## Canadian solar and its contributory companies marketing essay

Business, Marketing



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## **Canadian Solar ( Case Study)**

Overview of the ProjectIn this major writing project for my MG 4740 A1 Level 6 Capstone class, I am willing to analyze, formulate, execute and implement strategy for a business enterprise through the use of a case method that instructor has selected. The case study to be analyzed is Canadian Solar. In this case study I have to gather, organize, evaluate and generalize relevant data. In addition, I have to explain business strategy (its role in improving Canadian Solar's financial and strategic performance). Also, I have to contribute to Canadian Solar's sustainable competitive advantage. Furthermore, I have to conduct internal and external environmental analysis of Canadian Solar, using appropriate analytical tools. Moreover, I have to formulate and address alternative strategies and then I have to select the best strategies for implementation. Finally, I have to create action plan for strategy implementation and then manage all the above in competitive action. Introduction/Company ProfileCanadian Solar: Founded in 2001Incorporated in CanadaPublically traded since 2006Headquartered in Ontario (Canada)16 offices around the globeOver 10, 000 employees around the globeOver 2, 500, 000 sg. ft. of total facility space8 wholly owned manufacturing facilities3 gigawatts of product installed around the globeSatisfied customers in over 50 countriesCustomer Service Network for rapid response around the globeSource: Annual Report, Company Website, Primary and Secondary Research, Global DataCanadian Solar is one the world's biggest solar panel producers. Actually, in 2011 Canadian Solar was a top 5 (five) Global Module Supplier. Canadian Solar is a supplier of wafers,

ingots, solar cells, solar power systems and solar modules. Across the globe Canadian Solar delivers to its customers uncompromising value. Canadian Solar solar modules and products comprise customized modules ( such as soar powered bus stop lighting and solar powered car battery chargers). The Company classifies its products into 2 (two) product lines ( photovoltaic and custom engineered solar specialty products ). According to a research I made I found out that Canadian Solar's customers trust them because they manufacture very high quality PV solar and solar modules products and then they sell these products in very low cost. Canadian Solar its world-renewed technical enterprise and of curse its commitment to sustainable value. Key

Executives

## Name Title

Michael G. Potter Chief Financial OfficerShawn Qu ChairmanRobert McDermott DirectorLars Eric Johansson DirectorHarry E. Ruda DirectorSource: Annual Report, Company Website, Primary and Secondary Research, Global DataFinancial PerformanceSource: http://www. canadiansolar. ca/Recent developments 2012Canadian Solar announces new program for customers to finance and complete solar projects in USA. Canadian Solar lunches new residential Ac Module. Canadian Solar to supply solar modules to Gehrlicher Merk Solar for PV project. Canadian Solar and Mortenson construction break ground for 2. 5 MW PV project. Source: Annual Report, Company Website, Primary and Secondary Research, Global DataSWOT AnalysisStrengthsVertically Integrated companyFocused R&D InitiativesWeaknessesSubstantial DebtDeteriorating Profitability

RatiosOpportunitiesPositive Outlook of Solar MarketStrategic ExpansionsThreatsIntense CompetitionGrowing Market for Other Energy AlternativesSource: Annual Report, Company Website, Primary and Secondary Research, Global DataCompany Direction – vision, mission, values, and major goalsVisio statement reflect the perfect image of an organization in the future. Most vision statement are projected for a period of five (5) to ten (10) years. Vision statement is very important for an organization because it communicates both purpose and values. Mission statement reflect purpose, objective, goal, target of the organizing. Canadian Solar is driven by privilege and obligation to deliver a clean sustainable energy for the future. Canadian Solar is one of the few companies that enjoys the trust of their customers. The vision statement that Canadian Solar has for their employees is to give them a direction about how they are expected to behave and of curse inspires them to give their best so that to help the organization and by doing this they will benefit form bonuses and other material gifts that they organization may offer them. In general, Canadian's Solar vision is that all households in the future to use solar systems. Canadian Solar believes that in the future solar systems will be part

of all households, just like computers are today ( they believe that this will be reality in a period tem (10) to 20 (years). In addition, Canadian Solar believes in a world where all rooftops have solar systems. Also, Canadian Solar mission is to help their customers to pay less using solar that when using traditional energy. To sum up, Canadian Solar vision and mission focus on employees, customers and a sustainable environment. Canadian Solar try to convicted their customers that when they use solar they pay less than

Page 5

using traditional energy and that when they use solar they save the environment. vvvvvvvExternal analysisCanadian Solar and its contributory companies have many components making up the external threats and opportunities. All of these have the capacity to encumber or help the company and are out of the company's control. Factors such as socio cultural tendencies and trends are a big influence for Canadian Solar, being in the renewable energy field, green supply is being viewed as a way of the future and is being embraced by developers as well as consumers. Even though in 2008 the tariff return not being equal to the actual cost of other energy sources, the expectation was that they would be equal or that solar would be less expensive than regular energy in the next 3 to 5 years. The Political and legal aspects are one of the external influences that has proven to be, in this case, a real positive aspect of the growth of the company. Government incentives and the tariffs being offered to attain eventual grid parity is a positive for this company. Even though the government incentives did stop on 2006 in Japan, they are still being offered by other governments. Economically there have been difficulties in regards to prices for the raw materials. Being so dependent on Silicone and having to endure such a high fluctuation has had an impact on the company and being able to establish fixed prices. Having to offer clients between 10% to 30% discounts on orders means there is always the possibility that you could lose potential sales. From a physical point, Canadian Solar is well established, with offices throughout the world but being mainly established in Canada and China, this allows the company to transact with the CIDA as well as be eligible to partake in Canadian tariff offers, all the while continuing to produce and take

advantage of low cost labour in China. The threat of new entrants could be a high threat to current PV manufacturing companies as the entry barriers were considered low in this market. However, the need for a longer warranty supplied by the manufacturers was protecting the market from new entrants as well. Within the existing manufacturers, there is there is a strong rivalry. There is a low switching cost to the buyer, where switching from one manufacturer to the next is not a barrier. There are numerous equally balanced competitors in the market and a lack of differentiation between the products. Internal AnalysisCanadian Solar is a vertically integrated company in regards to production and use of low labour costs, but also using western management and engineering elements giving Canadian Solar an edge over some of the competition. They described themselves as an inverted vertically integrated company which they stated allowed them to respond to market shift in a short amount of time by freeing up their capital required to have equal amounts of each component. Canadian Solar has achieved the global mind set in their ability to manage and understand the internal organization without having the barriers of a certain culture, context or country. This is one of their biggest strengths, by being established in numerous countries they are able to compete on the global market. For example by being in Canada they can access the CIDA and by being local in Spain they can reach their customers and their needs better. They are also one of the first companies to establish a recycling process to try and reuse the silicone in the silicon wafers and ingots. This process is labour intensive and they were expecting a competitive advantage in being able to reclaim this silicon. Although not as significant as they had hoped in 2008, there is

still great potential for this aspect. They do also have some weaknesses such as the difficulty in forecasting. Their difficulty in forecasting properly caused the under supply of ready to install modules. Also they have posted net losses over the last 3 years. They are also not diversified at all. They have one main product with 3 different types. They are currently hinging all of their growth on this one particular product which is heavily influenced by government regulation and grants. If the government regulations were to change or the subsidies were to no longer be available this could have a devastating effect on the market and this company. There is also the fact that Canadian Solar is not a leader in this industry, this could be due to a lack of leadership. Canadian Solar has a business strategy that is very clear: Keep things simple. They have clearly defined strategies that is allowing them to stay within their area of expertise and lower the business risks. These government incentive programs mentioned earlier, while available, are a great opportunity. The credibility and warranty that Canadian Solar offers as a Canadian company will allow for the entry into new markets geographically. There are many other opportunities such as the US market. With President Obabma's endorsement of renewable energy, the PV manufacturers have all set up offices in the US to claim their part of, what is potentially believed to become the largest market for PV manufacturers. Europe and India will also be important areas of opportunity as is Germany in the near future. Canadian Solar also faces many threats, such as the changes in environmental regulations, which could affect the government subsidies and programs for the tariff. Competition is another threat. Canadian Solar is not alone in this market, and although the warranty

requirements are a barrier to new entrants, this in itself is not enough of a deterrent. Canadian Solar is placed 9th out of 10 in regards to the market share they control. The prices of raw materials such as silicon, with prices fluctuating between \$25 - \$500 per kilogram within the same year causes a great amount of difficulty in stabilizing prices and trying to lower the costs. Canadian Solar has many tangible and intangible resources. Financially by turning to venture capital in 2005, they were able to prepare for the IPO and in turn the money generated from that allowed Canadian Solar to prepay and purchase the silicon and solar cells allowing for a certain amount of fixed costs in the cost of goods for a designated amount of time. Physically, they are located world wide with plants in China and offices all over. They also have the ability to switch from one product to another in a relatively short span of time. They have a strong grasp on the human resource with small offices all over the world, with an international development office in Ottawa to focus on the projects in latin america and the middle east allowing the company to maintain ties to the CIDA. Core CompetenciesCanadian Solar has created credibility by becoming ISO9001 & ISO 16949 certified allowing them to have a good handle on the resource of their reputation. Canadian Solar distinguishes themselves from the competition mainly with price and reputation. This certification has helped establish the credibility of the quality of their product in the early stages. Using their resources and capabilities they are able to transform the recycling process into a core competency. Their management is also a core competency of this firm, utilizing the low labour costs of China with the western management elements. As is their manufacturing process and the ability to switch " gears"

in a short amount of time by having multiple production plants allows this company to be versatile in meeting the requirements of their clients. And their ISO certification is definitely a core competency. Business Level StrategyTheir business level strategy is a cost leadership strategy, offering low cost for a product that is not unique and by reaching a broad global market. The definition if a cost leadership strategy is an " integrated set of actions taken to produce goods or services with features that are acceptable to customers at the lowest cost, relative to that of competitors." (as cited in Porter, Competitive strategy, 35-40) This strategy could become obsolete as the competition innovates. This strategy can also impede the company from discerning their customers needs. RecommendationsBecause they have a certain amount of flexible manufacturing systems: human, physical, and IT, they could develop another product. To maintain their corporate identity they should focus on a product that is within the same scope such as long term storage for energy for off grid applications. This would allow them to maintain their identity while diversifying their sales market with a complimentary product. It would be easily integrated into their current structure and could allow for government subsidies. They would have the option of utilizing the same supplier stream for raw materials and also their marketing would be able to incorporate these products into their current marketing structure. Another option, if they chose to diversify into a new line of products instead of complimentary products, they could examine the possibility of bio fuel. This would also allow for the same corporate " green" identity and is unrelated enough to capture a new stream of revenue in a new market, while staying true to their roots. VvvvvvAlso, more new

entrants were vertically integrated. The ones that held an inverted vertical integration weren't considered an immediate threat, opposed to those who specialized in PV cell supplying and customers (i. e project developers). The government regulations also lower entry barriers since it promotes green energy with regulations such as FIT program. Bargaining Power of Suppliers the bargaining power of suppliers is relatively low since there aren't many buyers for their products. Therefore, it is hard for them to switch buyers. Supplier inputs are relatively similar (Grid-tied and off-grid applications) and there are many PV suppliers in the industry. Since they compete on costs, buyers will most likely be attracted to the supplier offering them the lowest cost. PV cell and module suppliers try to seduce the buyers with promotion packages, discounts and government subsidies. For example, In Asia, Canadian Solar developed a complete systems package that includes solar PV modules, racking systems, inverter and monitoring devices. Bargaining Power of BuyersBuyers of the PV manufacturers such as electronics, automotive and industrial product companies, have a lot of power. Since the switching costs are high, customers can bargain with the supplier for good deals. Since the cost of PV cells was always fluctuating, it was common for manufacturers to offer their buyers a 10-30% discount. Since the buyers' need for PV modules isn't crucial to their operations because they can use other resources like Bio Diesel, and there are they are in a negotiable position with suppliers. Threat of Substitute ProductsThere are not a lot of substitutes for PV cells. The main substitute is the fossil fuel, especially natural gas, is considered very cheap in North America and is a threat since it is in abundant quantity. In Ontario, the contract price for

500kW is 16 cent/kWh, as opposed to the price of 500kW of Solar PV for a rooftop which is 63. 5cent/kWh. There is a significant price difference. Although it isn't as ecological as the solar energy, since when you extract natural gas the risk of polluting water is high. Since it is cheap for buyers in North America, it can be a threat for PV modules since they can use it for automobiles and producing electricity. For Europe and China, where the natural gas is more expensive, the solar energy could be competitive. Intensity of Rivalry among CompetitorsDue to the variety of suppliers and the different technologies available (monochrystalline, polychrystalline, thinfilm etc..), the rivalry between PV manufacturers is heavy and they compete on costs. Competition is at a global level since the solar manufacturers are in many different countries. One supplier can have many offices in different countries, such as Canadian Solar who is active in 8 countries. Another major reason why competition is so strong is that there are high exit barriers, which makes it very difficult for PV suppliers to guit doing business because they are stuck with large assets that are hard to sell, such as their equipment. Competitor AnalysisThe competition in the market is divided in three groups based on geography, market strength, size and quality perception. The major competitors for the first group are the ones that their primary manufacturing base in China: Suntech, Yingli Green and Trina Solar. Those companies compete on price by taking advantage of lower variable costs in China. The second group's strategy focuses more on technological innovation. Companies competing in that group include Q-Cells, Solar World, Gintech and JA Solar. Finally, the third group consisted of mostly Japanese companies whose strategy is to use brand image to attract customers, such

as brand-renowned Sharp. Sharp's strategy has changed over time since it had a joint venture with Italy's Enel. All the companies competing in the first group are vertically integrated since they produced ingots, wafers and cells and modules. Therefore, they are highly competed on costs. Internal AnalysisResourcesCanadian Solar's resources include their research and development department, the location of plant and equipment and their capital. This company has an important R&D department that is very valuable for the company. Also, the fact that their plants and equipment are establishes in more than 8 countries is a good resource to the company, since it gives them geographically diverse customer bases. Considering the company has made revenue of \$574 million and the closing stock price in 2009 was \$16.74, the company's capital is a good resource. CapabilitiesThe company's capabilities includes the recycling of silicon, their inverted vertical integration and their management of distributing of products worldwide. Canadian Solar was the first solar company to recycle silicon, which should customers their true ecological determination. Also, their vertical integration model shows their capability at manufacturing ingots, wafers, cells and modules, which the company believes will reduce their long-term manufacturing cost, as well as better inventory control and efficient cash management. Their synergy management as well is a resource because they have a good management of activities that are happening in different continents. They are well aware of the government policies in other countries and of their threats in those countries such as their competitors. Core CompetenciesCanadian Solar's core competency is in managing the different offices around the world. Managing synergies is rare in the industry

since most companies are established in one country (e. g: Sunpower in the USA), also it is costly for competitors to imitate which gives the company a sustainable competitive advantage. They pay great attention to the administration and management of the company, for it is made up of 251 employees and they invest a lot in that sector (\$34. 5 million in 2008)AlternativesPossibilities for better performance do exist in this industry. A few strategies could be developed in order for Canadian Solar to obtain a sustainable competitive advantage, and thus gain an important edge over other solar module manufacturers. Differentiation Strategy: Canadian Solar is lacking differentiation. The company should focus on way to achieve competitive advantage, for example by creating new high-efficient solar cells (ELPS cells) that would increase their product line. That would already give them differentiated positioning in the market, whether in China or in Europe where the competition is high. Also, they could keep the cell capacity in modules (100MW) and make lighter or smaller modules than other suppliers. Outsourcing: Since the company's brand isn't really renowned, Canadian Solar should outsource its marketing activities. Having a renowned brand will be a good resource for the company and will differentiate them from others. By outsourcing its marketing activities, the company will be able improve their focus on R&D to create new technologies and they will be saving money at the same time since a contracting company will be taking care of their marketing department. In order to reduce costs, outsourcing involves strategic alliances. They only have 29 employees in sales and marketing which isn't enough. Outsourcing will help their finances since they've had net losses for the years 2006, 2007 and 2008. Financial initiatives: Canadian

Solar reduce their fixed costs in order to achieve economies of scale. In order to reduce costs, they could increase productivity. The company spent \$34.5 million in 2008 on general and administrative expenses, which was 35x more than what they spent on R&D. They should definitely reduce their expenses when it comes to general and administrative expenses. If it wasn't for the new government incentives in 2009 towards Canada and China, Canadian Solar wouldn't have made a net income of \$49 million. Therefore, they shouldn't be too confident about their net income and revenues and they should still reduce their costs. RecommendationAfter evaluating the three options Canadian Solar could adopt in order to differentiate itself from competitors and best compete in the increasingly global photovoltaic industry, I determined that the differentiation strategy would be the best option. Since their brand recognition isn't really developed, they should invest more in R&D to come up with a new technology that will give Canadian Solar a great competitive advantage. The photovoltaic module is similar between companies and in order to go higher than their 9th rank/10 of market shares and gross profits by PV module producers, they will have to raise equity capital. Therefore, a new successful technology will make them trustworthy for investors and they will gain brand recognition, which is what they need.