

## The Financial Merger And Acquisitions Analysis Of Vector Green Company

Surya S<sup>1</sup>, Dr. Asha Sundaram<sup>2</sup>, Dr. Thangamayan<sup>3</sup>

<sup>1</sup>Research scholar, Saveetha school of law, SIMATS, Chennai, India

<sup>2</sup>Professor and Principal, Saveetha school of law, SIMATS, Chennai, India

<sup>3</sup>Associate Professor, Saveetha school of law, SIMATS, Chennai, India

### ABSTRACT

N/A

Keywords:N/A...

### 1. MERGERS AND ACQUISITIONS

Mergers and acquisitions happen to exile between the companies which could be in the motive to target the other company for their benefits towards attaining the profit, making a provision for the target company to share and enhance their professional knowledge and skills towards the enhancement of better profit and shareholders increase of the firm value and market power of parent company(Paul,2001)

The strategic concerns of the objective and motive of the company are to determine the regulations and deregulations of the parent and target company

Efficiencies- the concentration of investment, revenue-making considerations and invest the sales revenue generated money in new product development. and core objective of forecasting the dependencies of an increase in market share and improving the product quality, the most efficient way of utilizing the resources and allocation of assets with accurate future forecasting and determining their financial efficiencies in terms of past performance and future forecasting of profit-making. capabilities of the target company.

The financial efficiencies could constrain the diversification factors of mergers and acquiring the target company to develop a strategy of unrelated diversification with a profit-making concept as the final objective towards the mergers and further determine their potential towards the value and core capabilities enhancement with the support from the parent company in financial, operational and human resource support towards future benefits

Inefficient management was also one of the factors considered to implement the mergers and acquisitions towards the more efficient way of allocation of resources and management for efficient final outputs

Tax reduction was also considered to be one of the factors for mergers and acquisitions to occur, considering the tax reform act 1987, the change in the general utilities to determine the fact of tax reforms towards the operating losses related to tax reduction was one of the reasons where mergers and acquisitions try to happen

Market power affects the merger for monopoly and the wave mergers for oligopoly either way one of the main

concerns was to attain market power and gain the most market share in the market. To attribute to an effort to secure market power and considering the antimerger legislation act 1950, which could become a very rare form of Merger

### 2. COMPANY OVERVIEW

Sembcorp Green Infra Limited (SGIL) is a renewable energy company, with a main focus on clean energy assets. It operates as a clean energy-independent power producer. The company is a private equity venture of IDFC Private Equity. GIL specializes in the investment, development and operation of clean energy assets in verticals, including wind, solar, small hydro and energy efficiency. Currently, the company operates and owns wind assets, spread across five states covering Gujarat, Rajasthan, Tamil Nadu, Maharashtra and Karnataka, in India. Besides, the company also focuses on small hydro, biomass, energy efficiency and solar energy. SGIL is headquartered in Gurgaon, Haryana, India.

### 3. BUSINESS DESCRIPTION

Sembcorp Green Infra Limited (SGIL) is an India-based renewable energy company. It carries out the development and operation of clean energy assets, under verticals including wind, solar, hydro, thermal and biomass. The company is a private equity venture of IDFC Private Equity. Currently, the company operates 415MW of wind energy assets, which are 100% owned by the company.

SGIL's operational project portfolio comprises wind and solar power plants. SGIL operates 41MW wind power projects in Jamnagar, Gujarat.

Both the projects supplies electricity to GUVNL through power purchase agreement for a period of 25 years. The company owns and operates 108 MW of wind power project through its special purpose vehicle, Green Infra Wind Farms Limited (GIWFL) at Tirunelveli, Tamil Nadu.

The project supplies electricity to group captive users. SGIL's operational assets include 127 MW of wind power projects in Maharashtra, of which 40 MW has been acquired from BP energy. The project supplies electrical energy to Maharashtra State Electricity Board (MSEB), through a power purchase agreement for a period of 13

years. SGIL operates 79 MW of wind power projects in Karnataka.

The project supplies electrical energy to BESCOM through power purchase agreement for a period of 20 years. The company also has commissioned a 20 MW wind power plant in Karnataka. SGIL through its solar division operates a 10MW solar power plant at Rajkot, in Gujarat. This plant generates 16 MUs of energy annually and is supplied to around 4,000 homes. It also has a 25 MW solar plant in Rajasthan, which is one of the first solar plants to be commissioned under the second phase of National Solar Mission. SGIL plans to increase its overall capacity to 5 GW covering various renewable resources.

Currently, there are nearly 186.4 MW of wind and solar power projects are under construction. It also has 767 MW under development projects in diverse verticals of wind, solar, hydro and biomass. In addition, the company is in the process of acquiring land in southern states to establish over 200 MW of wind power projects.

Currently, the company's renewable energy assets are saving over 825,000 tons of carbon emission per annum and they have saved more than 2,620,322 tons of carbon emission since the date of commissioning to till date.

It also actively focuses on addressing the demand side issues in energy management by conceptualizing and implementing projects based on energy efficiency. The company is an ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certified

one of the major aspects for Sembcorp green infra Ltd to acquire a debt company is their outbound rational thinking towards improving profitability, shareholders' value, the customer's demands and needs and creating stable cashflows.

In general Sembcorp green infra Ltd makes its profit through its online store business they have a great reputation in the production of renewable energy and power platform.

The revenue-generating products were through an online platform where the mission and vision statement is to serve its loyal customers the most wanted product at their expected cost, rate, and availability at a very short duration

Acquiring wholesale renewable energy and powers was a kind of great move decided by Sembcorp green infra Ltd

Source: fin shots-LinkedIn

So why did this happen

The need for growth

To acquire market power

The technology advancement and products development to determine the root cause of cashflow in the form

The concept to improve the operating efficiency and acquiring a customer-supplier or competitor to enhance technical and innovation skills internally as well as externally

## HISTORY Acquisitions/Mergers/Takeovers

Year: 2017 In September, Sembcorp Industries acquired IDFC's stake in the company. Acquisitions/Mergers/Takeovers

Year: 2016 In August, the company acquired 74% stake in SPV, Mulanur Renewable Energy Private Limited for S\$32 million. Contracts/Agreements

Year: 2015 In February, the company awarded a 166 mw contract to Inox Wind to set up projects in Gujarat, Madhya Pradesh and Rajasthan. Acquisitions/Mergers/Takeovers

Year: 2015 In February, Sembcorp Utilities, a subsidiary of Sembcorp Industries, agreed to acquire 60% stake in the company for a consideration of INR10,510 million. Acquisitions/Mergers/Takeovers

Year: 2013 In August, the company acquired a majority stake in TVS energy. Plans/Strategy

Year: 2013 In November, the company announced its plan to expand its wind and solar power generation capacity with investment received from CDC Group plc

Year: 2012 In December, the company along with juwi India commissioned 15 Mwp solar Plants in Rajasthan, India. Stake Sale

Year: 2012 In August, the company sold its 26 per cent of stake to Standard Chartered. Corporate Changes/Expansions

Year: 2011 In November, the company commissioned its first 10-megawatt solar photovoltaic power plant in the Rajkot district of Gujarat. Acquisitions/Mergers/Takeovers

Year: 2009 In September, Sembcorp Green acquired the BPs wind power assets in India with a value of Rs.650 crore. Acquisitions/Mergers/Takeovers

Year: 2009 The company acquired BP Energy India, which is a wholly-owned subsidiary of BP. Incorporation/Establishment

Year: 2008 The company was incorporated in year 2008. Others Year: 2008

### KEY FACTS

<b>Head Office</b>	Sembcorp Green Infra Ltd 5th Floor, Tower C, Building No. 8 DLF Cybercity Haryana Gurgaon Haryana India
<b>Phone</b>	91 11 39190500
<b>Fax</b>	91 11 39190510
<b>Web Address</b>	www.greeninfralimited.in
<b>Revenue / turnover ( )</b>	
<b>Financial Year End</b>	
<b>Employees</b>	
<b>Ticker</b>	

Source: EBSCO

The strategic alignment of a company tends to make greater value to the company's profits WHERE the need for starting up the new manufacturing unit is not a smart move whereas acquiring the vector green pvt ltd market which is an unlisted company, where they do already have their own company which in debt when merged or acquired by Sembcorp green infra Ltd could and can work with greater financial support and efficiency. To produce renewable energy and powers.

Helping their acquirer to develop their business as they have more capability and scope within them and need financial support to

This merger could reduce cost as Sembcorp green infra Ltd already have a great platform in SECTOR OF renewable energy and powers core could deepen its value and reduce its cost further as it may cost more if they start a new product all by itself from scratch

Scalability in terms of industry-specific scope towards growth in terms of revenue, increase in share price, to gain Market power

Vector Green Energy Pvt. Ltd. is a Private Limited Unlisted company incorporated on 06/09/2016 and has its registered office in the State of Maharashtra, India. Company's Corporate Identification Number(CIN) is U40300DL2016PTC342032 and registration number is 285601. Currently Company is involved in the business activities of Electric power generation, transmission and distribution.

SOURCE: EBSCO PORTAL

Financial synergy and operating synergy

Operating synergy between Sembcorp green infra Ltd and vector green pvt ltd has been determined based on cost savings, labor efficiency, the reduction of the expenses in distribution and sales lines

The acquittance of facilities and manufacturing units and another production process where the acquirer company attains the target with full efficiency and revenue generation in terms of economies of scale and scope with the value proposition and strategy implementation to

attain the standards of credibility and product enhancement.

The competitor of Sembcorp green infra Ltd is Alibaba in the market and their efficiency is based on the organic renewable energy and power they sell in the market, Sembcorp green infra Ltd is still lagging behind those concerns as they were not concentrating on any renewable energy and powers production and sales, whole renewable energy and power companies majorly concentrated on the production of whole renewable energy and power and they could determine the

From the above chart we could subscribe to the % of the change in product price before and after the merger value between Sembcorp green infra Ltd and whole renewable energy and power. Both products seem TO CONTRIBUTE TO THE EFFICIENCY IN RAISING OF REVENUE GENERATION

USD ▼ Thousands ▼	2021 Y	2020 Y	Growth
Total operating revenue	4,877	4,311	13.14% ▲
Net sales revenue	3,501	4,100	-14.61% ▼
Operating profit (EBIT)	1,573	1,437	9.44% ▲
Operating Profit Margin (ROS)	44.92%	35.05%	9.87% ▲
EBITDA	2,403	2,274	5.67% ▲
EBITDA Margin	68.64%	55.47%	13.17% ▲
Net Profit (Loss) for the Period	-2,798	-722	-287.72% ▼
Net Profit Margin	-79.91%	17.60%	-62.31% ▼
Total assets	144,634	113,692	27.22% ▲
Current assets	17,924	1,335	1242.13% ▲
Total liabilities	113,812	95,344	19.37% ▲
Net Debt	90,263	90,672	-0.45% ▼
Net cash flow from (used in) operating activities	935	1,857	-49.64% ▼

Please note that the Growth figures are affected by the currency rate changes.  
2021 Y - Audited, Individual , 2020 Y - Audited, Individual  
Source: Dion Global Solutions Limited, EMIS Company Database.

SOURCE: FINANCIAL STATEMENT OF VECTOR GREEN TARGET COMPANY FROM EBSCO

To illustrate how synergy works between Sembcorp green infra Ltd and renewable energy and power in terms of economies of scale that include.

From the chart we could infer the value or price of renewable energy and power that are based on two scenarios, the price of bananas before the acquisition happened was \$0.79 and after the acquisition, the rate is \$0.49

Calculation of synergy

To calculate the profit of the firm before merging

Profit= price x quantity-variable cost-fixed cost

The price of power before merging per unit is 0.78 dollars

Consider 12 kw power (1/2 kg) the price of half kg bananas is  $0.78 \times 12 = 10$  dollars

The variable cost for the 1/2 kw power is = 4 dollars

PERIOD 1: PRE-MERGER: The Total quantity of power that's been traded is 2,00,000

Profit = price x quantity - variable cost - fixed cost

$= 10 \times 2,00,000 - 4 \times 2,00,000 - \$2,00,000$

$= 80,00,00$

Profit margin  $= 80,00,00 / 20,00,00 = 4\%$

Fixed cost per unit  $= 2,00,000 / 2,00,000 = \$1$

PERIOD 2: POST-MERGER- The firm B possess a manufacturing unit for around 70,000 units then the value of the total considering both A and B manufacturing unit is 2,50,000

Considering the value of bananas after post-merger from Company B and A

Profit = price x quantity - variable cost - fixed cost

The price of power and energy before merging per unit is 0.78 dollars

Consider 12 bananas (1/2 kg) the price of half kw energy or power is  $0.78 \times 12 = 10$  dollars

The variable cost for the 1/2 unit kw energy is = 4 dollars

Profit = price x quantity - variable cost - fixed cost

$= 10 \times 2,50,000 - 4 \times 2,50,000 - \$2,00,000$

$= 13,00,000$

Profit margin  $= 13,00,000 / 20,00,00 = 6.5\%$

Fixed cost per unit  $= 2,00,000 / 2,50,000 = \$0.80$

From the calculation done for synergy we could infer that the price of 1/2 kg of bananas was dollar 1 premerger and when with post-merger with company b we could determine the fall of the price for fixed cost is .87 dollars of the commodity and a rise in profit margin.

Financial synergy: reduction in the acquirer cost of capital due to merger and acquisition

The flow of cash from Sembcorp green infra Ltd to the whole renewable energy and power market that is financially weak where the efficiency of the post-merger could directly or indirectly impact the financial efficiency of the company B vector green pvt ltd market in verse of cost savings and production and sales lines to reduce the fixed expenses.

Diversification-the diversification factor is determined in the Ansoff matrix where Sembcorp green infra Ltd tends to produce the products in a new genre: renewable energy and powers and the wholesale market.

the diversification of products can only tend to improve the production, efficiency and brand name instead it will not increase the shareholder value, if not the investment has been made to be in the proper way. Where the shareholder value should appraise but one of the negative impacts which will be faced by Sembcorp green infra Ltd is that they would acquire whole renewable energy and power market for

Hubris and the winner curse

Buying undervalued assets – q ratio

MANAGERIALISM- Some of the hurdle faced by Sembcorp green infra Ltd during the merger and acquisition was managerial complexities due to management greed, self-aggrandizement or hubris, which was due to consequences faced due to diversifying over emphasize growth or due to deciding the mergers in the wrong way.

To escape financial strains faced by the company or break unfavorable contracts and acquire the gains through tax players. bondholders, labour and consumers.

Hubris and the winner curse-The poor merger acquisitions would lead the company to lose its firm value in the long run. considering conglomerate mergers in history, which is defined as the mergers between two firms where their core objectives are unrelated and some of those types of diversification that happened in history are.



Source: [10 Largest Conglomerate Mergers in History \(Top Merger Examples\) \(dealroom.net\)](https://www.dealroom.net/)

From the above mergers and acquisition, few have been providing growth in market values in subsequent years but the certain company has failed due to this type of merger and acquisition which are unrelated we could state from the learnings in this graph that there was a reason for the merger and acquisitions to happen in order to gain the market share in greater aspects but there are some internal functional reasons to rectify the poor performance faced by the company and to enhance with the support of the other company strength and weakness.

Considering the risk-return profile at the expense of existing debt holder

The abnormal waves and shocks faced in terms of stocks price rising up and reverse action of waves during the mergers and acquisitions are happening.

TRACKING OF EFFICIENCY OF RETURN -POST-MERGER: Based on the target returns after post-merger and acquiring the company: Determining through decrease and increase in stock prices and effect of quality of product and price considerations



Even considering the accounting reasons for merging both the companies

Some such mergers should not happen to rise prices, reduce output or reduce quality mergers in terms of the potential anticompetitive mergers, mainly these happen due to antitrust authorities. Where a negative assessment has been made.

The lower returns in mergers are due to mergers based on negotiated mergers and with tender offer takeovers.

The stock market anticipation has been due to the takeover bid happening that has been accepted by the target company, hence there seems to rise in stock market price or greater return whereas the rejection of taking overbid tend to make the target company sustain the same or less market price during the mergers acquisitions and during the course of stock swaps

Stock price effects:

Capital asset pricing model: Adopting this model could help the company to acquire a positive return in managing the asset pricing with proper returns, from research it has been significantly stated as their accounting measure of returns seems to be highly associated with returns that have happened with mergers and acquisitions, and the market is the source through which the predictions has been determined to perform their value in terms of exhibits provided through stock prices waves in terms of shocks and rise in share price. as market stocks are unpredictable in terms of shareholder returns

Not considering the theory of abnormal stock market performance of merging in predicting the stocks they try to draw implications through actual performance against benchmark

The returns from mergers are basically done through horizontal mergers and diversifying mergers, buyers vs targets, cash versus stock repayments mechanisms, decade-by-decade comparisons and time horizons.

The returns from horizontal mergers seem to be large whereas the returns from diversifying mergers seem to be very minimal compared to the horizontal merger.

The returns through mergers seem to be inefficient due to managerial mistakes or self-aggrandizing behaviour of managers

#### 4. MARKET POWER IMPLICATIONS:

The market power hypothesis, has been utilized in the merger of the Sembcorp green infra Ltd and whole grains renewable energy and power market as the source of those gains is very difficult to understand and identify and the horizontal merger has happened between the Sembcorp green infra Ltd and whole grains renewable energy and power markets.

Market power hypothesis implies an anti trust source as it will not other rival firms to rise their prices and mostly there exists a fall in prices when the mergers happen horizontally, hence the equity values of rival firms should fall on the announcement of antitrust.

The factors that need to be considered as a positive context from Sembcorp green infra Ltd and wholerenewable energy and power market mergers are

The return relative to the market

The adjustment of a firm capitalization price

Whether the acquirer categorized as growth verses value of the firm

The calculation through weighted and value-weighted portfolios has been considered in terms of returns with the ratio considerations and underlying concept of normal returns

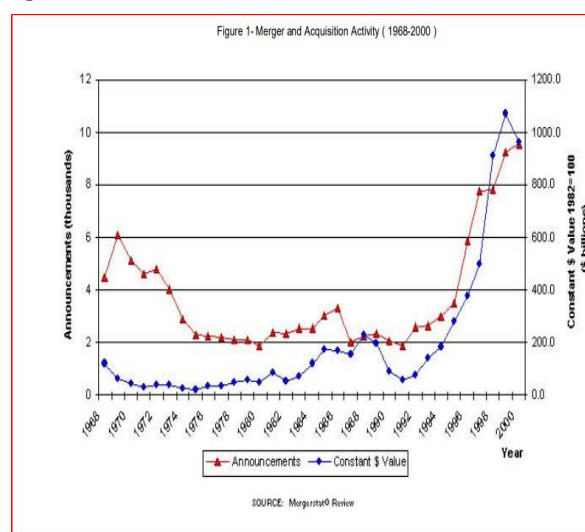
For example considering the airline mergers between twa/Ozark and Texas air eastern merger the concept of government blocks an efficient merger here small rivals the protection from competition in this Sembcorp green infra Ltd and wholerenewable energy and power markets merger the whole renewable energy and power markets seems to be the smaller company and the horizontal merger statements where they were not competitive and focused only on potential efficiencies and small size company seem to be less troublesome and easy takeover targets.

Some of the negative impacts of mergers are caused due to relative macroeconomic stability when relative antitrust laws not abiding constraints on trust combinations

The stock prices seemed to be predicted with a 15% return during the trust formations between the companies but this fell after the merger happened and the market power plays a major role in acquiring the positive return to stock and shareholders

In the case of Sembcorp green infra Ltd and vector green pvt ltd market mergers we could infer that the target company always tends to gain bulk returns when compared to the parent company and that

The financial analysis in terms of pre-merger and post-merger could provide the entitled picture of future forecasting of returns such as analyzing through profitability analysis, discounted cash flows, the measure of performance, r and d etc.



Source: \*wp243\_0.pdf (ftc.gov)

**Table 1**  
Number of Mergers, Divestitures and Disclosed Value (1968-2000)

Year	Net merger and acquisitions announcements	Number of transactions with purchase price disclosed	Total Divestitures	Divestitures as % of Total	Total dollar value paid (\$ billions)	Constant dollar value * (\$ billions)
1968	4462	1514	557	12.5	43.60	119.1
1969	6107	2300	801	13.1	23.70	62.4
1970	5152	1671	1401	27.2	16.40	41.7
1971	4608	1707	1920	41.7	12.60	31.1
1972	4801	1930	1770	36.9	16.70	40.0
1973	4040	1574	1557	38.5	16.70	36.6
1974	2861	995	1331	46.5	12.50	23.8
1975	2297	848	1236	53.8	11.80	20.3
1976	2276	998	1204	52.9	20.00	32.9
1977	2224	1032	1002	45.1	21.90	33.8
1978	2106	1071	820	39.9	34.20	49.0
1979	2128	1047	752	35.3	43.50	56.1
1980	1889	890	666	35.3	44.30	50.3
1981	2395	1126	830	34.7	82.60	86.0
1982	2346	930	875	37.3	53.80	53.8
1983	2533	1077	932	36.8	73.10	71.9
1984	2543	1084	900	35.4	122.20	117.8
1985	3001	1320	1218	40.6	179.80	171.7
1986	3336	1468	1259	37.7	173.10	167.7
1987	2032	972	807	39.7	163.70	155.3
1988	2258	1149	894	39.6	246.90	228.6
1989	2366	1092	1055	44.6	221.10	194.6
1990	2074	856	940	45.3	108.20	90.8
1991	1877	722	849	45.2	71.20	58.5
1992	2574	950	1026	39.9	96.70	78.5
1993	2663	1081	1134	42.6	176.40	141.5
1994	2997	1348	1134	37.8	226.70	180.6
1995	3510	1735	1199	34.2	356.00	278.3
1996	5848	2658	1702	29.1	495.00	377.0
1997	7800	3013	2108	27.0	657.10	498.6
1998	7809	3091	1987	25.4	1191.90	911.9
1999	9278	3364	2353	25.4	1425.90	1072.1
2000	9566	3757	2501	26.1	1325.70	960.7

\*Constant dollar value is the annual dollar value divided by the seasonally adjusted Producer Price Index, by Stage of Processing, Total Finished Goods (1982=100), Table B-65, p. 349, Economic Report of the President, January 2001.

SOURCE: Mergentat® Review, 2001, pp. 2 and 9. The Mergentat® Review Research Department tracks publicly announced formal transfers of ownership of at least 10 percent of a company's equity where the purchase price is at least \$1,000,000, and where at least one of the parties is a U.S. entity. These transactions are recorded as they are announced, not as they are completed. Open market stock purchases are not recorded. For sellers in the database with competing bids, only the highest offer is included in the calculation. Cancelled transactions are deducted from total announcements in the period in which the cancellation occurred, resulting in net merger-acquisition announcements for that period. The statistics reflect completed or pending transactions as of the end of the applicable period.

Source: [\\*wp243\\_0.pdf \(ftc.gov\)](#)

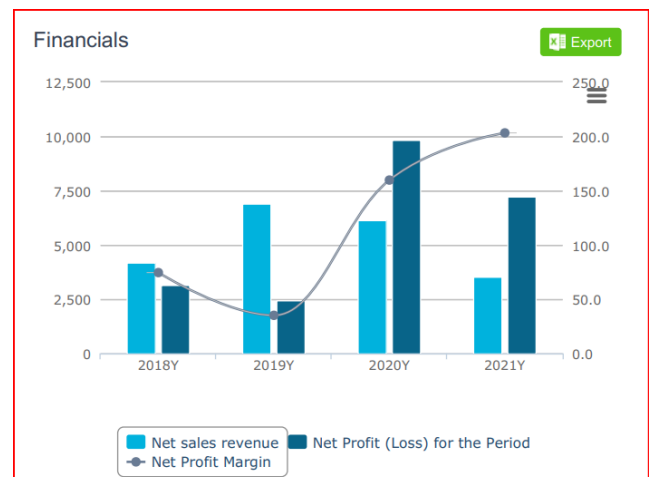
From the above data, we could infer that the merger and acquisitions of different industries have been captured from the year 1968-2000 both in horizontal and diversification mergers and acquisitions, we could state that some of the major reasons for the decline and rise of mergers seem to be based on financial constraints that the company faced due to balance the synergy that has been caused in terms of error and asymmetry in the management system, let's now have a wide configuration of different mergers happened between the industries that would help us to predict the future economic market returns considering the Sembcorp green infra Ltd and wholerenewable energy and power markets.

Some of the basic factors that were idealized for mergers were

Use stock evaluation methods from the past considering the welfare effects of the transactions

Large multi-industry reviews accounting and financial analysis that has been carried out to forecast FUTURE CASHFLOWS to make the mergers happen

<b>M&amp;A Deals</b>	
Indian renewable energy firm Sembcorp Green Infra takes over local peer Vector Green Energy	November 13, 2022   Acquisition - 474.00 USD Millions - 100.00% stake
Sembcorp Industries to become the sole owner of India's renewable energy firm Sembcorp Green Infra for USD 220mn	August 31, 2017   Minority stake - 220.22 USD Millions - 31.26% stake
A 74% of Mularur Renewable Energy Pvt Ltd was acquired by Sembcorp Green Infra Ltd and Sembcorp Industries Ltd for USD 23.63mn	August 08, 2016   Acquisition - 23.63 USD Millions - 74.00% stake
A 32.3300% stake of Sembcorp Green Infra Ltd has been purchased by Sembcorp Industries Ltd for USD 11.21mn	August 08, 2016   Minority stake - 11.21 USD Millions - 32.33% stake
A 35.9400% stake of Sembcorp Green Infra Ltd has been purchased by Sembcorp Industries Ltd for USD 8.96mn	March 24, 2016   Minority stake - 8.96 USD Millions - 35.94% stake



Source :ebSCO-the financial of vector green pvt ltd

Making one or several mergers that have happened based on stock valuation market returns with econometric techniques to predict the product value, price and output based on the merger

Study of leveraged buyouts on labor, investment and another factor of interests

Study of the market power of company in the market could help us to determine the market fluctuations

The stock market studies indulging in hostile and friendly mergers

## Strength Efficient Operational Assets

The company is emerging as a strong player in the renewable energy market, with efficient operational assets. The strong operational assets and service portfolio of the company enhances its reliable electricity supply and unparalleled service to its customers. At present, SGIL operates and maintains wind power projects in five states covering Gujarat, Tamil Nadu, Maharashtra, Rajasthan, Karnataka, in India. It own and operates around 415 MW of wind assets and has saved over 825,000 tons of carbon emission per year. The operational assets include 127 MW of wind power projects in Maharashtra; 79 MW of wind power projects in Karnataka; 41 MW of wind power projects in Gujarat; 60 MW of wind power projects in Rajasthan, and 108 MW of wind power projects in Tamil Nadu. The company also has a 25 MW solar plant in Rajasthan and 10 MW of solar power projects in Gujarat. Power Purchase Contracts The company under its business operations retains strong customer base in existing projects and for its upcoming pipeline projects. SGIL renders its electrical energy to diverse customer base covering Gujarat Urja Vikas Nigam Ltd. (GUVNL), Maharashtra State Electricity Board (MSEB), Bangalore Electricity Supply Company (BESCOM) and to other group captive users, under power purchase agreements ranging from 13-25 years. The power purchase agreements would generate significant savings for SGIL, to be invested in their upcoming projects. These power purchase agreements would significantly generation capacity and reliable supply of energy to its contracted customers. Association with IDFC The company is a

private equity venture of IDFC Private Equity (IDFC PE), one among the leading Indian infrastructure focused private equity fund companies. SGIL's association with the company would support it to utilize the expertise in the area of renewable power generation and also retain financial support to the company. IDFC PE, is a private equity fund management company with approximately US\$1.3 billion across three funds. With over US\$200 million invested in renewable energy sources and cleantech sources, IDFC PE is among the largest investors in this sector in India. IDFC PE holds strong operational presence in the renewable power projects and sustainable development for clean energy markets in India. Weakness Capital-intensive Operations SGIL is a privately-owned company and is surrounded by the various challenges associated with being a privately-held company. It is not mandated to disclose its financial and operational activities and thereby, lack transparency in operations. It also suffers from resource constraints, as it cannot raise funds from public in the form of IPO or FPO for expansion plans. However, public limited companies have an edge over private companies. The wind power business is highly capital intensive and with plant availability factor being moderate in the range of 19%-29%, this results in modest returns on capital employed and returns on net worth in the medium term. Further, any disruptions in ongoing construction projects, post planning and initiation would increase its operating cost. The company's value lock up because of being private in nature could result in leveraging their operations excessively with debt capital. Opportunity Power Outlook: India The increase in demand for electricity in India could provide ample growth opportunities to the company. During 2020-2030, the demand for electricity is expected to grow at a CAGR of 7.0%. India is the world's third-largest energy consumer after the US and China. By 2030, power consumption is expected to increase to 1,998.3 TWh, growing at a CAGR of 7.0% during 2020-2030. To meet the increasing power demand, a significant amount of power generation capacity is expected to be commissioned between 2021 and 2030. The government is also focusing on renewable capacity development, with the aim of diversifying the country's power mix and reducing its carbon emissions. The Indian government set an ambitious target to install 175 GW of renewable power capacity by March 2022, with 100 GW from solar, 60 GW from wind, 10 GW from biomass, and 5 GW from small hydro. India is situated in solar belt and gets significant amount of solar DNI and GHI. The top solar power rich states are Rajasthan, Karnataka, Gujarat, Andhra Pradesh, Telangana, and Maharashtra. Regulatory bodies in India have drafted attractive policies and schemes for the growth of the renewable energy sector. For instance, MNRE provides custom and excise duty benefits to the solar rooftop sector to propel growth. A new hydropower policy for 2018-28 has been drafted for the growth of hydro projects in the country.

To increase generation, the government granted renewable energy status to large hydro. This will facilitate greater participation by local and international players in the country's rapidly growing renewable energy market. India is also focusing on the development of its nuclear power sector. India signed a nuclear deal with the US for

the supply of nuclear fuel, and new nuclear power plants with advanced technology are expected to start operations in years ahead. The country also entered into agreements with companies such as Westinghouse of the US and Areva of France for the supply of reactors. Wind Energy Market: India The growth in wind energy market in India could benefit the company's operations. According to inhouse research, India is the fourth-largest wind power market in the world after China, the US and Germany, and is the second largest in Asia-Pacific. The country's cumulative wind capacity is expected to reach 109.8GW by 2030. The fiscal and promotional incentives from government, increasing demand for electricity and untapped domestic wind potential are likely factors for this growth. Renewable Energy Initiatives: India The government of India is taking initiatives to increase the use of renewable sources and reduce India's dependence on imported fossil fuels which could provide growth opportunities to the company. According to the India Brand Equity Foundation (IBEF), the Indian renewable energy sector is the fourth most attractive renewable energy market in the world. India was ranked fourth in wind power, fifth in solar power and fourth in renewable power installed capacity, as of 2020. With the support of government and improved economy, the sector has become attractive to investors. India is considering meeting the demand for electricity on its own, which is expected to reach 15,820 TWh by 2040, with renewable energy set to play an important role. The government is aiming at achieving 227 GW of renewable energy capacity (including 114 GW of solar capacity addition and 67 GW of wind power capacity) by 2022, which is more than its 175 GW target as per the Paris Agreement. The government also plans to establish renewable energy capacity of 523 GW (including 73 GW from hydro) by 2030. Threat Highly Competitive Environment SGIL operates in a highly competitive hydro and wind energy markets. Attracted by various subsidies being provided by governments to promote renewable energy, many new players are entering this sector. In addition, big industry players in traditional energy business are diversifying into renewable energy. The company faces direct competition from various domestic and international players operating in India. Its key competitors include GVK Power and Infrastructure Limited, Jaiprakash Power Ventures Limited, KSK Energy Ventures Limited, and Suzlon Energy Limited. Some of the company's competitors have access to greater financial, technical, human, marketing, purchasing or other resources, which enable them react more quickly to new or emerging technologies or changes in customer requirements. The company could face challenges in sustaining its market share by providing power at competitive prices. Failure to sustain competition could affect the company's profitability and share in the market. Changes in Regulations and Policies

The construction and operation of wind power projects is subject to various regulations. The company requires certain approvals and licenses for operating its business. Many countries have introduced legislation governing the manufacture, operation and decommissioning of assets. This in turn could affect the company's profit margins and hamper its business growth. These regulations also include acquisition procedures of land for wind power

plants, regulations and approvals for the commencement of a wind power project, and clearances from environmental regulators. Changes in these legislations and regulations could result in changes to the infrastructure necessary for wind power projects. Any new government regulations or utility policies or changes in existing regulations related to the company's projects may result in significant additional expenses. Growing Market for Other Energy Alternatives SGIL faces challenges from other non-conventional alternative sources of energy, which could adversely affect the company's business. It faces competition from other sources of energy such as nuclear, clean coal technologies, and other clean technologies. Nuclear energy as a source of power generation is gaining momentum across the

world. Another alternative energy source is the coal Integrated Gasification Combined Cycle (IGCC) with pre-combustion capture being the lowest cost option for capturing CO<sub>2</sub> from coal power plants. At the same time, the market for fuel cell is rapidly evolving and new technologies are being developed using these products to produce lower carbon emissions and generate high levels of electricity. The Hydrogen fuel cell based on natural gas is becoming economically attractive in small-scale power generation applications and transportation sectors. It is projected that these fuel cells market would emerge as a new source of distributed power after 2020. These technologies, which typically have a lower up-front cost, are currently gaining preference, which would lower the demand for the company's products and services.

s.no	Industry indices	Factors for merger	inferences
1	Stock evaluation	The market value of the firm to determine its share price	Has to undergo the cash flow analysis and needs to efficiency
2	Financial Credibility	The cashflows with financial accounting category to determine the value of the return	To ask for risk-return profits even after post-merger happening
3	Shareholder dividends	The face value of shareholders needs to be determined with the dividends we indulge during the post and pre-merger	The role of understanding the shareholder aspects to increase their value towards this merger needs to be profitable
4	The risk assessment and leverage beta value	As confrontation towards the rate of risk the Sembcorp green infra Ltd and wholesale renewable energy and power market seem to face to buy the target company or sell out the rate of risk was not easy to determine	The beta leverage value and further future forecasting mode of cash flows should be determined with the happening of this merger
5	The efficiencies gap	The operational and financial synergy with an aspect of determining the financial inefficiency faced by the target company	The economies of scale and scope and the skills enhancement between the companies need the statement of purpose here to predict the value to calculate the synergy and nullify it
6	The cost aspects	The most aspect of the merger in terms of post-way is to attain a cost leverage optimization to enhance the value of the firm and capabilities, the increase in price reduction and increase in cost	Positive impact on return



s.no	Industry indices	Factors for merger	inferences
		happens due to factors affecting the market fluctuations and inflations with customers' need as the concentration	
7	ANSOFF MATRIX	Market penetration and diversification are the two core objectives for the Sembcorp green infra Ltd and wholerenewable energy and power markets merger happened that could determine the way to see the value of why this merger happened with the need to nullify the inefficiency in terms of synergy	The cost of the product has been reduced
8	Value enhancing investors	The investors need to determine an acceptable value-enriching state to get the merger to happen and trust to invest in this merger	Need to be cautioned with target company size and for Sembcorp green infra Ltd, it seems they afford to buy the whole renewable energy and power market
9	The product mix enhancements	The product development and the market penetration in production of renewable energy and power platforms customer demand also state to the most efficient way to determine the value that shareholders acquire post-merger as Sembcorp green infra Ltd was eccentrically concentrated in renewable energy and powers and market	The type of product they produce to intimate the loyal Sembcorp green infra Ltd customers' needs and demands
10	Firm-specific merger	The market structure of the production of renewable energy and power industry seems to undergo many fragile conditions like covid where the stock evaluation seems to rise and fall which was based in restructuring and valuation that has undergone with determined a whole new value of the market after post-merger and share price evaluation, in case of Sembcorp green infra Ltd the restricting of merger seem to quite avail the shareholders a basic return due to its leverage buyout and assessment and valuation done between the companies	The p/e ratio of the stock value and the firm-specific financial start of the target company to determine the need of a merger with Sembcorp green infra Ltd can be determined
11.	Aggregate concentration	Based on the federal trade commission and evaluation in the merger area, the regulations of prices and other governmental statements also seem to affect the merger actions between the companies	The regulation of the government could centralize the decision made between the countries to revisit the change for the better profitability
12	The size of the market and competitors	The competitor of Sembcorp green infra Ltd seem to be Alibaba and one of the major strength of Alibaba is selling renewable energy and powers Sembcorp green infra Ltds needs to be a smart box when it has to penetrate through renewable energy and power sales whereas whole renewable energy and power markets seem to have a valuable concentration that could determine the asset added premium to Sembcorp green infra Ltd t	The competitor analysis could give Sembcorp green infra Ltd a clear picture to Sembcorp green infra Ltd for where they play a market power to reach the top scorecard in the market

s.no	Industry indices	Factors for merger	inferences
13	The taxation	The severe rise and fall of price could be with regards to inflation happened in the economy where Sembcorp green infra Ltd could no way deregulate the taxation that needs to be considered for the mergers with target companies to enhance the profitable ratios	Price optimizations are based on the market inflation that has to be evaluated on current and past inflation rates and market growth rate
14	The horizontal-related merger	Sembcorp green infra Ltd was preferably in context to horizontal merger and the merger waves evaluation affecting the growth rate of products	The profitable returns needs can be expected based on market waves and changes
15	Industry shocks	The transactions of the exchange rate of money during the mergers between the companies	The strategic alliance and methods adopted by Sembcorp green infra Ltd to acquire wholerenewable energy and power seem to be based on the investors, bonds statements and other financial aspects of the company's risk leverages and antitrust policies
16	misevaluation	This evaluation may tend to lead to financial bankruptcy and liquidation and stock buyouts	The bankruptcy may occur in future if Sembcorp green infra Ltd tends to misevaluate its financial restructuring
17	The management decision \	The workforce, joint venture, takeover or buyout could be happened based on the merger deals and trust dealing done with the target company	The asset management between companies before and after a merger needs to be under consideration, here the friendly takeover has been determined for further future profitable returns. and it has become the subsidiary
18	Alternate takeover strategies	Sembcorp green infra Ltd seem to adopt this strategy to merge with WFM as the friendly or hostile takeover	The friendly takeover was the theme towards buying stocks in a friendly manner and open market purchase to buy

s.no	Industry indices	Factors for merger	inferences
			target shareholders of WFM.
19	Risk calculation CAPM	$CAPM: k_e = R_f + \beta(R_m - R_f)$ <p>The accessible risk formula that is used to determine the rate of return from the benchmark including the market inflation</p>	The risk-return obtained through this merger will be based on beta value and core value

BENCHMARKS CLOSED  
SIFT 17,511.25 ↓ -43.05

NSE GAINER-LARGE CAP  
Indus Towers 173.00 ↑ 7.60

FEATURED FUNDS  
Pro Investing by Aditya Birla Sun L... [INVEST NOW](#)

MARKET WATCH

THE ECONOMIC TIMES | Industry

English Edition | Today's Paper

Subscribe null

Special Offer on ETPrime

Home ETPrime Markets News **Industry** Rise Politics Wealth Mutual Funds Tech Jobs Opinion NRI Panache ET NOW More

Renewables • Indl Goods/Svs • Healthcare/Biotech • Services • Media/Entertainment • More

Business News > Industry > Renewables > Sembcorp to acquire Vector Green for Rs 2,780 cr

## Sembcorp to acquire Vector Green for Rs 2,780 cr

T Online • Last Updated: Nov 13, 2022, 11:07 AM IST

SHARE FONT SIZE SAVE PRINT COMMENT

**Synopsis**

"Sembcorp Industries (Sembcorp) announces that its wholly-owned subsidiary, Sembcorp Green Infra Limited, has signed an agreement with India Infrastructure Fund II, a fund managed by Global Infrastructure Partners India Pvt Ltd, to acquire 100 per cent interest in Vector Green Energy Private Limited (Vector Green) for a base equity consideration of approximately Rs 2,780 crore," it said in a statement.

**Energy and urban development**

company **Sembcorp** Industries has announced plans to acquire **Vector Green** Energy for Rs 2,780 crore to expand its **renewable energy** footprint in India to 3 gigawatts (GW), the company said on Sunday.

**AXIS BANK**

The expertise of wealth management backed by the power of a bank.

**SSVM**  
A Cambridge International School

Cambridge Assessment International Education  
Cambridge International School

EARLY YEARS (KG), PRIMARY (GRADES 1-5) & LOWER SECONDARY (GRADES 6-8) THE CLASSES WILL DRIVE UP TO

**IGCSE**  
& A-LEVEL IN THE YEARS TO COME!

SINGANAILLUR, Coimbatore.  
+91 63 846 31 313

www.ssvmcambridge.com

OUTLOOK ON MERGER AND ACQUISITION OF SEMBCROP AND VECTOR GREEN ENERGY PVT LTD  
consideration of approximately Rs 2,780 crore," it said in a statement.



Full name: Vector Green Energy Pvt. Ltd

"Sembcorp Industries (Sembcorp) announces that its wholly-owned subsidiary, Sembcorp Green Infra Limited, has signed an agreement with India Infrastructure Fund II, a fund managed by Global Infrastructure Partners India Pvt Ltd, to acquire 100 per cent interest in Vector Green Energy Private Limited (Vector Green) for a base equity consideration of approximately Rs 2,780 crore," it said in a statement.

Including Vector Green, Sembcorp's gross renewables portfolio installed and under development in India will total 3 GW, comprising 1 GW of solar assets and 2 GW of wind assets," it said.

The acquisition will be funded through internal cash resources and external borrowings. Completion of the acquisition is subject to customary closing conditions and is expected by the first quarter of 2023.

Vector Green Energy Pvt. Ltd. is a Private Limited Unlisted company incorporated on 06/09/2016 and has its registered office in the State of Maharashtra, India. Company's Corporate Identification Number(CIN) is U40300DL2016PTC342032 and registration number is 285601. Currently Company is involved in the business activities of Electric power generation, transmission and distribution. any records, minutes, reports or other documentation evidencing the approval of the proposed merger agreement's approval of the SEMB CROP ENERGY PVT LTD

board of directors" This case is appropriate for business policy, strategic management, and corporate governance courses at the undergraduate, graduate, and executive levels.

The six subsidiaries of Vector Green Energy — a renewable energy-focused independent power producer backed by Global Infrastructure Partners (GIP) — will be issuing the first AAA-rated green bonds in the local market.

The subsidiaries plan to raise Rs 1,237 crore, and received Climate Bonds Standard certification for their bonds. The issuance has been given the highest rating by CRISIL and India Ratings. The tenure of the bonds will be three years. Axis Bank and ICICI Bank are the underwriters of the deal.

The six subsidiaries of Vector that are issuing bonds are Malwa Solar Power Generation, Sepset Constructions, Rattanindia Solar, Yarrow Infrastructure, Citra Real Estate, and Priapus Infrastructure. They operate 352 MWp (megawatt peak) of solar power projects across the country in Rajasthan, Maharashtra, Karnataka, Uttar Pradesh and Madhya Pradesh.

Of the capacity, 98 per cent is tied up through 25-year power purchase agreements with the Centre's Solar Energy Corporation of India (SECI) and the National Thermal Power Corporation (NTPC).

Vector Green owns and operates 750 MWp of renewable assets across wind, utility scale and rooftop solar projects. They are spread across 19 ground mount project sites and nearly 200 rooftop project sites across 12 states in India. Vector has recently won a 90 MWp greenfield solar asset

in Gujarat. It is owned by funds managed by GIP, one of the leading global infrastructure fund managers handling a portfolio of over \$71 billion. It employs over 62,000 people and has combined annual revenues of \$45 billion. So far, Indian companies have gone overseas to issue green bonds, where there is plenty of liquidity to tap.

The value of green bond issuance has crossed \$6 billion this calendar year, whereas, till 2020, the cumulative green bond issuance was just \$10 billion. Out of this, there has been only a handful of rupee issuances of green bonds.

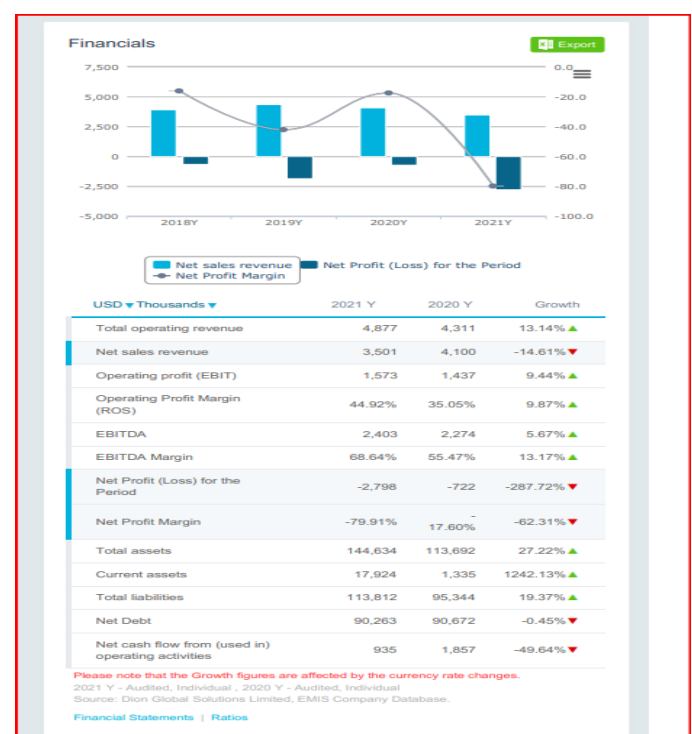
Vector's issuance is expected to boost the green bond market in India substantially, and help bring international investors in Indian corporate bonds, said a person closely involved with the deal.

While Indian companies are hitting offshore to raise funds, trying to bring those investors to the Indian markets and investing in rupee resources have not seen success.

Deal arrangers say most of the foreign funds are focusing on environmental, social, and corporate governance (ESG) lending, and companies are committing themselves to sustainable projects. This is partly because India doesn't have a proper green standard. If a bond or fund is certified "green", it brings down the cost by almost half a percentage point.

However, in the domestic market, investors do not yet distinguish much between a normal bond and a green bond because of the lack of green standards, say bankers.

The largest green loan issuance so far has come from Adani Green, which raised \$1.3 billion in March. The Adani Group is planning to mop up \$12 billion in green funds in the next four-five years, by raising \$2-3 billion annually, mostly from the overseas market.



Case -discussion Questions



Foreign Collaborator	Country	Indian Company	FDI Equity Inflow (US\$ mn)
Asian Development Bank	India	Avaada Energy Pvt Ltd.	50
Asian Development Bank	Philippines	Renew Power Ventures Pvt. Ltd.	44.69
AIRRO Singapore Pte Ltd.	Singapore	Diligent Power Pvt. Ltd.	41.07
ORIX Corporation	Japan	Laipur Wind Energy Pvt. Ltd.	37.75
ENEL Green Power Development B.V.	Netherlands	BLP Energy Pvt. Ltd.	32.61
DEG-DEUTSCHE-InvestitionsUnd-Entwickeln	Germany	WELSPUN Renewables Energy Pvt Ltd.	32.50
ENERK International Holdings Ltd.	Seychelles	RKM POWERGEN Pvt Ltd.	32.50
OSTRO Renewal Power Limited	Mauritius	OSTRO Energy Pvt Ltd.	32.21
AREVA Solar Inc.	U.S.A	AREVA Solar India Pvt Ltd.	31.53

Is this deal a merger or a consolidation from a legal standpoint? Explain your answer

This deal is merely a merger but is considered to be a consolidation from a .legal standpoint. Of view, Based on consideration from a legal perspective of a statutory consolidation, considering the corporate consolidation law we could state that -

with reference to the journal stated

*JEREMY BENTHAM, THEORY OF LEGISLATION 134 (Richard Hildreth trans., Boston, Weeks, Jordan, & Co. 1840*

*“a muddle in the case law, I reason that substantive consolidation can be supported in three situations and suggest reformulating the doctrine based on this simple tripartite division: substantive consolidation may be granted*

*(1) to achieve cost savings that a court believes will benefit at least one creditor without harming other creditors, - one of the considerations of this type of consolidation is happening due to the purpose of cost savings and the advantage of gaining financial strength towards pay back the loan.*

*(2) in cases justifying the application of traditional veil piercing doctrine upon a showing of the need to correct some harm, and*

From the three statements that have been identified with consideration of how the substantive consolidation happening between SEMB CROP ENERGY PVT LTD and VECTOR GREEN PRIVATE LIMITED happens the assets have been pooled to withhold the resolution of liabilities between the companies and make the asset of consolidation strong enough to pay back the liabilities undergone by the parent company to buy its SEMB CROP ENERGY PVT LTD company, the elimination of liabilities seem to be the main objective

Is this a horizontal or vertical merger? is the significance of this distinction from a regulatory perspective

Mergers and acquisitions happen to exile between the companies which could be in the motive to target the other company for their benefits towards attaining the profit, making a provision for the target company to share and enhance their professional knowledge and skills towards the enhancement of better profit and shareholders increase of the firm value and market power of parent company(Paul,2001)

The strategic concerns of the objective and motive of the company are to determine the regulations and deregulations of the parent and target company

Efficiencies- the concentration of investment, revenue-making considerations and invest the sales revenue generated money in new product development. and core objective of forecasting the dependencies of an increase in market share and improving the product quality, the most efficient way of utilizing the resources and allocation of assets with accurate future forecasting and determining their financial efficiencies in terms of past performance and future forecasting of profit-making. capabilities of the target company.

The financial efficiencies could constrain the diversification factors of mergers and acquiring the target company to develop a strategy of unrelated diversification with a profit-making concept as the final objective towards the mergers and further determine their potential towards the value and core capabilities enhancement with the support from the parent company in financial, operational and human resource support towards future benefits

Inefficient management was also one of the factors considered to implement the mergers and acquisitions towards the more efficient way of allocation of resources and management for efficient final outputs

Tax reduction was also considered to be one of the factors for mergers and acquisitions to occur, considering the tax reform act 1987, the change in the general utilities to determine the fact of tax reforms towards the operating losses related to tax reduction was one of the reasons where mergers and acquisitions try to happen

Market power affects the merger for monopoly and the wave mergers for oligopoly either way one of the main concerns was to attain market power and gain the most market share in the market. To attribute to an effort to secure market power and considering the antimerger legislation act 1950, which could become a very rare form of Merger

Use stock evaluation methods from the past considering the welfare effects of the transactions

Large multi-industry reviews accounting and financial analysis that has been carried out to forecast FUTURE CASHFLOWS to make the mergers happen

Making one or several mergers that have happened based on stock valuation market returns with econometric techniques to predict the product value, price and output based on the merger

Study of leveraged buyouts on labour, investment and another factor of interests

Study of the market power of the company in the market could help us to determine the market fluctuations

The stock market studies indulging in hostile and friendly mergers

s.no	Industry indices	Factors for merger	inferences
1	Stock evaluation	The market value of the firm to determine its share price	Has to undergo the cash flow analysis and needs efficiency
2	Financial Credibility	The cashflows with financial accounting category to determine the value of the return	To ask for risk-return profits even after post-merger happening
3	Shareholder dividends	The face value of shareholders needs to be determined with the dividends we indulge during the post and pre-merger	The role of understanding the shareholder aspects to increase their value towards this merger needs to be profitable the p/e ratio
4	The risk assessment and leverage beta value	As confrontation towards the rate of risk, the VECTOR GREEN PRIVATE LIMITED seem to face to buy the target company SEMB CROP ENERGY PVT LTD or sell out the rate of risk was not easy to determine	The beta leverage value and further future forecasting mode of cash flows should be determined with the happening of this merger
5	The efficiencies gap	The operational and financial synergy with an aspect of determining the financial inefficiency faced by the target company	The economies of scale and scope and the skills enhancement between the companies need the statement of purpose here to predict the value to calculate the synergy and nullify it
6	The cost aspects	The most aspect of the merger in terms of post-way is to attain a cost leverage optimization to enhance the value of the firm and capabilities, the increase in price reduction and increase in cost happens due to factors affecting the market fluctuations and inflations with customers' need as the concentration	Positive impact on return with VECTOR GREEN PRIVATE LIMITED

s.no	Industry indices	Factors for merger	inferences
7	ANSOFF MATRIX	Market penetration and diversification are the two core objectives for the Sembcorp green infra Ltd and wholerenewable energy and power markets merger happened that could determine the way to see the value of why this merger happened with the need to nullify the inefficiency in terms of synergy	The cost of the product has been reduced
8	Value enhancing investors	The investors need to determine an acceptable value-enriching state to get the merger to happen and trust to invest in this merger	Need to be cautioned with target company size and for p and g, it seems they afford to buy the SEMB CROP ENERGY PVT LTD with lending money
9	The product mix enhancements	The product development and the market penetration in production of renewable energy and power platforms customer demand also state to the most efficient way to determine the value that shareholders acquire post-merger as VECTOR GREEN PRIVATE LIMITEDwas eccentrically concentrated in women razors and beauty products market	The type of product they produce to intimate the loyal Sembcorp green infra Ltd customers' needs and demands
10	Firm-specific merger	The market structure of the production of renewable energy and power industry seems to undergo many fragile conditions like covid where the stock evaluation seems to rise and fall which was based on restructuring and valuation that has undergone with determined a whole new value of the market after post-merger and share price evaluation, in case of VECTOR GREEN PRIVATE LIMITEDthe restricting of merger seem to quite avail the shareholders a basic return due to its leverage buyout and assessment and valuation done between the companies	The p/e ratio of the stock value and the firm-specific financial start of the target company to determine the need for a merger with gillatte can be determined
11.	Aggregate concentration	Based on the federal trade commission and evaluation in the merger area, the regulations of prices and other governmental statements also seem to affect the merger actions between the companies	The regulation of the government could centralize the decision made between the countries to revisit the change for the better profitability

s.no	Industry indices	Factors for merger	inferences
12	The size of the market and competitors	The competitor of VECTOR GREEN PRIVATE LIMITED seems to be many and one of the major strength of competitors is selling women's razors which need to be smart box when it has to penetrate women's beauty sales whereas cosmetics and beauty products markets seem to have a valuable concentration that could determine the asset added premium to VECTOR GREEN PRIVATE LIMITEDt	The competitor analysis could give VECTOR GREEN PRIVATE LIMITEDa clear picture of SEMB CROP ENERGY PVT LTD for where they play a market power to reach the top scorecard in the market
13	The taxation	The severe rise and fall of price could be with regards to inflation happened in the economy where VECTOR GREEN PRIVATE LIMITEDcould no way deregulate the taxation that needs to be considered for the mergers with target companies to enhance the profitable ratios	Price optimizations are based on the market inflation that has to be evaluated on current and past inflation rates and market growth rate
14	The horizontal-related merger	VECTOR GREEN PRIVATE LIMITEDwere preferably in context to horizontal merger and the merger waves evaluation affecting the growth rate of products	The profitable returns needs can be expected based on market waves and changes
15	Industry shocks	The transactions of the exchange rate of money during the mergers between the companies	The strategic alliance and methods adopted by Sembcrop green infra Ltd to acquire wholerenewable energy and power seem to be based on the investors, bonds statements and other financial aspects of the company's risk leverages and antitrust policies
16	misevaluation	This evaluation may tend to lead to financial bankruptcy and liquidation and stock buyouts	Bankruptcy may occur in future if VECTOR GREEN PRIVATE LIMITEDtends



s.no	Industry indices	Factors for merger	inferences
			to misevaluate its financial restructuring and lend money to buy SEMB CROP ENERGY PVT LTD
17	The management decision \	The workforce, joint venture, takeover or buyout could be happened based on the merger deals and trust dealing done with the target company	The asset management between companies before and after a merger needs to be under consideration, here the friendly takeover has been determined for further future profitable returns. and it has become the subsidiary
18	Alternate takeover strategies	The VECTOR GREEN PRIVATE LIMITED seem to adopt this strategy to merge with SEMB CROP ENERGY PVT LTD as the friendly or hostile takeover	The hostile takeover was the theme towards buying stocks in a hostile manner and open market purchase to buy target shareholder
19	Risk calculation CAPM	<div style="border: 2px solid red; padding: 10px; text-align: center;"> <math display="block">CAPM : k_e = R_f + \beta (R_m - R_f)</math> </div> <p>The accessible risk formula that is used to determine the rate of return from the benchmark including the market inflation</p>	The risk-return obtained through this merger will be based on beta value and core value

Stock price effects:

Capital asset pricing model: Adopting this model could help the company to acquire a positive return in managing the asset pricing with proper returns, from research it has been significantly stated as their accounting measure of returns seems to be highly associated with returns that have happened with mergers and acquisitions, and the market is the source through which the predictions has been determined to perform their value in terms of ~~exhibits provided through stock prices waves in terms of~~ *Advances in Consumer Research*

shocks and rise in share price. as market stocks are unpredictable in terms of shareholder returns

Not considering the theory of abnormal stock market performance of merging in predicting the stocks they try to draw implications through actual performance against benchmark

The returns from mergers are basically done through horizontal mergers and diversifying mergers, buyers vs

targets, cash versus stock repayments mechanisms, decade-by-decade comparisons and time horizons.

The returns from horizontal mergers seem to be large whereas the returns from diversifying mergers seem to be very minimal compared to the horizontal merger.

The returns through mergers seem to be inefficient due to managerial mistakes or self-aggrandizing behaviour of managers

Foreign Collaborator	Country	Indian Company	FDI Equity Inflow (US\$ mn)
Asian Development Bank	India	Avaada Energy Pvt Ltd.	50
Asian Development Bank	Philippines	Renew Power Ventures Pvt. Ltd.	44.69
AIRRO Singapore Pte Ltd.	Singapore	Diligent Power Pvt. Ltd.	41.07
ORIX Corporation	Japan	Lalpur Wind Energy Pvt. Ltd.	37.75
ENEL Green Power Development B.V.	Netherlands	BLP Energy Pvt. Ltd.	32.61
DEG-DEUTSCHE-InvestitionsUnd-Entwicklung	Germany	WELSPUN Renewables Energy Pvt Ltd.	32.50
ENERK International Holdings Ltd.	Seychelles	RKM POWERGEN Pvt Ltd.	32.50
OSTRO Renewal Power Limited	Mauritius	OSTRO Energy Pvt Ltd.	32.21
AREVA Solar Inc.	U.S.A	AREVA Solar India Pvt Ltd.	31.53

## MARKET POWER IMPLICATIONS:

The market power hypothesis has been utilized in the merger of VECTOR GREEN PRIVATE LIMITED and SEMB CROP ENERGY PVT LTD as the source of those gains is very difficult to understand and identify and the horizontal merger has happened between Sembcrop green infra Ltd and the whole grains renewable energy and power markets.

Market power hypothesis implies an antitrust source as it will not other rival firms to rise their prices and mostly there exists a fall in prices when the mergers happen horizontally, hence the equity values of rival firms should fall on the announcement of antitrust.

The factors that need to be considered as a negative context from VECTOR GREEN PRIVATE LIMITED and SEMB CROP ENERGY PVT LTD market mergers are

The return relative to the market

The adjustment of a firm capitalization price

Whether the acquirer categorized as growth versus the value of the firm

The calculation through weighted and value-weighted portfolios has been considered in terms of returns with the ratio considerations and underlying concept of normal returns

For example considering the airline mergers between twa/Ozark and Texas air eastern merger the concept of government blocks an efficient merger here small rivals the protection from competition in this VECTOR GREEN PRIVATE LIMITED and SEMB CROP ENERGY PVT LTD merger the whole renewable energy and power markets seems to be the smaller company and the horizontal merger statements where they were not competitive and focused only on potential efficiencies and small size company seem to be less troublesome and easy takeover targets.

Some of the negative impacts of mergers are caused due to relative macroeconomic stability when relative antitrust laws not abiding constraints on trust combinations

The stock prices seemed to be predicted with a 15% return during the trust formations between the companies but this fell after the merger happened and the market power plays a major role in acquiring the positive return to stock and shareholders

In the case of VECTOR GREEN PRIVATE LIMITED and SEMB CROP ENERGY PVT LTD mergers we could infer that the target company always tends to gain bulk returns when compared to the parent company and that

The financial analysis in terms of pre-merger and post-merger could provide the entitled picture of future forecasting of returns such as analyzing through profitability analysis, discounted cash flows, the measure of performance, r and d etc.

The actual motive for VECTOR GREEN PRIVATE LIMITED to buy back its stock

target's board and management recommend shareholder approval

acquiring company usually offers a premium to the target's current stock price: a purchase or acquisition premium o reflects the perceived value of obtaining a controlling interest in the target, the value of expected synergies and any overpayment for the target

Overpayment is the amount an acquirer pays for a target in excess of the present value of future cash flows, including synergy

the VECTOR GREEN PRIVATE LIMITED state to buy back its stocks was mainly due to its calculation towards CAPM where the risk may be determined by the company to fall below 1 which could make the beta value to buy the stocks back.

$$CAPM : k_e = R_f + \beta (R_m - R_f)$$

Ke – Rf or Equity Premium

Additional return in excess of the risk-free rate that investors require to purchase a firm's equity o Intuitively, the risk premium is what the investor demands as compensation for buying a risky asset

only factor the basic CAPM model uses o risk premium should be forward-looking o obtaining precise estimates of future market returns is difficult

Analysts often look to historical data

Note that actual returns on risky assets may differ significantly from those returns predicted by basic CAPM

Beta (β) :

Measure non-diversifiable risk or the extent to which a firm's financial return changes because of a change in the general stock market's return

Stock's standard deviation of returns divided by the benchmark's standard deviation of returns o All stocks are impacted by stock market fluctuations

Extent of the impact on each stock will o Commonly estimated by regressing the per cent change in the total return on a specific stock with that of a broadly defined stock market index such as the S&P 500 index

$\beta = 1$ , the stock is as risky as the general market

t o  $\beta < 1$ , the stock is less risky

$\beta > 1$ , the stock is riskier than the overall stock market

Appendix 1: Off-taker details of renewable energy projects owned by Vector Green

No.	Off-taker	State	Gross capacity (MW)
<b>Solar</b>			
1	Solar Energy Corporation of India	Uttar Pradesh Maharashtra Madhya Pradesh	130
2	National Thermal Power Corporation	Rajasthan Karnataka	120
3	Telangana Southern Power Distribution Company Limited	Telangana	110
4	Andhra Pradesh Southern Power Distribution Company Limited	Andhra Pradesh	80
5	Uttar Gujarat Viji Company Limited	Gujarat	64 <sup>5</sup>
6	Punjab State Power Corporation Limited	Punjab	40
7	Maharashtra State Electricity Distribution Limited	Maharashtra	4
8	Madhyanchal Vidut Vitran Nigam Limited	Uttar Pradesh	2
<b>Wind</b>			
9	Adani Electricity Mumbai Limited, Krete Energy (I) Private Limited	Maharashtra	24
<b>Rooftop Solar</b>			
10	Commercial and industrial customers	National Capital Region Kolkata Karnataka Madhya Pradesh Maharashtra Tamil Nadu	9
<b>Total Capacity</b>			<b>583MW</b>
- Solar			550MW (including 64MW under development)
- Wind			24MW
- Rooftop Solar			9MW

SOURCE: [Sembcorp to Acquire Vector Green, Adding 583MW of Renewable Assets in India](#)

## GREEN BOND TRANSACTIONS

A green bond is a fixed-income instrument designed to support specific climate-related or environmental projects.

Green bonds may come with tax incentives to enhance their attractiveness to some investors.

The phrase “green bond” is sometimes used interchangeably with “climate bonds” or “sustainable bonds.”

Green bonds are part of a larger trend in socially responsible and environmental, social, and governance (ESG) investing.

A green bond is a type of fixed-income instrument that is specifically earmarked to raise money for climate and environmental projects. These bonds are typically asset-linked and backed by the issuing entity's balance sheet, so they usually carry the same credit rating as their issuers' other debt obligations.

Dating back to the first decade of the 21st century, green bonds are sometimes referred to as climate bonds, but the two terms are not always synonymous. Climate bonds

specifically finance projects that reduce carbon emissions or alleviate the effects of climate change, while green bonds represent a broader category of instruments related to projects with a positive environmental impact.

## CONCLUSION

### VALUATION AND DEAL STRUCTURING OF THE ACQUISITION OF VECTOR GREEM BY SEM CROP ENERGY PRIVATE LIMITED

Completion of the acquisition will bring the Group's gross renewable energy capacity to 8.5GW<sup>1</sup>, closer to its 2025 target of 10GW of gross installed renewable capacity - Sembcorp's gross renewable energy portfolio installed and under development in India will grow to 3GW

Sembcorp Industries (Sembcorp) announces that its wholly-owned subsidiary, Sembcorp Green Infra Limited, has signed an agreement with India Infrastructure Fund II, a fund managed by Global Infrastructure Partners India Pvt Ltd, to acquire 100% interest in Vector Green Energy Private Limited (Vector Green) for a base equity consideration<sup>2</sup> of approximately INR27.8 billion (approximately S\$474 million<sup>3</sup>).

Vector Green is an Independent Power Producer with renewable power generation assets spread across 13 Indian states. The portfolio includes 495MW of solar capacity and 24MW of wind capacity in operation, with 64MW of solar projects under development. Including Vector Green, Sembcorp's gross renewables portfolio installed and under development in India will total 3GW, comprising 1GW of solar assets and 2GW of wind assets.

Wong Kim Yin, Group President & CEO, Sembcorp Industries, said: "Sembcorp remains committed to growing its renewables portfolio in India, one of the fastest growing renewables markets in the world. This acquisition is aligned with the Group's brown-to-green transformation strategy. With the completion of this acquisition, Sembcorp's gross renewable energy capacity will increase to 8.5GW<sup>4</sup>, pushing us closer towards our 2025 target of 10GW."

Vipul Tuli, CEO of South Asia, Sembcorp Industries added: "This acquisition brings the significant utility-scale solar capacity to our India business, which will complement our existing wind portfolio. It also broadens and deepens our renewable energy capabilities and presence across states in India, and positions us well for further green growth in the country."

The acquisition will be funded through internal cash resources and external borrowings. Completion of the acquisition is subject to customary closing conditions and is expected by the first quarter of 2023. The acquisition is expected to be accretive to earnings upon completion. For more information on Vector Green's portfolio, please see the ABOVE Appendix.

This acquisition is in the ordinary course of business of Sembcorp Industries and is not expected to have a material impact on the earnings per share and net asset value per share of Sembcorp Industries for the financial year ending December 31, 2022

## REFERENCES

1. JEREMY BENTHAM, THEORY OF LEGISLATION 134 (Richard Hildreth trans., Boston, Weeks, Jordan, & Co. 1840
2. Source: fin shots-LinkedIn
3. Andrade, Gregor, Mark Mitchell, and Erik Stafford, "New Evidence and Perspectives on Mergers," *Journal of Economic Perspectives* 15:2 (Spring 2001), 103-120.
4. Paul A Pautler; "EVIDENCE ON MERGERS AND ACQUISITIONS",2005
5. Source: 10 Largest Conglomerate Mergers in History (Top Merger Examples) (dealroom.net)
6. India Energy Outlook 2021 (windows.net)
7. IBEF Presentation:
8. [https://economictimes.indiatimes.com/industry/renewables/sembcorp-to-acquire-vector-green-for-rs-2780-cr/articleshow/95483964.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/industry/renewables/sembcorp-to-acquire-vector-green-for-rs-2780-cr/articleshow/95483964.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
9. Vector Green Energy - Crunchbase Company Profile & Funding
10. Sembcorp to Acquire Vector Green, Adding 583MW of Renewable Assets in India