Economics

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There is a continuous increase in gas prices in Australia and the sector is experiencing a period of heavy growth (Ford, Steen, & Verreynne, 2014). An amount of $ 350 billion has been spent on various gas projects which are at various stages of planning. Like all gas related projects, these projects are creating environmental concerns for the society as a whole e.g. coal seam gas project will require installation of long pipelines from wells to central production and distribution place. Presently, Australian oil and gas sector provides a unique opportunity to assess the impact of environmental regulations. Adhering to these environmental regulations will result in an increase in prices of the final product. Government intervention should be continued in form of price control and environmental regulations so that people get gas at reasonable price and there is least danger to the environment.

Gas comes into natural resources under the head land which has been defined by Adam smith as a combination of natural resources which can be used to produce goods. Demand is defined as the willingness and ability to purchase a product. Ability relates to purchasing power whereas willingness means that person does have a desire to use that product. Another concept that is closely related to this scenario is the price elasticity of demand which is the ratio of percentage change in quantity demanded to percentage change in price (Layton & I.Tucker, 2019). If we talk about gas, it is a product that has an inelastic demand because its use cannot be abandoned or postponed. In other words, it is a necessity of life that cannot be quit. Inelastic demand means that consumers cannot change quantity demanded in response to change in price. Income elasticity of demand is also associated to this scenario and gas is a product which is income elastic which means that people with higher income will use more gas and vice versa. For most industrial units, gas is a variable cost i.e. it varies with increase or decrease of production.

Large industrial customers purchase gas directly from wholesale gas market and there are general sales agreements between parties. Smaller industrial units purchase their required products from retailers who provide a wide variety of offerings ranging from formal general sales agreements to standard retail contracts. 1 P j/a threshold also provides a differentiation for type of connection. High pressure transmission or sub-transmission pipelines are used to deliver gas to large industrial customers whereas smaller customers are provided the product from low pressure distribution network. A government intervention in form of compulsory environmental regulation will affect both large and small industrial units simultaneously but increase in costs will affect smaller firms more as compared to larger firms.

Load factor is considered important when analysis of gas prices is undertaken and it is calculated as a ratio between actual used quantity of gas and maximum allowed usage level of gas by any customer. Both large and small scale users of gas are affected by load factor considerations because more load factor will mean higher prices for customers. There is a high load factor for households because ratio of actual consumption and maximum allowed consumption is high which will mean that there will be more effect of change in prices. The load factor for larger units is generally a flat one because both average and maximum consumptions are high whereas smaller units will have more variability in load factor figures because of their working hours.

Take or pay level is another factor that shows variability along with load factor. The reference quantity in case of this measure is the minimum level of gas that a user has to purchase from a gas company, if users do not purchase the minimum amount, payment has to be made for it to gas company. Large industrial units use take or pay levels set at 80% of their average usage because any level below 80% will affect pricing levels.

Time span of general sales agreement will also define how change in price will affect a consumer. A short-term agreement has less than three years of life while more than three years’ contracts are considered long-term. In short-term contracts, any price increase in gas cannot be transferred to retailers unless there is a specific clause for transferring this increase in the contract. Large industrial set ups have long-term contracts with upstream producers but more recently, retailers have also entered into contracts with large scale producers. The environmental regulations are expected to affect companies in the longer run because these regulations take time to be effective that is generally more than three years. In long-term contracts, there is a provision that allows for transfer of price hike to the customer. With more hikes in prices of gas, customers prefer to have short-term contracts so that there is no risk of changes in prices. In case of a price fall as it has done in WA, it will be a disadvantage to the customer and advantage to the seller (Greenwood, 2017).

Gas prices have stabilised but they are still on a higher side for C & I gas users. Export parity prices affect gas prices in country which are calculated as LNG netback price and is defined as the maximum price that a customer should expect to pay for gas in a properly functioning market. Many customers in the east coast have been paying prices for gas which are much higher than LNG netback prices which showed that market is inefficient. Australian government undertook an agreement with LNG companies. Competitive terms were settled with these companies to provide LNG to consumers. There was a significant decrease in prices of gas products in the end of 2017 and in 2018, these prices were connected to LNG payback values. An increase in demand of gas meant that there is an increase in prices as well. The factories working in the East coast areas have decided to relocate their businesses or close operations altogether. One particular example of a company that has exited East coast is RemaPak which experienced 400% increase in gas prices. If there is no relief in wholesale gas prices, many other companies will exit the east coast area. Most of these companies will have bigger problems when their capital expenditures become due. LNG netback prices are available on websites of some government agencies so that businesses can use them as a benchmark for assessment. Some criticism has been received by these agencies that publishing such prices is similar to setting prices of gas however agencies say that their major aim is to improve transparency in stetting gas prices. Prices of LNG show that it will remain at $ 9.2/G.J till 2020.

The LNG netback prices are significantly lower as compared to prices offered to customers prior to this intervention. In short term, there is considerable variability in these prices especially in the short term. Companies have to keep a balance between taking advantage from short term price hike and planning for long term future growth at the same time.

In the medium to long term time span, an acceleration in investment in gas exploration and development. Key infrastructure should also be continued to develop. Government should encourage further development of infrastructure. Most companies are not well prepared to take advantage of opportunities available for developing infrastructure. The government agencies have important role to play in this while scenario. An increase of transparency in price setting is one of the major aims pursued by government agencies. Another improvement in whole scenario is that information asymmetry is minimized across all gas users. There are certain areas of concern which have to be looked into. One specific area of concern is the poor transparency in East coast gas market (Sims, 2019).

There is a rise expected in Gas and LNG demand till 2035 with China emerging as world’s biggest importer of gas and LNG. China, ASEAN and south East Asia will account for 95% of total growth in demand. Europe and rest of Asia’s gas supply is going to decline over this period of time. There will be Asian economies in front seats of development till 2035 led by China with USA also showing growing demand. World gas demand is expected to rise by 0.9% while the same figure for Asia is expected to be 2.1% per year. On the supply side, US will lead as top supplier with almost 60 % of total supply (McKinsey energy, 2019).

Keeping in view, all the above discussion, the discussion can be concluded with two or three points, there should be transparency in setting prices of gas, demand for gas is on an increase and supply is controlled by a small number of countries and finally with a considerable difference between demand and supply, it is compulsory for governments to keep interfering in gas sector. In order to properly implement environmental regulations, government has to make sure that there is a balance in demand and supply of gas.

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