Tools and techniques for enterprise essay

Business, Industries

Executive summaryThis research paper examines the wind energy industry of the UK with a special emphasis on wind turbine sector. In 2005, it was estimated that the UK consumption of renewable energy was standing at 4. 2 million tones, which was an increase of about 15% over the consumption in the previous year (PRLog, 2007). Though, bio-fuels accounted for a lot of this amount, wind power also contributed significantly to that total amount. Wind energy has shown a remarkable raise in the market share over the recent past, this has been due to increase in wind farms being developed. Among factors that have contributing to wind energy increase is the increasing need of renewable energy.

However, the industry faces some challenges among them being getting permission to built new plants. The report will use the PEST analysis to get a better understanding of the UK wind energy market. IntroductionWind Force Company is a large company based in America dealing in wind energy technologies.

Its key market includes America and the Eastern European countries. However, it is bind to increase its market share globally; the company intends to open its presence in the UK. Among its main products are wind turbines that can be used to generate energy for domestic use. The company has a wide range of different wind turbines that can generate varying amount of energy. Wind Force Company installs, services and maintains the wind turbines. BWEA (2009) explains that the UK government is targeting an increase of 15% of renewables energy as at 2015, thus the company will be in a good position to market its products in line with the government’s wishes. Analyzing companiesIn relation to new wind power installations that

were installed in 2007, it was established by Global Data (2008) that the top 10 companies dealing in wind power accounted for over 82% or 353 market share. Despite that Iberdrola, E.

ON and RWE GROUP are the market leaders; they did not contribute much in adding new capacities of wind power in the UK in that year. The market was mostly driven through other companies like Dong energy, Falck Renewables and Airtricity Holding, who came out as top players in the industry in installation of new wind power in 2007. Accordingly, Dong Energy accounted for 21%, followed by Airtricity Holding with 19% and then Falck Renewables at 14%. These three companies in 2007 respectively added nearly 90 MW, 80MW, and 60MW, of new wind energy capacity (Global Data, 2008).

It is expected that of these companies, E. ON Company, Centrica Energy and also Iberdrola will possible take on the wind power market in the UK by coming out as the leaders in the industry in relation to adding new wind power capacity. In 2008-09, it is expected that E. ON will account for about 22% of added new wind power, while Centrica Energy will account for 21% and then Iberdrola at 16 % (Global Data, 2008). E. ON’s Market plans for the 2008-09Putting in mind that the UK is the windiest nation in Europe, whist Wind energy is seen as one of the E.

ON’s highly promising renewable energy technologies, E. ON Company is aggressively dedicated to developing wind farms and other wind power generating devices within the country. At the moment, the company is operating 20 wind farms producing 213 MW and has got over 18 onshore as well as offshore wind power plants in different phases of development. Thus,

E. ON’s share of the market which was 4% IN 2007 is bound to increase to nearly 22% by the year 2008-2009(Global Data, 2008). Centrica’s market plansCentrica Company, that had a market share of less than 1% of UK’s wind power market in 2007, is currently vigorously in pursuit of wind power development in UK.

It is protected that within the next two years Centrica will be next to E. ON with a market share of 21% in additional new wind power capacity. The company is taking keen interest in pursing an upstream approach of energy markets. At the moment the company is involved in various wind farms projects like developing the Lynn, Inner Dowsing and Lincs wind farms. At the same time the company has a focus on exploiting the opportunities for building two more farms to bring its total of wind power generation to about 1, 000 MW. When approved, the company will be in a position to produce over 1.

6 GW of wind power come 2010 (Global Data, 2008). Iberdrola’s market plansWith the race for market leadership in wind power poised to get more competitive, Iberdrola’s leadership in the industry will be on its account of its strategy to focus on building capacity in places that well-known wind power businesses already exist. Permitting the company to fully exploit the value creation as well as achieving economies of scale. It has been established that the Company has plans to invest more than 8. 6 billion in wind power generation for the period of two years; 2008-10. Thus, the company will be able to compete favourable. It is also emerging that the company plans to

acquire over 340 MW of wind power through a Scottish Power company (Global Data, 2008).

In addition, various new companies for example EDF Energies as well as HgCapital are poised to gain more momentum in wind power industry through developing a number of power projects in this current year next year (Global Data, 2008). Market analysisThere is a target to achieve 15% of electricity from sources that are renewable by 2015 by the UK government. The government as well desires to have renewable micro-generation sources in both urban and rural areas contributing to this target.

Currently there are about 15 companies that are manufacturing or fabricating prototypes of over 20 varied vertical axis as well as horizontal axis small wind turbines operating in the UK wind energy industry. According to Syngellakis (2009) 30% of these companies are located in the villages or in the country parks, while 16% are located in the denser areas around tall building. However, correct estimate of energy harvest in urban surrounding remains a big challenge and those who won urban turbines seems to be let down with their energy harvest. There is a huge difference in prices of the small turbines.

But prices reduce as the size increases, with average price for each installation of kW being 4789 Euros. Site factors play a key role in pricing of small turbines (Syngellakis, 2009)PEST analysis of the UK wind energy marketIn assessing the macro-environment of a business, it is critical to identify the various factors that may at the end affect different important variable that are in turn likely to impact the organizations, supply and

demand amounts and their costs (Grant, 2007). Finlay (2000) explains that, the drastic and ever-changing business environment creates uncertain atmosphere and impacts the functioning of the entire organization. Various checklists have mean formulated as means of classifying the various different aspects that could impact an industry. A PEST assessment is one of the tools used in analyzing the macro-environment of an industry. PEST analysis is a structure that classifies environmental impacts as political, economic social and technological forces. At times, two more factors are added which are environmental and legal, thus making it to be PESTEL.

However, these two last factors can simply be subsumed within the others. Consequently this paper will analyze the first four factors meaning PEST. The results will then be used to for the organization to exploit the advantages and opportunities on the UK wind energy market, while at the same time, the company will make eventuality strategies for dealing with threats. Grant, (2007) suggests that PEST assessment is an important strategic tool that is used to understand the market position, its growth or decline and its potential as well as direction for operating. PEST analyzing is a structure for assessing a situation of the industry and can be used with other market analysis tools such as SWOT or Porter’s Five Forces models in reviewing its strategic plans including analyzing new markets. PEST as well ensures that an organization’s performance is inline with the powerful forces of change that affects the business environment (Porter, 2004). As Porter (2004) notes, PEST is a useful tool when an organization decides to enter into a new market and new country. The application of PEST in this situation assists in

breaking free the unconscious presumptions and assists to efficiently adapt the realities present in the new business environment.

Political FactorsIn this aspect, the following factors have been established as drivers for turbine wind energy. The UK’s national renewable energy target that is but at 10% as at the year 2010Energy policy: The wind energy enjoys a lot of autonomy from the government. At the same time the government gives out incentives to companies that ate promoting energy efficientTax policies: Renewables energy sources are exempted from levy in UKDeregulation policies that the government has put in place are seen as a common driver of the energy market for new companies entering the UK market. For example the opening up of renewable electricity market in the UK is a clear indication of freeing the market for foreign companies.

Privatization: this is another aspect that is seen as a driver. However, might not be realistic unless there is an understandable separation among suppliers and the wind energy companies. There is proper national information on technical as well as financial issues. Barriers: Reduction in spending on research and design due to financial hardships the government is experiencingLow buying price of biomass and small cogeneration that could result in low demand for wind energy technology (ENIRDGnet, 2003). Economical factorsThompson (2002) explains that, Economic conditions a country affects how simple or difficulty it is for a company in that country or a business to succeed and profitable at any given moment since they affect capital availability as well as cost, and also demand. Supposing the demand is buoyant, for instance, and the capital cost is low, then it would be

attractive for companies to invest in such and a country and grow with prospect of being profitable. On the contrary companies could find that in certain industry, the profitability is low throughout. In the last three or four years ago, the demand for these components have been increasing so much and to obtain crucial components like gearboxes as well as bearing, turbine companies were forced to resort to other strategies like vertical integration as well as entering into long-term contracts with those supplying the components.

But, suppliers were not ready to meet the ever increasing demand, a position that coupled by some design complexities of components, was leading to shortage of supply which was upsetting the industry. The UK economy is predicated to experience a slowdown over the next few years. This possibility could impact the level of a work in the building industry directly negatively affecting the demand of small turbine, and thus affecting the chances of the company succeeding in industry. Other positive aspects of economic factors include: The economy of the UK could be experiencing a downturn, but, it is still vibrant and the sterling pound is still a strong currency around the world. Money supply: it is considerably easy to get national or even European funding for Renewable Energy Projects in UKBarriersThe new Electricity Trading Arrangements (NETA) that was enacted in the UK has been interpreted as being a barrier since it penalizes energy sources that are non-predictable (ENIRDGnet, 2003). Investment cost: the initial investing in wind energy could be expensive in UK because the investment required meeting all set standards and to ensure safety and quality could be higher (ENIRDGnet, 2003). Social FactorsThe fact that

London is going to host the 2012 Olympic Games also stimulates the construction industry and helps in creating more demand for energy consumption especially the renewable energy such as wind energy. In addition to this, the following social factors acts as drivers: Increase in employment: the increase in employment could mainly occur for those companies in wind energy industry particularly for those companies manufacturing wind-turbine.

Increase in earnings: this could be due to increased employment; more earnings would allow people to buy more wind energy technologiesIncrease in energy demand: Owing to increase in population increase, coupled by increasing preference for renewable energy, the demand for the wind energy products will increase. Favour for renewable energy: with the ecologist and the general public showing strong support as well as better acceptance of Wind energy technology in UK, companies in the industry will have a boost from these to key players in the industry. Educational and professional qualifications: The UK boost of have got good educated and professional workforce that understands how to develop and utilize wind energy.

At the same time, the public well informed about wind energy technologyThere is a good consciousness of sustainable energy use and interest in wind energy in UK. Barriers: Sometimes there is resistance from the public on some of planed onshore projects. Reduced earnings and global meltdown is affecting families and they may not have much to invest in wind energy technologies (Syngellakis, 2009). Technological factorsA number of factors have been established as drivers in this aspect, they include:

Research and Development on Renewable energy sources, the research is expected to help companies within the industry and develop new businesses fro them. Fast technology transfer within the industry that is supposed to benefit the companies operating in UKConstant power supply: more so, wind energy can assure its consumers of continuous power supply and other uses such as, standby power and power source for remote places.

Being aware of these uses comprises a driver for wind turbines. In addition to this, the following factors also acts as drivers in the industry: Good information and communication infrastructureImproved storage technologyBetter wind energy predicting software andNew raw material and proceduresBarriersTechnical restrictions that could hinder the company form exploiting the market are: Poor advancement of results gotten from the research carried outThe expense on the technology required could take a long time before return of capital investedTechnical limitations placed on the networkCurrent network design measures and proceduresSafety issuesConclusion and RecommendationsThe UK turbine wind industry has got a lot of prospective: its largest asset is presently the great interest being shown by the public as well as the private sector, together with the positive attitude of key players in the industry towards the new technology. The current global economic downturn has begun to have its effect on the wind energy in UK. Fresh assessment from a research company Frost and Sullivian asserts this (BWEA, 2009). Indeed, some companies operating in the UK market are reducing their projections and cutting down on their production for this year (2009), since the market for the first time is showing indications of a slowdown. However, Frost and Sullivian says, that this could bring a

positive impact like reduction in price of turbines because of the falling prices of raw material and speeding up of delivery of components (BWEA, 2009). Promoting and discouraging market forces of wind energy in UK market have been established.

The main promoting factors are environmental concerns, deregulation of energy market, energy independence and its efficient usage as well as diversification of power sources. These promoting factors or drivers are translated into different incentives as well as tax policies. Some barriers or discouraging factors includes, reductions in public spending, absence of technical standards, reduce earning, high cost of technology and low prices on electricity. Nonetheless, it is important that the company be realistic with the capabilities of the industry.

It is clear that wind turbines will be more marketable in rural areas than in urban areas because the urban areas receive lower amounts of wind speeds, at the same time urban area have lower capacity factors. This aspect decreases energy production considerable thereby reducing the economic viability. Thus, for the company to successfully capture the urban market it will have to improve the technologies used.

This is possible because wind energy technology is still maturing. In addition the company can also improve the capacity of its turbines by responding quickly to problems arising and advising customers appropriately on the how suitable their location is for the turbine. When the company establishes its presence in the UK market, it will be able to gain more data on energy predictions and be more accurate and experienced in turbine site, thus be

able to place the turbines in locations that they can most possibly optimize wind capture. The availability and application of modernized telecommunication as well as information technologies, together with the internet acting as a linkage between customers and the organizations, plays an essential role in boosting business. Modern telecommunication reduces the cost of operations and allows high levels of communication even outside the country.

Nonetheless, it is anticipated that 2008-09 period will witness a major change in relation to wind power ownership composition in the UK. Motivated by good support given by the government and huge wind power prospective, a new group of companies is set to emerge as the key players and leaders in the industry. A lot of new companies have started to focus on developing their wind power range in the UK ReferenceBritish Wind Energy Association (BWEA) (2009): Delivering the UK’s wind, wave and tidal energy: small wind systems: Available online at: www. bwea.

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