Financial performance of hydrogenics corporation

Hydrogenics Corporation

Part I: Introduction

Brief Description of Hydrogenics Corporation:

Hydrogenics is a developer and manufacturer of hydrogen generation andfuel cellproducts based onwater electrolysisandproton exchange membrane(PEM) technology. Hydrogenics is divided into two segments: Onsite Generation and Power Systems. Onsite Generation is headquartered in Oevel, Belgium. The Onsite Generation business segment is based onwater electrolysistechnology, which involves the decomposition of water into oxygen (O_2) and hydrogen gas (H_2) by passing an electric current through a liquidelectrolyte. The resultanthydrogengas is then captured and used for industrial gas applications, hydrogen fueling applications, and is used to store renewable and surplus energy in the form of hydrogen gas. Hydrogenics HySTAT electrolyzer products can be used both indoors and outdoors. The Power Systems business segment is based on PEM fuel cell technology, which transforms chemical energy resulting from the electrochemical reaction ofhydrogenandoxygeninto electrical energy. (Edgar) Its HyPM products can handle electrical power outputs ranging from 1kilowattto 1megawatt. The company also develops and delivers hydrogen generation products based on PEM water electrolysis.

Objective of the paper:

The objective of this paper is to analyze the financial performance of Hydrogenics using various financial statements and ratios from years 2012 and 2013. By reviewing these documents, as well as the past and present environment, we can better understand the efficiency and predict the company’s profitability.

Summary of Findings:

The analysis performed show that Hydrogenics Corporation has been tapping a new market, which replaces fossil fuels with Hydrogen Cells. This is a market that helps in sustainability and at the same time increases the knowledge of the customers about the effects of fossil fuels. The process is expensive but after a careful analysis we can say that the company is slowly and steadily repaying their loans and borrowings. This is a good sign of a sustainable future. The trend analysis shows us that the financial statements are more or less improving or staying constant.

Part II: Firm, Industry and Environment

Brief Description of The Company and Its Management:

Hydrogenics is the worldwide leader in designing, manufacturing, building and installing industrial and commercial Hydrogen generation, Hydrogen fuel cells and MW-scale energy storage solutions. While our leadership comes from our technology, our success is the result of one essential ingredient – the human one. It’s our people, our engineers, our experts who are accelerating a global “ power shift” to a cleaner energy future. Daryl Wilson was appointed President and Chief Executive Officer in December 2006, bringing a varied 25-year background in technology and industrial management to the company, including operations, manufacturing, human resources, research, product development, organizational change and turn-around experience. Prior to joining Hydrogenics, he held senior leadership positions at Royal Group Technologies, Zenon Environmental, Toyota and Dofasco.

Competitive Environment:

We can Analyze Hydrogenics Corporation to Porter's Five Point Analysis. The five points of the analysis are Threat of New Entrants, Bargaining Power of Suppliers, Threat from Substitute Products, and Rivalry amongst existing players. New entrants in Industrial Electrical Equipment brings innovation, new ways of doing things and put pressure on Hydrogenics Corporation through lower pricing strategy, reducing costs, and providing new value propositions to the customers. Hydrogenics Corporation has to manage all these challenges and build effective barriers to safeguard its competitive edge. They can tackle this problem by innovating new products and services. New products not only brings new customers to the fold but also give old customer a reason to buy Hydrogenics Corporation ' s products and also by building economies of scale so that it can lower the fixed cost per unit.

All most all the companies in the Industrial Electrical Equipment industry buy their raw material from numerous suppliers. Suppliers in dominant position can decrease the margins Hydrogenics Corporation can earn in the market. They can tackle the bargaining power of suppliers by building efficient supply chain with multiple suppliers and also by experimenting with product designs using different materials so that if the prices go up of one raw material then company can shift to another.

Buyers are often a demanding lot. They want to buy the best offerings available by paying the minimum price as possible. This put pressure on Hydrogenics Corporation profitability in the long run. This problem can be solved by by rapidly innovating new products. Customers often seek discounts and offerings on established products so if Hydrogenics Corporation keep on coming up with new products then it can limit the bargaining power of buyers. New products will also reduce the defection of existing customers of Hydrogenics Corporation to its competitors.

When a new product or service meets a similar customer needs in different ways, industry profitability suffers. This can be tackled by increasing the switching cost for the customers.

If the rivalry among the existing players in an industry is intense then it will drive down prices and decrease the overall profitability of the industry. Rivalry can be avoided by building a sustainable differentiation.

Economic Climate and Outlook:

Hydrogenics has the potential to grow in the field of sustainability in the future. They are developing a broader range of products at various power levels, aiming for more attractive solutions and better economies of scale for our customers. As a global corporation, Hydrogenics are subject to the risks arising from adverse changes in global economic conditions. Economic conditions in leading and emerging economies have been, and remain unpredictable. Hydrogenics has recently opened a new branch in California to spread its operations.

Other Factors:

Hydrogenics announced that it will supply six heavy-duty fuel cell power modules to GTI and Trans Power for a set of Class 8 Navistar drayage trucks scheduled to be deployed in Southern California early next year. The trucks are part of the California Air Resources Board's " California Climate Investments" program, meant to enable the acceleration of low-carbon technology in commercial trucking applications. The major setbacks would be the government regulations in California and the restrictions on the use of the hydrogen fuel cell power and the heavy investments involved.

Part III: Balance Sheet Analysis

From the balance sheet of Hydrogenics Corporation, the direction observed from 2012 to 2013 for each of the balance sheet item shows that the total assets of the company have decreased mainly because of the decrease in cash and short-term investments and the account receivables which both are the current assets of the company.

From the common size balance sheet, it can be seen that the cash equivalents have reduced from 31. 1% to just 29. 5% and the overall current assets have reduced by 3%. The liability of the company has also decreased and the reasons behind the reduction are in the current liabilities of the company, which includes the warranty provisions, deferred revenue, and the warrants of the firm. The account payable for the company was 27. 6% of the total assets in 2012 which increased in 2013 to 32. 9% but the overall current liabilities reduced by 6% of the total assets.

The liquidity of the company as also explained in the notes provided can be predicted from the path observed in the balance sheet figures especially the current assets and the current liabilities of the company. Considering that both have reduced, the current liabilities have reduced at a higher percentage, which has resulted in better liquidity for the company as the formula divides the current assets by the current liabilities.

The current ratio has increased but the quick ratio has decreased. This is because the quickest forms of current asset i. e. the cash and its equivalent has decreased relatively. Overall, the cash flow liquidity is either improving or staying consistent.

The equity section of the balance sheet shows a major part of the retained earnings going away from the company and is rather a deficit for the firm for the two years under consideration and this may be because the funds are used for the investment purposes. This gap has decreased from 803. 4% to 861. 9%.

For the year 2013 the receivable allowance has increased from 124 to 139, which is not in harmony with the account receivable of the company. Though the account receivable for the company has decreased which is a good sign that majority of the receivables have been dissolved, the slight increase in the allowance shows that the customers might have defaulted on their payments or there might be some serious concerns which would have made it regard as allowance for doubtful debt. This can be supported by the fact that the sales for the year increased by 33. 81% as compared to the previous year and the higher sales signifies more customers.

The contingencies and the guarantees of the company are shown in the notes section of the financial statements. The note 20 shows the commitments of the firm and it signifies the importance of rent and operating leases. Lease is a topic that is of interest to the investor because it adds to liability and expenses of the company. Operating lease is where the lessor allows the lessee to use the asset for something specific. Rent is a form of operating lease and a commitment, which involves rules and regulations and hence shall be disclosed in the notes to add transparency for the users of financial statements. The commitment section classifies the operating leases in terms of the premises, office equipment and the vehicles.

The contingencies on the other hand refers to the future event that cannot be predicted with certainty but is likely to have an impact on the financial statement and shall be disclosed in the notes so that the investors can use the information in making informed decisions. The company identifies the indemnities with the directors which will require some charges to be paid and might have an impact on the financial statement and performance of the company. Note 23 talks about the guarantees of the company and it totalled to $7, 614, which is a huge amount to be reported in the financial statements. The company has paid cash security worth $2, 024. If there is a failure to comply by the company’s deadlines, chances of losing this security is high and would be reported in the notes to make the users of the financial statements make informed decisions.

Part IV: Income Statement Analysis

Hydrogenics Corporation has two departments or segments, Power Systems and Onsite Generation. It is seen in the Discussion and Analysis section that both the locations are expecting to gain substantial profits from multiple markets. Onsite Generation shows us that the expected increase in their sales will come from the increasing demand for hydrogen that is used for fuel and for an alternative energy source. Power Systems has also created a different energy by using hydrogen instead of fossils. The majority of the sale is coming from the need for different backup energy for telephone systems and transportation.

Also the military has a large market for Power Systems as well, considering that the military adapts quickly to new technology. Both the segments have explained that their markets for all of their products are projected at least a few billions each.

In 2012, Hydrogenics reported $31, 697 of revenue sales and in 2013 their revenues increased to $42, 413. This is due to an increase in sale of the products from one of the segments. In 2012 Onsite Generation had accomplished $27, 336 in revenue, while in 2013 they had reported revenues of $24, 078. Power Systems had only shown revenue of $4, 361 for the year. This was much lower than the revenue that Onsite had reported for the year. The difference was about $23, 000. In the upcoming year, Power Systems had shown $18, 335 as their revenue.

Power Systems had a significant increase in revenue from 2012 to 2013. The change in revenue for Power Systems from 2012 to 2013 is around $14, 000. This scenario of the increase in revenue for at least one segment of

Hydrogenics Corporation is a positive factor for the profitability and success of the company. In contrast, the change in revenue for Onsite Generation was not positive. The decrease in revenue from 2012 to 2013 was not substantially different from the previous year to the next. Onsite Generation had shown revenues of $27, 336 in 2012 and $24, 078 for 2013, a difference of 3, 000. Amongst both the segments, Onsite has shown to generate most of the revenues for 2012 and 2013. Power Systems had submitted a significant amount of the total revenues in 2013, while in 2012 Power Systems only reported a part of the total revenues of the year.

Onsite Generation has said that the increase in the revenues for the year 2012 was mainly accounted by the increase in orders and the explanation for the decrease in revenue margins during the year 2013 is because there were not as many orders being placed and completed. Also Onsite said value of the euro is much lower than before. The euro had a 10% decrease from the year 2012. That is lesser than the US Dollar. Gross profit in 2013 was 16% of total revenues. Onsite also said that despite the cut in costs of the products they manufacture, they saw a fall in revenue during 2013. Power Systems said that the 330% increase in the revenues that they incurred was mainly because the revenue was being received in a different period for the contracts that had been completed previously. Power systems had a 46% of gross profit turnover from total revenues, which is due to the high number of customized projects that produced an even bigger gross margin. Power Systems looks like the part of Hydrogenics that needs to be focused on for production of specific, custom products. Hydrogenics also hopes to have an increase in demand for the products, which is mainly based on if the government will or will not increase spending the hydrogen energy as a source of alternative energy. Hydrogenics states that the economy conjuncts heavily on the positivity of its sales.

Part V: Cash Flow Analysis

This is analysis of Hydrogenics statement of cash flows. It is marginally unnatural that the differences and highs and lows in the net income and the cash equivalents are not in alignment. Also, the operating and financing sections show some normality of a type of company that may be steering attention away from their statement of cash flows. There is also a net loss shown in the operating activities for both the years, and a net gain in financing activities both years, which usually shows signs that the company has to take out loans to cover their deficit. This is marginally true for the company, although there are some redeeming factors that bring in the idea that Hydrogenics might be worth the investment in the future if it can keep its stability.

In the operating section, there is also a net loss. The majority of the loss for both the years is shown from the income statement, which we discussed earlier. The next big item for both years is the increase of $15, 138 in the year 2012 and then the decrease of $6, 629 in 2013 in deferred liabilities. Since we are assuming that this is unearned revenue, this could have to do with contracts that they had in recent times come into. As the years go on, it is predicted that the deferred liabilities would go lower as and when they are fulfilled. The same thing has happened with accounts payable but on a relatively small scale. They borrowed a small amount of money in 2012, but paid a larger amount back in 2013, presumably for previous years. Spending on inventories was double in 2012 than what it was in 2013. This could be for two obvious reasons. First, they may have made their inventory and are ready to ship it. Another reason is that they did not keep up with demand as shown in the income statement. Hydrogenic Corporation's receivables made promising progress. While they increased in 2012, there was a decrease in 2013. That being said, Hydrogenics is good at staying on top of the firms that they lend credit to. In other non-cash items, there was a profit in 2013 in liabilities for compensation indexed to share price, which could be correlated to their stock value increasing. Overall, the deferred liabilities are the biggest part of the operating section. The biggest advantage of deferred liabilities in 2012 offset its larger net loss in 2013 by turning into service revenue.

In the investing section, there is not a lot going on. There are some capital expenditures. There was also a small amount spent on intangible assets. This seems to just be upkeep of their plant assets and maybe their patents. It is possibly the case that a lot of their spending on plant assets and intangible assets happened in the past, when they were just getting started.

The financing section does show a net increase for both the years, which as I stated previously, is generally a sign of heavy borrowing. While there is some long-term borrowing, a lot of the gain is coming from the sale of common stock. This is usually a form of borrowing, as Hydrogenics is going to have to pay for dividends once they have a net income. Something to consider in this scenario, is that the sale of that much common stock could mean that other investors are also interested in Hydrogenics. Despite their downward key point, investors are still buying Hydrogenics Corporation's stock, and the value of the stocks is even rising. The next biggest number is the increase in long-term debt for both years. This is where the company starts to get a little risky. They are paying for their long-term debt in small proportions as shown in the payments account, but eventually they are going to have to pay all the debt back that they have accumulated.

Overall, the statement of cash flows for Hydrogenics reinforces the idea that they are setting foot in a growing industry and might leap in value soon. The most profitable thing that they perform as of now is keep margins low and start trying push their product to make some income. A lot of the losses are stemming from the fact that they are about to go commercial with their products. The loss for 2013 year may seem worrisome, however this is just the start of making the retraction for its customers.

Part VI: Ratio Calculation Of Financial Statements

A. Liquidity / Asset Ratios

Liquidity ratios measure a company's ability to meet short-term debt obligations. Hydrogenics Corporation's current ratio has increased in 2013 as compared to 2012. The ratio was 1. 30 in 2012 and up to 1. 40 in 2013. This means that Hydrogenics had been meeting its short-term obligations. In 2013, quick ratio was 0. 80, and 0. 88 in 2012. Generally, the higher the quick ratio the greater the company's liquidity and Hydrogenics Corporation's quick ratio for the past three years has been significantly lower than 1. 0. This means that they are having difficulties in funding current liabilities. The quick ratio was much smaller than the current ratio because a large portion of current assets was associated to inventory. Hydrogenics

Corporation’s cash flow liquidity ratio has been going downward over the past two years, moving from 0. 44 in 2012, down to 0. 11 in 2013. It also makes short-term creditors to think of potential liquidity problems.

Hydrogenics Corporation’s daily inventory held has decreased from 164 days in 2012, to 155 days in 2013. This indicates that inventories are spending less time in warehouse than it has in the past. The average collection period has increased. They were at 58 days in 2012, and 41 days in 2013. Decreasing average collection period could indicate that Hydrogenics has become more efficient in its collection efficiency over the years. Since average collection period decreased, their receivables turnover increased. Hydrogenics daily payables outstanding were 73 days in 2012, and 38 days in 2013. They extended days to delay their payment and conserve cash that could arise from better terms with vendors. Since Hydrogenics Corporation’s cash conversion or their ability to convert product into cash inflows improved for the past two years. It was 149 days in 2012 and 158 days in 2013. Improving cash conversion cycle has a positive impact on firm performance over time and liquidity over time.

Hydrogenics Corporation’s fixed asset turnover ratio increased from 22. 60 in 2012 to 25. 10 in 2013. An increasing trend in fixed asset turnover ratio is not desirable because it means that the company has more money used in fixed asset. The declining trend means the company is over investing in their property, plant and equipment. It would appear that Hydrogenics has established an increase in investment to approach and manage fixed assets but it would be better if they reduce their property, plant and equipment. Like the fixed asset turnover, they showed an increase in change in total asset turnover, but marginally lesser. It was 0. 76 times in 2012 and 1. 10 in 2013. Increasing in total asset turnover ratio usually indicates stability with the asset categories composing total assets. Hydrogenics looks like they

B. Leverage (debt) Ratios

Leverage ratios are important to the financial analyst because it measures the extent of the firm's financing, as it is associated to debt. Hydrogenics Corporation's leverage ratios show the trend of Hydrogenics a positive debt ratio in 2013. Hydrogenics is showing the amount of debt and risk decreasing over the past two years. This means that the company is profitable. Hydrogenics Corporation's had a debt ratio of 89. 70% in 2013 and 84. 60% in 2012. Hydrogenics showed small increases in long-term debt to total capitalization from 2012 to 2013. It reported 23. 00% in 2012 and 26. 80% in 2013. Long-term debt is used for the firm's permanent financing, and as stockholders' equity increased, their long-term debt will also increase. Debt to equity ratio measures the riskiness of the firm's capital structure that is supplied by creditors and investors. Hydrogenics Corporation's debt to equity decreased from 2012 to 2013, which shows that they had a lesser degree of risk. Compared to 2012, there was a 3. 20 times decrease in 2013. The ratios have decreased somewhat for Hydrogenics from 2012 to 2013, which means they are stable on capital structure. When the ratios are decreasing, creditors and investors do not have to worry about Hydrogenics Corporation's financial situation.

Hydrogenics showed that times interest earned ratio has decreased over the years. Although it decreased, a lower times interest earned ratio is not beneficial. Hydrogenics reported 15. 90 times in 2013, and 37. 10 in 2012. The cash interest coverage ratio measures how many times interest payments can be covered by cash flow from operations before interest and taxes. It was higher in 2013 (1148. 00 times) than it was in 2012 (366. 70 times). In 2013, the company improved its ability to cover interest payments from operating profits and cash from operations than what it was in 2012. The fixed charge coverage has decreased from 9. 17 times in 2012 to 4. 67 times in 2013. Hydrogenics Corporation's cash flow adequacy has increased over the past two years, reported 6. 90 times in 2013 and 1. 59 times in 2012. The company covered annual payments of debt, capital expenditures, and dividends well. To satisfy Hydrogenics Corporation's leverage ratios, Hydrogenics should be concerned with covering the principal payments with cash generated in large amounts by the company.

C. Profitability Ratios

Profitability ratios show overall efficiency and performance of how Hydrogenics did over the past two years. Gross profit margin, operating profit margin, and net profit margin represent the company's ability to convert sales dollars into profits at different stages of the analysis. Hydrogenics increased their gross profit margin and decreased their operating profit margin and net profit margin in 2013, which shows that Hydrogenics was able to control the growth of operating expenses. Hydrogenics also increased their cash flow margin. Cash flow margin is important because it shows the relationship between cash generated from operations and sales. Although, the company's cash flow margin increased, the company had a lower margin than net profit margin. This is a negative result in generation of cash.

Return on total assets and return on equity (ROE) are ratios that measure the overall efficiency of the firm in managing its total investment in assets and ingenerating return to shareholders. Hydrogenics reported 22. 20% of ROA that is decreased compare to 2012. In 2013, ROE reported 144. 60%, so they had poor return to shareholders as compared to the previous year. Cash return on assets increased in the year 2013, which represents the firm’s cash-generating ability of assets was much better than the past year. The company’s profitability ratios was different than that of the industry average. The company did make a lot of changes. They made changes of decreasing and increasing simultaneously over the past two years, so it will be easy to maintain a stability around the company’s efficiency ratios.

Earnings per share are net income for the period divided by the weighted average number of common shares outstanding. Hydrogenics reported 1. 04 in 2013 as compared to 1. 74 in 2012. It is not good to decrease the earnings per share because investors always look for companies with steadily increasing earnings per share. Hydrogenics should maintain the result of market ratios since the company is working to sustain its market ratios.

Part VII: Summary and Conclusion

Sustainability industry is a good investment for the future and in the long run. There is heavy money involved and requires a lot of technology. Hydrogenics can be sustainable as long as they are paying their debts. After going through the above analysis, it is safe to safe that they are slowly and steadily paying their debts off and also have good dividend returns for their investors which assures us that the company's finances are in a good standing.

In conclusion I would like to say that the sustainability sectors requires a lot of investments and with the right technology, Hydrogenics will be a world leader and may also be a monopoly in the market.

Part VIII: References

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