

Case Study

Solex Energy Limited

Dr. Bindiya Kunal Soni

Professor and (I/c) Director
Anand Institute of Management, Shri Ramkrishna Seva Mandal,
Opposite Town Hall, Anand-388 001
Email: drbindiyasoni@gmail.com

Dr. Jigna Chandrakant Trivedi

Associate Professor
Shri Jairambhai Patel Institute of Business Management and Computer Applications, Near Infocity
Gate 1, Near Indroda Circle, Koba-Gandhinagar Highway, Gandhinagar-382007
Email: jigna2804@gmail.com

Solex Energy Ltd (SEL)

Sun Energy Systems was incorporated as a sole-proprietary concern on 10th October, 1997 to manufacture solar water heaters. On 2nd January, 1998, it received its first government order to supply water heaters. The contract was worth Rs. 2,00,000 per annum, subject to the receipt of payment after three months. It received the payment for the first contract on timely basis. As the size and scale of operation was expanded, a need was felt to change the organization structure of the company for higher operational efficiency and raise additional finance. Thus, the Sun Energy Systems was converted into Solex Energy Private Limited on 13th October, 2014. The company used to bid for many government tenders to supply solar equipment such as solar panels, solar water-heaters, etc. On 10th May, 2017, Kalpeshbhai Patel, 47, the owner of the company anticipated that the company was likely to receive many government orders of more than Rs.10 crore to supply various solar equipment. He was facing an acute problem of funds to run the company on daily basis. Kalpeshbhai Patel knew that he required funds to successfully meet the orders. He was in a dilemma with regard to estimating

the amount of money required on daily basis to fulfill the government orders so that the company may not have any operational difficulty in future. He was also not certain about the source of funding i.e. equity vs. debt option.

The Company

From receiving the first individual order of installation of solar boilers in L D College of Ahmedabad in 1999 to becoming the company with a turnover of more than 100 Crore in 2017-18, Solex Energy Limited (SEL) has travelled a long way. Exhibit 1 describes the successful journey of the company so far. The company is engaged in providing renewable energy solutions, specializing in the manufacturing of Solar Photo Voltaic (PV) module, solar home light, solar street light, solar lantern, solar power plant, solar invertors, solar water heating systems, wood fired water heater, etc. It also renders solution for solar roof top system, solar home and rural lighting system, solar power pack and solar power plant.

The high quality products and services of the company are accredited by national and international bodies. The certifications and accolades to the company have been specified in

Exhibit 2. SEL believes in providing cost effective PV solutions without compromising on quality, performance and safety standards.

SEL has cost efficient manufacturing and supply chain management ensuring minimum operational cost for the company. Further, the company is able to timely procure the raw materials and being a large player in the industry. SEL is able to source these materials at a competitive price. As far as the marketing and distribution is concerned, the solar solutions of the SEL are widely available across India including Gujarat, Rajasthan, Uttar Pradesh, Madhya Pradesh, etc. Further, there is a lot of potential to get the solar projects from the rural areas of India. Considering the potential for solar energy in India, the company may need to add to its sales force in future.

Currently, the company is having semi-automatic manufacturing facility which will be soon upgraded to the state of the art fully automatic production line at Vasad (Gujarat). Besides, at macro level, SEL is operating in renewable energy, a sunshine sector, which is going to supplement the expansion initiatives of the company in future. Appendix 1 highlights the outlook for the solar energy sector in India. At present, company's dependence is more towards government funded projects. As per the promoter, 80% of the current projects of the company are those where government is giving incentives and subsidies. And due to delayed payment from the government department, the operating cycle of SEL is extending beyond 6 months. This results in blocking of the funds and translating in to higher working capital requirement.

Financial Need

As on 31st July, 2017, the balance sheet was prepared for the period of four months. (Exhibit-3). Considering the base of four months, the owner anticipated the figures for the forthcoming 12 months. From his past experience, he was aware that the inventory got converted into cash

after 60 days. Customers who were sold goods on credit made payment of the dues after 45 days. The suppliers of raw-materials were paid the money after 45 days. The company operated for 320 days in a year. To be on a safer side, Kalpesh Patel assumed a safety margin of 10% of net current assets for estimation of working-capital.

The Management Dilemma

Having identified the working capital needs as discussed above, the management of the company was facing a dilemma regarding the best option available for financing the working capital requirement and make the right capital investment to maximize the return. Essentially, the management had to decide between debt and equity investment options.

The company explored the option of raising the working capital loan from a bank or a financial institution. This option would allow the company to retain 100% ownership. However, the management of the company had various apprehensions in relation to accessing the bank loans such as cumbersome appraisal and disbursement process, complex collateral requirements, heavy reliance on excellent personal and business credit score, higher interest rates, severe repayment terms, small size of the firm, one size fits all approach of the bank officers, etc.

Against the debt option, the management was optimistically exploring the equity financing option through floating an Initial Public Offer (IPO) in the stock market. The management of the company was ambitious regarding the expansion of the SEL's operations in future and wanted to gain increased creditworthiness, trust, transparency and visibility among the investors. The promoters strongly believed that their public accountability, transparency and reporting requirements by equity markets would ensure better management practices, governance and performance appraisal in future. Further, listing SEL's shares would raise a company's public

profile with customers, suppliers, investors, financial institutions and the media and would provide continuing liquidity to the shareholders. In future, due to listing of shares, the company may be able to raise borrowed fund at an efficient rate.

Here the major challenge for the company was to meet the eligibility criteria of Bombay Stock Exchange (BSE) and National Stock Exchange

(NSE). However, SEL had the option of listing the shares on a separate platform launched especially for Small and Medium Enterprises (SMEs) i.e. either BSE SME or NSE Emerge. Considering the advantages of IPO over debt financing options, the management of the SEL was ready to undergo the lengthy and complex process of issuing the shares to the public and bear the cost.

Exhibit 1: SEL Journey

1998	A proprietary firm, Sun Energy System, started manufacturing solar water heaters, wood-fired water heaters and gas-fired water heaters
2000	The firm expanded its product line and entered in to manufacturing of solar home lighting systems.
2007	Continuing the growth journey, the firm started manufacturing solar photovoltaic modules.
2014	The proprietary firm was converted in to Solex Energy Pvt Limited and expanded the production capacity of solar photovoltaic modules to 30 MW.
2017	Solex Energy Private Limited got converted into a public limited company becoming Solex Energy Limited. In the same year (2018), the company came out with an IPO and was listed on the NSE Emerge in.

(Source: Compiled from <https://solex.in/about-us/>)

Exhibit 2: Quality Certifications

1.	Certificate of Compliance as ISO 9001:2015 for its quality management systems
2.	Certificate of Compliance as ISO 14001:2015 certified for its environmental management systems
3.	Certificate as OHSAS: 18001: 2007 certified for its health & safety management systems
4.	Certified for Photovoltaic Module (PV) by UL India Private Limited for complying with IEC 61701 Standard for Salt Mist Corrosion testing
5.	Certified by SGS-TUV SAAR GMBH (Germany) for solar products

(Source: Compiled from <https://economictimes.indiatimes.com/solex-energy-ltd/infocompanyhistory/companyid-67416.cms>)

Particulars	Rs.
I. Equity and Liabilities Exhibit 3: Financial Statement as on 31 st July, 2017 (Four Months)	
1. Shareholders' Funds(a) Share Capital(b) Reserves and Surplus(c) Money received against share warrants	2,22,50,000 1,74,61,342 -
2. Share Capital Money Pending Allotment	-
3. Non-Current Liabilities (a) Long-Term Borrowings (b) Deferred- Tax Liabilities (Net) (c) Other Long- Term Liabilities (d) Long-Term Provisions	48,63,942 21,19,277 - -
4. Current Liabilities (a) Short-Term Borrowings (b) Trade Payables (c) Other Current Liabilities (d) Short-Term Provisions	2,35,95,677 6,21,53,628 8,32,02,205 32,08,755
TOTAL	21,88,54,825
II. Assets	
1. Non-Current Assets (a) Fixed Assets (i) Tangible Assets (ii) Intangible Assets (iii) Capital Work-in-Progress (iv) Intangible Assets Under Development (b) Non-Current Investments (c) Deferred Tax Assets (Net) (d) Long-Term Loans and Advances (e) Other Non-Current Assets	1,47,30,373 1,45,680 - - - - -
2. Non-Current Assets (a) Current Investments (b) Inventories (c) Trade Receivables (d) Cash and Cash Equivalents (e) Short-Term Loans and Advances (f) Other Current Assets	2,26,06,409 14,58,41,071 77,06,895 2,18,50,095 -59,73,492
TOTAL	21,88,54,825

(Source: Solex Energy Private Limited, 2017)

Appendix 1 Outlook for Solar Energy Sector

<ul style="list-style-type: none"> As reported in the Renewable Energy Report of IBEF, India, being a growth economy, electricity consumption is expected to reach 15280 TWh in 2040.
<ul style="list-style-type: none"> With a huge landmass and an average of 300 sunny days a year, India offers a great potential for solar sector.
<ul style="list-style-type: none"> Government of India has ambitious target of achieving 100 GW of the solar power by 2022. By July, 2019, the solar sector has already contributed 30% of the defined target. To achieve this target, Central Government pays 30% of the benchmarked installation cost for rooftop PV systems to states in general category and up to 70% to the states in special category; applicable to institutional, residential and social sectors.
<ul style="list-style-type: none"> From a historically low base, rooftop solar power generation has become the fastest growing renewable energy sub-sector in India, with a compound annual growth rate (CAGR) of 116 per cent between 2012 and 2018. Due to increased awareness and Government subsidies, rooftop solar power installations in India grew at a robust pace in 2018-19, with the country adding a record 1,836 Mw.
<ul style="list-style-type: none"> According to a periodic report on the average cost of generation from different electric power sources – the “levelized cost of electricity” by the investment firm LAZARD, over the last decade the levelized cost per unit of electricity from new utility-scale onshore wind and photovoltaic (PV) solar power plants has dropped about 70 and 90 per cent, respectively.
<ul style="list-style-type: none"> However, the country is facing few challenges such as majority of the electricity generation based on fossil fuel, frequent changes in rules and regulations pertaining to renewable energy sector, storage of solar power etc.

(Source: Authors' Compilation)

Acknowledgement

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