

Household energy consumption in california essay

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Household Energy Consumption in California Economics can be defined as the study of how scarce resources are allocated and affected by the different demand and supply forces on a large scale. Supplies refer to the available goods or products that are distributed or sold to the consumers whereas demands refer to the consumption rates or consumption quantities of the consumers of the supplied goods.

Microeconomics, on the other hand, is similar to the concept of economics only that the coverage of the studies conducted are on a smaller and more specific scale. It primarily deals with the ways in which households, firms and individuals decide in allocating resources that are limited in order to maximize the use of such resources. The law of demand is a law of microeconomics that states that the demand for certain goods and services from certain consumers will decrease if the prices of such goods and services increase with all the rest of other factors being equal. The same can also be said about the opposite scenario where the price of the goods and services are lower; in such a case, the demand from consumers will increase. On the other hand, the law of supply states that the quantity or number of goods and services that a supplier offers increases in the situation where the prices of such goods and services also increase.

Likewise, the prices of the services and goods decrease whenever there is a decrease in the quantity of the goods and services being supplied. There are many factors that contribute to certain changes in both the supply and demand of goods and services. Moreover, the demand for goods and services would most likely affect or change the supply of the same goods and services. For instance, a higher consumption rate and demand from

consumers of canned sardines will change the available supply of canned sardines in the market. The purchasing power—or the capability to buy goods and purchase services—of the consumers can also change both the demand and the supply of goods and services.

For instance, individuals belonging to the upper strata of the social hierarchy in terms of financial status are more able to purchase certain goods and services in contrast to the individuals who belong roughly in the lines of poverty. Thus, if the main market of a certain costly service targets the lower income families, it is most likely that such families or most of them will not be able to avail of that service given the high cost of the service relative to the financial capabilities of the individuals. The availability of raw materials can also change the supply of certain goods. For example, the low quantities of aluminum for creating cans can result to a low production of canned goods, thereby decreasing the supply of the product. Based on the official energy statistics reported by the Energy Information Administration of the United States government for 2001, California has roughly around 12.3 million households. Out of this total number of households, 0.

75 quadrillion Btu or British thermal units of electricity were consumed which translates to about 73 billion kilowatt hours. Almost half a quadrillion or 0.49 quadrillion Btu for natural gas was also consumed for the same year which is about 475 billion cubic feet. All the other energies consumed would equal to about 0.

28 quadrillion Btu and the total Btu consumption per household amounts to 62.3 million Btu, excluding the energies from primary electricity and wood

used. For primary electricity, a household consumed 5, 948 kWh of primary electricity and 45 thousand cubic feet of natural gas last 2001 in California (Consumption and Expenditures Data Tables, 2001). In 1997, California had 11. 5 million households which used 0. 72 quadrillion Btu of electricity or 70 billion kWh. Natural gas consumption amounted to 0.

49 quadrillion Btu for all the households or 919 billion cubic feet. All the other energies consumed would equal to about 0. 96 quadrillion Btu and the total Btu consumption per household amounts to 104. 2 million Btu, excluding the energies from primary electricity and wood used. For primary electricity, a household consumed 9, 988 kWh of primary electricity used and 87 thousand cubic feet of natural gas last 1997 in California (1997 Consumption and Expenditures Tables, 1997). Between 1997 and 2001, it can be observed that the trend in the consumption pattern for electricity among the residents of California decreased by 3 billion kWh even though the number of households increased by 0.

8 million within 3 years. Likewise, the consumption in natural gas decreased by 444 billion cubic feet and the average electricity consumption for every household decreased by 4040 kWh per year within the same span of time. The rate in the total Btu consumption per household as far as the other energies used are concerned has also decreased by 41. 9 million Btu.

There are many factors that can be considered in the decline in the total consumption of energy in California between 1997 and 2001. During May 2000 to June 2001, California experienced increases in electricity rate prices because of a decrease in the output of electricity from the hydroelectric

plants, thereby effectively diminishing the supply of electricity while the demand for electricity remained the same or more or less likely increased due to the increasing number of households during the time (Pope, 2002). The observation of Pope (2002) reveals the effect of supply on the prices of basic goods and services given the irremovable presence of a steady demand and the inability to provide a sufficient amount of supply on the existing demand. The fact that the number of households in California increased between 1997 and 2001 implies that there has also been an increase in the number of consumers of electricity and other forms of energy.

Given the increase in the number of consumers, it is expected that there will also be a corresponding increase in the demand. Yet even though it can be said that there was an apparent increase in the demand for energy, it cannot be disputed that there was a decrease in the usage of electricity among the households. The fact that there was a decrease in average consumption indicates that the households used less electricity in 2001 than in 1997, thereby suggesting the idea that consumption rates decreased while demand increased. Moreover, the decrease in consumption and the increase in actual demand by virtue of the increase in the number of households suggest that the supplies of electricity was bordering between enough and less. That is, the electricity supply would have been increased because of the increase in actual demand or that the electricity supply was enough to power the total households since there was a relative decrease in the consumption rates. Conversely, the price of electricity was lower and the supply of electricity was sufficient prior to 1997.

A few months after, the price of electricity increased as a consequence of the decrease in the supply which seems to defy the law of supply. However, it is not necessarily the case that the situation back in 1997 defied the economic law of supply since not all the factors considered are equal. One of those factors is the fact that electricity is a basic commodity that cannot be or can hardly be abandoned entirely.

Since California is the location of numerous industries and households, electricity is not a factor that is equal with the other factors such as household number. Electricity is essential to every household and industry whereas households and industries are not essential in the production of electricity per se although, of course, the estimates of the supply of electricity depend on the existing demand to a certain degree. It is enough to say that California has experienced an increase in population in the past and more likely in the coming years. That being said, the actual demand for electricity will likewise increase and the need for the supply of electricity should be able to fill the increasing demand. References 1997 Consumption and Expenditures Tables. (1997). Retrieved.

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