for a company like Coastal Energen, where the focus is on forecasting revenue generation.

3. Reduced Subjectivity in Estimations:

- Unlike other methods that heavily rely on estimations, the DCF method introduces a structured approach to estimate future cash flows. By directly incorporating available data and considering the specific financial dynamics of Coastal Energen, this method minimizes subjectivity and enhances the precision of the valuation.

4. Tailored to Company-Specific Dynamics:

- Coastal Energen's unique position within the energy sector necessitates a valuation approach that captures its distinctive characteristics. The DCF method, by focusing on the company's individual cash flow dynamics, offers a tailored solution that reflects its specific operational nuances and market positioning.

5. International Acceptance and Applicability:

- The DCF method enjoys international acceptance as a robust valuation technique. Its adaptability to diverse industries and its recognition in financial markets make it a reliable and globally recognized approach, adding credibility to the valuation process for Coastal Energen.

In essence, the choice of the Discounted Cash Flow method for Coastal Energen Private Limited is driven by its forward-looking, dynamic business model. This method ensures a comprehensive evaluation of the company's enterprise value, considering its specific financial dynamics and industry nuances.

Valuation by Income Approach

Valuation by DCF (Discounted Cash Flow) Method:

Discounted FCFF method values the firm by discounting free cash flows available to firm at the Weighted Average Cost of Capital (WACC) for the forecast period. It can be derived by these methods:

$$\text{FCFF} = \text{CFO} + \text{IE} * (1 - T) - \text{Capex}$$

$$\text{CFO} = \text{Cash flow operation IE} =$$

Interest expenses after tax

Capex = Capital expenditure

Discounted FCFE method values the firm by discounting free cash flows available to the equity shareholders at the Cost of Equity for the forecast period.

FCFE is a measure of company's profitability and measures the net amount of cash generated for the equity shareholders, after accounting for expenses, taxes, changes in net working capital and investments. FCFE method involves the following steps:

A financial model of the business is prepared for a specific forecast period, covering at least one business cycle of a cyclical industry.

Free Cash Flow to Equity holders (FCFE) is calculated for each year as below—

$$\text{FCFE} = \text{PAT} + \text{Depreciation} - \text{Capex} - \text{Working Capital requirement} - \text{Net Debt repayment}$$

The present value of the stream of cash flows is calculated by discounting the cash flows at the Cost of Equity. The business is considered to have indefinite life and the issue is resolved by separating the value of business in two time periods—value during the explicit forecast period and value after explicit forecast period referred to as the Terminal value. (Total Value = Present value of cash flows during forecast period + Terminal value).

The Terminal Value of a firm as a going concern can be by assuming cash flows continuing to perpetuity at a long-term sustainable growth rate.

Growth rate in this case is not considered, since we have cover projections till end of life of plant, which based on the future growth prospects on long-term business outlook for the Company and generally acceptable Discounted Cash Flow Valuation norms.

Cost of Equity: Capital Asset Pricing Model (CAPM) can be employed to determine the cost of equity.

As per CAPM, Cost of Equity = Risk Free Rate + Beta x Equity Risk Premium

The yield on long term Government of India Securities can be used as a benchmark for the risk-free rate and the equity risk premium can be established by an analysis of historical return on the market.

we have assumed Risk-Free Rate of 7.15% (10-year Government of India bond Yield and calculated Market Return of 13.79 % (As per Market Data) , after considering market risk premium of stock exchange. Further considering the sector specific risk of 10% to 5%, depending on risk factors. However we have not considered these parameters, in place of this we have considered 12% WACC /COE (in absence of debt or equity ratio) it is pretax rate.

Equity risk premium should be adjusted based on whether the business to be valued is more or less volatile than the market, which is measured by Beta co- efficient. Beta coefficient essentially represents the relative volatility of returns on the stock vis-à-vis returns on the market. It measures the company's systematic risk, which can't be diversified away.

Assumptions for Projections: -

This valuation report uses the Income Approach, specifically the Discounted Cash Flow (DCF) method, to determine the Enterprise Value of Coastal Energen Private Limited. The valuation is based on the projected financials for the 20 years FY 2023-24 to FY 2042-43 for life of plant (assumed)

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Plant Load Factor (PLF):

The PLF (in terms of days) is projected to range from 191 to 234 number of days over the forecast period, reflecting variations in operational efficiency.

Rate per Unit:

The rate per unit is anticipated to increase gradually, ranging from ₹5.10 to ₹6.10, mirroring potential market dynamics.

Profit Margin:

The profit margin is estimated to vary from 8.0% to 10.0%, pretax, (*after considering interest payment if any & depreciation*), considering potential fluctuations in operational efficiency and market conditions.

Depreciation:

Depreciation is considered as straight-line method, assumed from the last years balance sheet to be a constant ₹200.00 Cr throughout the projection period

Tax Rate:

A tax rate of 25% is applied to the earnings before tax (EBT) after the fiscal year FY 2026-27 after netting off carried forward losses (*assumed carried forwarded loss are available for set off*)

Discounting Factor:

The discounting factor is calculated based on the assumed WACC/cost of capital (COC) of 12%. (Tax factor not considered here).

Realizable Value of Plant including land at the end of the 20th year:

A land appreciated value and scrap of plant value, considered as ₹1,000.00 Cr as an additional factor for valuation at the end of the 20th year. This includes 50% as land value and 50% as scarp value of Plant. (assumption is based on futuristic realizable value after 20 years)

Revenue Projection:

Estimated revenues are calculated based on the projected plant load factor, the number of units per year, and the rate per unit.

EBT and EBDT Calculation:

Earnings Before Tax (EBT) and Earnings Before Depreciation and Tax (EBDT) are computed by applying the profit margin to the estimated revenue and deducting depreciation.

Tax and Cash Profit:

Taxes are calculated on EBT, and the cash profit is derived by subtracting depreciation and taxes from EBDT.

Discounting and Present Value (PV) Calculation:

Cash profits are discounted using the appropriate discounting factors, resulting in the present value of future cash flows (PV of FCFF).

Enterprise (Business) Value Calculation:

The sum of the present values of future cash flows value yields the enterprise value.

Tax Adjustments:

Tax adjustments are made to account for potential changes in the tax rate, ensuring a more accurate representation of the company's financial position.

Data Room and Capacity Assumptions:

A data room factor is introduced, and capacity assumptions consider a range of Plant load factor, 360 days in a year, and a discount rate of 12%.

Comprehensive Expense Consideration:

It is assumed that all capital expenditures (Capex) and working capital requirements are thoroughly incorporated into the operating expenses. This implies that the valuation takes into

account not only direct costs related to production but also the necessary investments in fixed assets and working capital needed to sustain and grow the business. By factoring in all relevant expenses, the DCF analysis aims to provide a holistic and realistic representation of the company's financial performance and value.

Profit Margins: -

Considering the historic performance of Coastal Energen Private Limited (CEPL), insights from industry research, and estimations based on anticipated future market conditions, a range of 8% to 10% for the Profit Margin is assumed in the Enterprise Valuation. This broader perspective incorporates not only current operational efficiency considerations but future efficiency which is visible in current year performance as of Oct 2023 shared by the company and industry-specific insights to arrive at a realistic and informed projection for profit margins over the forecast period.

Calculations based on considering 360 days in the Year: -

In financial modeling, we often use 360 days in a year instead of 365. It's like a shared language among financial professionals – making calculations simpler and staying true to traditional practices, especially in industries where interest calculations follow a 360-day year. It's a balance between accuracy and practicality, recognizing that the extra precision from 365 days may not be a game-changer for most analyses. It's a little quirk in the world of finance that keeps things clear and consistent.

Data Of Costal Considered and Assumptions -

1. Operational Efficiency and Plant Load Factor (PLF):

- The correspondence mentions ideal capacity achieving a 600MW units correspondence to 14.4 million/day, and achieving 28.8 million/day as there are 2 Units of 600MW emphasizing operational efficiency.
- Consideration of a 53% to 65% plant load factor, with discussions on increasing thermal capacity, availability of imported coal or substitution if any and potential impact on utilization.

2. Revenue and Cost Dynamics:

- Revenue considerations involve factors like payload protection, renewables growth, and margin percentages ranging from 0.50 to 0.75 paise.
- Insights into cost structures, including expenses constituting 85% of overall sales, and China's influence on thermal capacity.

3. Asset Value and Investment:

- Exploration of the Replacement cost concept and insights into a Chinese plant's capacity (3L-4L MW/year).
- Discussions on land value, rehabilitation, and sustainable debt, indicating a potential for additional investment in the plant.

4. Operational Expansion and Efficiency Measures:

- Considerations for further units, optimal land usage, and potential OpEx reductions through efficient manpower management.

- Insights into the lifecycle of the plant, reinvestment, and development strategies for sustained operational efficiency.

5. Financial Projections and Investment Feasibility:

- Discussions on the financial viability of the plant, projections for sales, and the potential for additional capital expenditure.
- Evaluation of the time required for plant development, emphasizing financial prudence and leveraging existing promoter investment.

6. Discounted Cash Flow (DCF) Considerations:

- A 20-year discount rate of 10-12% with aspirations to improve it highlighting a long-term perspective in financial valuation. We have considered 12% here.

Valuation Using Income Approach- DCF Method

Amounts in Cr\Years	0.5	1.5	2.5	3.5	4.5	5.5	6.5
Particulars	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Loading Factor %	53%	58%	58%	58%	60%	60%	60%
Plant Load Factor In days	190.80	208.8	208.8	208.8	216	216	216
No.of Units/Year (MU)	534.24	584.64	584.64	584.64	604.80	604.80	604.80
Rate per Unit	5.10	5.25	5.25	5.25	5.25	5.5	5.5
Estimated Revenue (INR)	2,724.62	3,069.36	3,069.36	3,069.36	3,175.20	3,326.40	3,326.40
Profit Margin	8.0%	8.0%	8.3%	8.50%	8.50%	8.50%	8.75%
EBT	218.0	245.5	253.2	260.9	269.9	282.7	291.1
Depreciation	200.00	200.00	200.00	200.00	200.00	200.00	200.00
EBDT	417.97	445.55	453.22	460.90	469.89	482.74	491.06
Tax	0.00	0.00	0.00	0.00	-113.12	70.69	72.77
Cash profit	417.97	445.55	453.22	460.90	583.01	412.06	418.30
Land & Scrap Value of Plant							
Discounting Factor	0.94	0.84	0.75	0.67	0.60	0.54	0.48
PV of FCFF	₹ 394.94	₹ 375.90	₹ 341.40	₹ 309.98	₹ 350.10	₹ 220.93	₹ 200.25

Amounts in Cr\Years	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5
Particulars	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35	FY 35-36	FY 36-37	FY 37-38
Loading Factor %	60%	63%	63%	63%	63%	64%	64%	64%
Plant Load Factor In days	216	226.8	226.8	226.8	226.8	230.4	230.4	230.4
No.of Units/Year (MU)	604.80	635.04	635.04	635.04	635.04	645.12	645.12	645.12
Rate per Unit	5.5	5.5	5.75	5.75	5.75	5.75	6	6
Estimated Revenue (INR)	3,326.40	3,492.72	3,651.48	3,651.48	3,651.48	3,709.44	3,870.72	3,870.72
Profit Margin	8.75%	9.0%	9.0%	9.3%	9.5%	9.5%	9.5%	9.5%
EBT	291.1	314.3	328.6	337.8	346.9	352.4	367.7	367.7
Depreciation	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
EBDT	491.06	514.34	528.63	537.76	546.89	552.40	567.72	567.72
Tax	72.77	78.59	82.16	84.44	86.72	88.10	91.93	91.93
Cash profit	418.30	435.76	446.47	453.32	460.17	464.30	475.79	475.79
Land & Scrap Value of Plant								
Discounting Factor	0.43	0.38	0.34	0.30	0.27	0.24	0.22	0.19
PV of FCFF	₹ 178.79	₹ 166.30	₹ 152.13	₹ 137.92	₹ 125.00	₹ 112.61	₹ 103.03	₹ 91.99

Amounts in Cr\Years	15.5	16.5	17.5	18.5	19.5
Particulars	FY 38-39	FY 39-40	FY 40-41	FY 41-42	FY 42-43
Loading Factor %	64%	65%	65%	65%	65%
Plant Load Factor In days	230.4	234.00	234.00	234.00	234.00
No.of Units/Year (MU)	645.12	655.20	655.20	655.20	655.20
Rate per Unit	6	6	6.1	6.1	6.1
Estimated Revenue (INR)	3,870.72	3,931.20	3,996.72	3,996.72	3,996.72
Profit Margin	9.5%	10.0%	10.0%	10.0%	10.0%
EBT	367.7	393.1	399.7	399.7	399.7
Depreciation	200.00	200.00	200.00	200.00	200.00
EBDT	567.72	593.12	599.67	599.67	599.67
Tax	91.93	98.28	99.92	99.92	99.92
Cash profit	475.79	494.84	499.75	499.75	499.75
Land & Scrap Value of Plant					1,000.00
Discounting Factor	0.17	0.15	0.14	0.12	0.11
PV of FCFF	₹ 82.14	₹ 76.27	₹ 68.78	₹ 61.41	₹ 164.54

Assumptions for Projections:

Year	PLF No of days	Percentage
FY 23-24	190.8	53%
FY 24-25 to FY 26-27	208.8	58%
FY 27-28 to FY 30-31	216	60%
FY 31-32 to FY34-35	226.8	63%
FY 35-36 to FY 38-39	230.4	64%
FY 39-40 to FY 42-42	234.00	65%
Year	Net Margin including interest payment if any	
FY 23-24 to FY 26-27	8%	
FY 27-28 to FY 30-31	8.50%	
FY 31-32 to FY 34-35	9.00%	
FY 35-36 to FY 38-39	9.50%	
FY 39-40 to FY 42-43	10.00%	

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Parameters	
Max Capacity/day @ Full-load (1200 MW basis)	2.8 Cr Unit per days
No. of Days in Year	360
Cost of Capital	12%
Profit Margin (Range is 8 %to 10%)	10% to12%
Tax Rate	25%

Enterprise Value (SUM of PV of all Years)

3,714.42

less: Risk Adjustment (Variation of PLF, Capex, Maintenance, Opex, current status of company, etc.)

10%

Adjusted Realisable Enterprise Value(Business Value)

3,342.97



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Upside or Uptick for enterprise (Business) value:

The value of business depending on various factors like Plant Load Factors, Units Price, Margins, Capex or Opex, Further expansion etc....we have analyzed each variable and prepared sensitivity analysis for reader of reports-

Plant Load Factors (PLF)-

We have considered PLF between 53 % to 65% in next 20 years with riders, however if it gets improve like in between life span of plant reaches to 55% to 75% etc, it can substantially increase the value of business. However, it depends on various factors like imported coal or substitute and other conditions like available consumptions or efficiency of running the plant etc. With all other variables combination, The Business value can be achieved upto INR 4000/- crores plus.

Unit Price:

The range of unit price we have considered is between INR 5.10 to 6.10 per unit in next 20 years, which can be improve substantially with revision of PPA price, Power exchange efficient management and other factors. If it improves along with maximum Plant Load Factors (PLF)than Business value can be achieved upto INR 4000 /- crores plus.

Margins:

The range of margin is being considered between 8% to 10% after which is profit before tax, it has considered interest on loan if any, depreciation etc. This can be improved substantially with efficient management of Plant, PLF, Unit price, Capex & OEM etc. If it improves slightly as well, the business value can be achieved upto INR 4000/- Crore plus.

Discount Rate:

The range of discount factor can be varied, we have considered 12% , without considering tax, however with blending of Debt & equity, it can be lower than this , even after tax it could be more lower i.e less than 10%, or different assumptions can be considered. This variable can change business value significantly.

Other Factors:

There are various other factors like, Imported coal, Capex and regular maintenance of the plant, further expansion of the plant or monetization of additional land space, efficient management of Plant beyond 20 years, with capex & Opex, Manpower and margins. There is also value of scrap at the end of Plant dismantling stage & unlocking potential value of Land after 20 to 25 years.

Important Note:

These are the factors which can bring upside to entrepreneurs or investors; however, all this comes with riders of fund availability, government policies, imported coal availability with affordable price and investor appetite to take risk, hence not applied it with high optimistic performance in ideal conditions, we have considered moderate performance with restricted coal supply or other factors directly impact on PLF.

Realizable Business Value or Enterprise Value:

With all assumptions and available information, current PLF factors, scarcity of coals, unit rates for electricity and the current status of the Company, we have considered further 10% discount on above mentioned risk factors, hence adjusted business value considered lower than derived enterprise (business value) which is INR 3343/- Crores. There could be scenario as well that assets value may be more of the company since it might include lots of other cost factors, however replacement value of plant might be lower than this business value. One more variation which should be considered while reading report that, the business value which indicated here is around 10-15 year after installation of the plant.

Conclusion:

In our opinion, an indicative realizable business (Enterprise) Value of is INR 3,343/- Crores of Coastal Energen Private Limited, based on the assumptions and basis work outlined above and also by considering all assumptions and available information, current PLF factors, scarcity of coals, unit rates for electricity and the current status of the Company which is into CIRP process.

Restriction on use of the Valuation report:

The Analysis is confidential and has been prepared exclusively for Coastal Energen Private Limited, It should not be used, reproduced or circulated to any other person or for any purpose other than as mentioned above, in whole or in part, without the prior written consent of the Valuers. Such Consent will only be given after full consideration of the circumstances at the time.

Notes, Limitations, Disclaimers and Caveats:

In the preparation of the report, we have relied on the following information: -

- Information provided to us by Coastal Energen Private Limited.
- Other relevant information available to us and our data bank.
- Other publicly available information, internet information & reports.
- Present status of the Company under CIRP
- Assumptions of PLF for projections, We have not been provided with projections, hence used projections based on available present & future market trend.

❖ The fact that the total useful life remains to be utilized of The Power Plant (of Company) is considered 30 years. Market Trend is based on the raw material supply, ready to use assets & considering the period required to setup the plant. The life of plant can be more as well, depending on the regular OEM of the plant.

❖ Our valuation is based on our experience and knowledge & this is an opinion only and does not stand as a guarantee for the value it can fetch if disposed, due to any emergency, in future.

❖ The legal documents pertaining to the ownership of the above said property have been referred to on its face value and that is presumed that Bank has got the same verified through its legal counsel.

❖ Since this being an established Power Plant, we have relied on the documents and information provided by the party. It is presumed that the soft copy of documents is taken from the originals duly tested and verified about veracity.

❖ Changes in Socio – Economic and political conditions could result in a substantially different situation than those presumed at the stated effective date. We assume no responsibility for changes in such external conditions.

❖ It should be noted that our value assessments are based upon the facts and evidence available at the time of assessment. It is therefore recommended that the value assessments be periodically reviewed.

❖ The report is issued at the specific request of the party for specific purpose and the said report is not valid if the purpose of use and party is different.

❖ Our report should be read along with disclaimers. The value given in our report is only an opinion on Enterprise Value of the Company.

❖ This report should be read along with legal due diligence report. Value assigned herein is subject to this stipulation.

❖ Our report is only for the use of the party to whom it is addressed and no responsibility is accepted to any third party for the whole or any part of its contents.

Thanking You,
Yours Truly,

Think.Innovate.Create

Place: Mumbai

Date: 25th December 2023

For Vastukala Consultants Pvt Ltd

**Sharadkumar
B. Chalikwar**

Digitally signed by Sharadkumar B. Chalikwar
DN: cn=Sharadkumar B. Chalikwar,
o=Vastukala Consultants (I) Pvt.
Ltd., ou=CMD,
email=cmd@vastukala.org, c=IN
Date: 2023.12.26 15:08:35 +05'30'

Sharadkumar B. Chalikwar

Govt. Reg. Valuer

Chartered Engineer (India)

Reg. No. (N) CCIT/1-14/52/2008-09

CA Prashant Jain

Chartered Accountants (India)

Regd. Valuer

Reg. No. IBBI/RV/06/2018/10138



Vastukala Consultants (I) Pvt. Ltd.

An ISO 9001:2015 Certified Company

www.vastukala.org



Annexures Enclosed herewith:**Annexure: - Power Generation**

As per information provided by the Company, the details of Power

Generation of 2 X 600 MW CBTPP of CEPL is as under: -

S. No.	Parameters	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
1	No of days of operation (In Hrs)	6140	9116	8962	7040	8623	5707	2901	5594
2	Station Generation (MU)	2713	3749	3906	3222	3560	2297	1222	2350
3	Power Export (MU)	2505	3483	3630	2980	3276	2109	1125	2171
4	Power Import (MU)	19.48	12.58	6.82	12.40	11.53	21.03	30.41	17.54
5	Gen loss due to Back down (MU)	3661	6760	6606	7290	6981	8215	9290	8145
6	Back down certified by Discom (MUs)								
7	PLF (%) - Station	25.74%	35.66%	37.16%	30.65%	33.77%	21.85%	11.62%	22.36%
8	PAF (%) - Station	57.49%	69.37%	88.75%	70.63%	87.62%	78.24%	69.75%	48.40%
9	PLF (%) - Unit 1	44.87%	48.33%	23.63%	24.81%	44.99%	20.57%	15.34%	2.86%
10	PAF (%) - Unit 1	65.42%	84.79%	89.23%	68.58%	86.09%	64.58%	66.22%	8.03%
11	PLF (%) - Unit 2	6.62%	23.00%	50.69%	36.49%	22.55%	23.13%	7.91%	41.85%
12	PAF (%) - Unit 2	49.56%	53.96%	88.27%	72.69%	89.14%	91.90%	73.28%	88.77%
13	Station Aux Power Consumption (MU)	209	266	276	242	284	189	97	179
14	Station Aux Power Consumption (%)	7.69%	7.10%	7.07%	7.51%	7.97%	8.21%	7.94%	7.62%
15	Unit 1 Aux Power Consumption (MU)	182	180	94	105	187	86	58	28
16	Unit 1 Aux Power Consumption (%)	7.70%	7.08%	7.53%	8.02%	7.89%	7.91%	7.20%	7.56%
17	Unit 2 Aux Power Consumption (MU)	26	86	183	137	96	102	33	151
18	Unit 2 Aux Power Consumption (%)	7.58%	7.15%	6.86%	7.16%	8.09%	8.40%	8.05%	6.85%
19	ULF (%)	73.65%	68.54%	72.65%	76.27%	68.80%	67.08%	70.18%	70.02%
20	Fuel Oil Consumption (KL)	2998	2951	1252	1659	2309	2329	1837	1692
21	Specific Oil Consumption (ml/kwh)	1.10	0.79	0.32	0.51	0.65	1.01	1.50	0.72
22	Coal Consumption (MT) (Actual)	1703303	2357545	2449784	2030308	2248725	1476986	802168	1571730
23	SCC (kg/kwh)	0.628	0.629	0.627	0.630	0.632	0.643	0.657	0.669
24	Avg GCV (as fired) (in Kcal/Kg)	4071	4054	4102	4058	4098	4108	4120	4000

25	SHR (Kcal/KWh)	2555	2550	2572	2558	2588	2641	2705	2675
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Plant Performance Report (2023-24)									
Description	UNITS	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	FY 23-24
No of Days		30.00	31.00	30.00	31.00	31.00	30.00	31.00	214.00
Unit-1 Operating Hours	Hrs	720.00	554.85	155.27	224.97	330.73	714.12	675.60	3375.53
Unit-2 Operating Hours	Hrs	352.62	744.00	714.45	248.23	416.53	697.82	631.25	3804.90
Unit-1 Loading Factor	%	81.99	69.28	61.72	68.05	80.71	71.27	58.90	71.03%
Unit-2 Loading Factor	%	81.49	74.31	65.71	72.68	90.82	79.25	91.75	78.86%
Power Generation - Unit #1	MU	354.20	230.65	57.50	91.85	160.15	305.37	238.77	1438.50
Power Generation - Unit #2	MU	172.40	331.72	281.69	108.25	226.98	331.80	347.49	1800.34
Station Generation	MU	526.60	562.36	339.19	200.11	387.14	637.17	586.26	3238.84
Power Export - Unit #1	MU	329.77	212.40	52.37	85.06	149.38	284.19	220.71	1333.87
Power Export - Unit #2	MU	159.59	308.87	260.96	100.29	212.25	309.15	324.79	1675.90
Station Export	MU	489.35	521.26	313.33	185.35	361.64	593.34	545.50	3009.77
Auxiliary Power Consumption - Unit #1	MU	24.43	16.84	4.16	6.63	10.51	21.18	17.75	101.49
Auxiliary Power Consumption - Unit #2	MU	11.44	22.85	20.73	7.72	14.65	22.51	22.27	122.18
APC - Unit-1 in SD and import from Unit-2	MU	0.00	1.41	0.97	0.17	0.26	0.00	0.31	3.14
APC - Unit-2 in SD and import from Unit-1	MU	1.38	0.00	0.00	0.25	0.07	0.13	0.43	2.26
Auxiliary Power Consumption - station	MU	37.25	41.10	25.86	14.76	25.50	43.83	40.76	229.06
Auxiliary Power Consumption - Unit #1	%	6.90%	7.30%	7.23%	7.21%	6.56%	6.94%	7.43%	7.06%
Auxiliary Power Consumption - Unit #2	%	6.63%	6.89%	7.36%	7.13%	6.46%	6.79%	6.41%	6.79%
Station Auxiliary Power Consumption	%	7.07%	7.31%	7.63%	7.38%	6.59%	6.88%	6.95%	7.07%
Import from Grid during Both units Shutdown	MU	0.00	0.00	0.11	1.49	1.38	0.12	0.00	3.10
Total Coal Consumption - Unit #1	MT	2,14,556	1,43,744	37,237	57,178	98,344	1,90,231	1,49,731	891021.00
Total Coal Consumption - Unit #2	MT	107441	205629	183986	68130	139087	205157	214803	1124233.00
Station Coal Consumption	MT	3,21,997	3,49,373	2,21,223	1,25,308	2,37,431	3,95,388	3,64,534	2015254.00
Physical Coal Reco., Qty., (+Ve Shortage & - Ve Sign Gain)	MT	8,960	-986	-1,518	2,746	4,675	-1,030	6,764	19611.00
Station Coal Consumption after Reco., Qty.,	MT	3,30,957	3,48,387	2,19,705	1,28,054	2,42,106	3,94,358	3,71,298	2034865.00
SCC - UNIT-1	KG/KWH R	0.606	0.623	0.648	0.622	0.614	0.623	0.627	0.619
SCC - UNIT-2	KG/KWH R	0.623	0.620	0.653	0.629	0.613	0.618	0.618	0.624
SCC - STATION	KG/KWH R	0.611	0.621	0.652	0.626	0.613	0.621	0.622	0.622
SCC - STATION (after Reconciliation)	KG/KWH R	0.628	0.620	0.648	0.640	0.625	0.619	0.633	0.628
Total Oil Consumption- LDO Unit #1	KL	0.0	327.1	70.7	104.6	105.1	37.0	75.5	720.01
Total Oil Consumption- LDO Unit #2	KL	176.5	0.0	59.7	16.5	114.9	43.8	78.1	489.43
Station LDO Consumption	KL	176.5	327.1	130.5	121.2	219.9	80.8	153.5	1209.44
SOC - UNIT-1	ml/KWh r	0.00	1.42	1.23	1.14	0.66	0.12	0.32	0.50
SOC - UNIT-2	ml/KWh r	1.02	0.00	0.21	0.15	0.51	0.13	0.22	0.27
SOC - STATION	ml/KWh r	0.34	0.58	0.38	0.61	0.57	0.13	0.26	0.37
PLF-Unit-1	%	81.99	51.67	13.31	20.58	35.88	70.69	53.49	46.68%

Plant Performance Report (2023-24)									
Description	UNITS	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	FY 23-24
PLF-Unit-2	%	39.91	74.31	65.21	24.25	50.85	76.81	77.84	58.42%
Station PLF	%	60.95	62.99	39.26	22.41	43.36	73.75	65.67	52.55%
PAF- Unit-1 (technical)	%	100.00	96.79	90.72	100.00	100.00	99.19	90.81	96.79
PAF-Unit-2 (Technical)	%	85.17	100.00	99.23	100.00	100.00	96.92	84.85	95.19
PAF-STATION (Technical)	%	92.58	98.40	94.98	100.00	100.00	98.05	87.83	95.99
TANGEDCO DC	%	80.18	93.85	62.24	56.61	90.63	61.20	61.97	72.45%
Unit Heat Rate-Unit-1	Kcal/KW hr	2535	2617	2681	2600	2573	2596	2599	2586
Unit Heat Rate-Unit-2	Kcal/KW hr	2596	2598	2712	2622	2570	2584	2573	2606
Station Heat Rate	Kcal/KW hr	2555	2606	2707	2612	2571	2589	2583	2597
Gross Heat Rate-Station(after Reconciliation)	Kcal/KW hr	2627	2599	2688	2669	2622	2583	2631	2622
Net Heat rate - Station	Kcal/KW hr	2826	2803	2910	2881	2807	2773	2828	2822
Gross Calorific Value-Unit-1	Kcal/Kg	4186	4200	4140	4176	4190	4167	4144	4175
Gross Calorific Value-Unit-2	Kcal/Kg	4166	4191	4153	4166	4194	4179	4162	4173
Station GAR	Kcal/Kg	4179	4195	4151	4171	4192	4173	4155	4174

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1. Profit & Loss Statement

COASTAL ENERGEN PRIVATE LIMITED NO.4, MOORES ROAD, BUHARI TOWERS,EGMORE, CHENNAI-600006 Statement of Profit and Loss for the year ended 30th Sept 2023			
Particulars	Note No.	As at 30th Sept 2023	As at 30th Sept 2022
Income			
Revenue from operations	21	1,811.16	905.19
Other income	22	16.35	7.40
		1,827.51	912.59
Expenses			
Cost of materials consumed	23	1,475.51	836.26
Purchase of Energy		-	-
Employee benefits expense	24	5.02	5.57
Finance costs	25	0.02	1.54
Depreciation and amortisation expense	2 (a)	100.80	99.87
Other expenses	26	142.12	82.51
		1,723.47	1,025.76
Profit/(Loss) Before Tax		104.04	(113.18)
Tax expense			
Current tax		-	-
Deferred tax	15	-	-
Total tax expense		-	-
Profit/(Loss) for the period		104.04	(113.18)
Other Comprehensive Income			
A i) Items that will not be reclassified to profit and loss			
Remeasurements of past employment benefit obligations		-	-
Changes in fair value of FVOCI equity instruments		-	-
Others		-	-
ii) Income tax relating to items that will not be reclassified to profit or loss			
		-	-
Other Comprehensive Income for the year		-	-
Total Comprehensive Income for the year	0	-	-
Earnings per equity share (in Rs.)			
(1) Basic	27	-	-
(2) Diluted		-	-

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2. Balance Sheet: -

COASTAL ENERGEN PRIVATE LIMITED NO.4, MOORES ROAD, BUHARI TOWERS,EGMORE, CHENNAI-600006 Balance Sheet as at 30th Sept 2023			
Particulars	Note No.	As at 30th Sept 2023	As at 30th Sept 2022
ASSETS			
Non-current assets			
Property, Plant and Equipment	2 (a)	6,475.80	6,676.51
Capital work-in-progress	2 (b)	0.09	0.09
Intangible assets	2 (c')	2.24	2.24
- Other Financial Assets	3	-	-
Other non current assets	4	0.94	1.04
Current assets			
Inventories	5	84.47	57.62
Financial assets			
- Trade receivable	6	782.03	713.07
- Cash and cash equivalents	7	38.37	2.22
- Other bank balances	8	115.00	0.00
Current tax assets (Net)	9	5.93	4.45
Other current assets	10	20.89	54.89
TOTAL ASSETS		7,525.77	7,512.13
EQUITY AND LIABILITIES			
Equity			
Equity share capital	11	210.90	210.90
Other equity	12	(676.25)	(818.58)
Non-current liabilities			
a) Financial liabilities			
- Borrowings	13	107.18	4,513.90
(b) Provisions	14	2.00	1.81
(c) Deferred tax liabilities (Net)	15	-	149.78
Current liabilities			
Financial Liabilities			
- Borrowings	16	7,122.01	2,715.29
- Trade payables	17		
Total outstanding dues of micro and small enterprises		2.73	2.67
Total outstanding dues of creditors other than micro and small enterprises		324.08	341.79
- Other financial liabilities	18	431.20	393.60
Other current liabilities	19	1.91	0.95
Provisions	20	-	-
TOTAL EQUITY & LIABILITIES		7,525.77	7,512.13