

Porter's Five force analysis on the Utility sector of India

Porter's five force analysis includes:

- ☐ Bargaining power of the buyers
- ☐ Bargaining power of the suppliers
- ☐ Rivalry among existing competitors
- ☐ Threats of substitutes products
- ☐ Threats of New entrants

The bargaining power of buyers depends on the number of companies providing the same product. If the number of companies providing the same product or service is significant, then the bargaining power of the buyer is high as it leaves the buyers with several choices to choose from. If we talk about the utility sector in India and that too renewable energy sector.

Amid the rising concerns about climate change, the government of India is shifting its focus toward cleaner sources of energy like wind, hydro and solar energy. With recent international summits based on climate change, more and more countries are aiming toward making net emissions zero by 2050 India being one of them, is introducing newer policy initiatives to encourage companies to shift from non-renewable energy sources to cleaner renewable energy sources.

Its policy initiatives include:

- ☐ In the Union Budget 2022-23, the government allocated Rs. 19,500 crores (US\$ 2.57 billion) for a PLI scheme to boost the manufacturing of high-efficiency solar modules.
- ☐ In June 2021, India launched the Mission Innovation CleanTech Exchange, a global initiative to accelerate clean energy innovation among countries.

In recent years the investment in this area has increased immensely. Non-conventional energy sector received an FDI inflow of US\$ 11.21 billion between April 2000 and December 2021. There has been a rising foreign investment in the renewable sector (such as the US\$ 75 billion investment from the UAE). With the favorable policy initiatives taken by the government and increasing investments, more companies are transitioning from conventional to non-conventional forms of energy, offering more choices to the buyers. An increased number of choices will increase the buyers' bargaining power.

The bargaining power of the suppliers mainly depends on the number of suppliers in the market who offer the same undifferentiated product and the ease at which a company can switch to other suppliers. If the number of suppliers is less and the cost of switching to other suppliers is high, the bargaining power of the supplier's increases.

India manufactures as well as imports solar cells and solar modules. As Indian solar manufacturers expanded their module production capacities last year, the volume of imports of foreign-made cells to assemble those panels rose. The value of solar cells imported from April to the end of last year stood at US\$633 million, topping the US\$572 million figure reported for the whole of the previous fiscal year. China was the most significant source of imported solar cells from April to December, accounting for US\$578 million, Malaysia US\$20 million, and Thailand US\$16 million. With China dominating all the other countries in terms of the amount of import of solar cells and modules it makes to India, it is the main supplier of solar cells and modules, which empowers it to bargain as per its requirements.

Rivalry among existing competitors: With rising concerns over climate change, initiatives taken by the government in the form of policies to encourage companies to shift from conventional to non-conventional sources of energy and the ever-increasing investments in this sector in recent times have led to many companies adopting renewable means to generate energy. Large companies are operating in this sector, such as ReNew Power Ventures, Suzlon, Tata Power Solar System Ltd, Adani Green Energy Ltd, etc., but since they are all new to this sector, the rivalry among them is not so high. In December 2021, India's largest energy provider, Tata Power, was awarded a contract by the Maharashtra State Electricity Distribution Company Limited (MSEDCL) to set up a 300 MW wind-solar hybrid power plant. Similarly, many companies compete with others to win such projects to increase their portfolio of renewable energy production, leading to a fierce fight among them regarding pricing, innovative technologies, etc., offering more choices to the consumers to choose among these.

The threat of Substitutes products: The threat of substitutes product will remain high as long as the non-renewable source of energy remains cost-effective. Recent innovations and high-end technology have made manufacturing solar cells and wind panels a lot easier. Still, there is a lot of scope for improvement in terms of increasing the power conversion efficiency of solar panels and reducing their manufacturing cost, etc.

The threat of new entrants: The threat of new entrants is low as the cost of generating renewable energy is very high. For example - The cost of setting up a windmill or a solar panel is quite high, making it difficult for new entrants to enter this sector.

