Abstract



Abstract Energy in today's modern society has indeed fluctuated. Energy and its needs of today vary from natural gas, to solar to fuel cells, and all alternate renewable sources in between. It is an important part of our daily lives from building potential energy as we sleep, to when we use kinetic energy to wake —up and get out of bed in the morning in order to grab that first cup of coffee or tea, or baking cookies, as well as participating on a sports team. We use all aspect of energy to function, especially throughout the year at different points in our life, and all energy sources have their pros and cons, and the sources of energy needed also determines depending on our surroundings, and environment. Forms of energy that deems itself reliable consist of natural gas, solar, as well as wind. In the country of Germany the countryside depends on many different sources of energy in order to progress in their daily live especially for those individuals who work the farm lands or live in small villages of the windy mountain, and hillside. These individuals definitely depend on a combination of wind, and solar power due to the fact that they use smaller power grid that it is base off that of solar power, and have the use of large wind mills. These sources of power has origins dating as far back as 5000 B. C., for instance wind energy that was used to help propelled boats across the Nile river (2011, History of Wind Energy). Or even that of solar energy dating back as far as 700 B. C. when the use of using glass to concentrate the sun's emissions in order to make fires (2013, The History of Solar), or the origin of natural gas which dates as far back as 1000 B. C. and perplexed to the Greek civilization because it was thought to be a supernatural or divine sign as it would seep from fissures within the earth's crust and rise to the surface, and would be lit by lightning and seen as a flame; the Chinese in 500 B. C. would use these fissures and

built bamboo shoots and divert gas in order to boil sea water and turning it into a potable water source (2004-2011, Natural Gas History). And these types of energies assisted our daily lives as helping individuals keep cool within the summer and warm within the winter timeframe for which is much needed for the cold fierce winters of Germany. Although Germany have its share of cold winter nice the sun is out and shining and thus makes use of the solar powered selection used on its countryside, as well as that of the wind mills used on the hill and mountainside, and within the main cities like Frankfurt and Munich they rely mainly on natural gas as a power source to heat their homes especially within the winter timeframe. Within Germany the theme of their energy policy embraces three goals which is the purpose of environmental conscience, economically friendly, and the security of supply (2012, The renewable energy industry in Germany). Even though all renewable resources are useful and a cleaner source of energy each one pertains to its pros and cons. For instance natural gas has its advantages because it can be stored safely and efficiently and has a low emissions rate, on the other hand natural gas also has its disadvantages as it is hard to detect if a leak occurs within a home because it is odorless, colorless, and tasteless, natural gas can also be unstable if transported carelessly (N. D., Natural Gas). Wind power also produces its advantages and disadvantages some pros consists of wind farms leaving a smaller foot print than that of coal-fired power plants, or that wind energy it economically efficient and can be used where electrical grids do not reach (2013, Advantages and Disadvantages of Wind Energy Reviewed). Some disadvantages would be that wind power the wind turbines may sometime interfere with television signals of those living close by, it also can cause an uneven supply of power

when connected to the electrical grid, or that the initial cost of these turbines can be expensive (2013, Advantages and Disadvantages of Wind Energy Reviewed). Solar power also precedes its list of advantages and disadvantages. For instance solar power is always a constant reliable renewable resource; solar energy does not create pollution, and solar energy panels requires very little maintenance in order to keep running (2008, Solar Power-Advantages and Disadvantages); but as well as it sounds solar energy also produces disadvantages it has a fairly low output, needs to be stored in battery form, and it is expensive to harvest, but stills maintains a carbon trail (2008, Top Five Solar Power Disadvantages). With knowing the cost effective, advantages and disadvantages of each energy source it is also good to know how to conserve energy within the home place, work, or any other means. Germany is considered to be a very ecofriendly energy conservative place to live; aside from recycling the cities and towns many partake in the use of walking, and bike riding as a way to conserve energy. Another way they conserve energy is to turn the street lights on all the side streets and streets with little travel at night off, as well as certain areas on the autobahn to control the output of electricity of the city at night, another way to conserve is through the use energy conservation products such as light bulbs, and washer and dryers. In conclusion energy is a major aspect of our daily lives. It is important to realize the importance of our energy sources ranging from nonrenewable resources to renewable resources. And to understand our environment and the best use of certain energy forces such as having the use of wind farms in windy areas, or the use of solar panels in mostly sunny areas, or just clean burning energy to help minimize pollution such as the use of natural gas. And how each source of energy has their pros and cons,

but when combine it helps to minimize the use of depleted and harmful resource. References U. S. Department of Energy (2011). "History of Wind Energy", Retrieved from http://www1. eere. energy. gov/wind/wind history. html, April 16, 2013 U. S. Department of Energy, Energy Efficiency and Renewable Energy (2013). "The History of Solar", Retrieved from http://www1. eere. energy. gov/solar/pdfs/solar timeline. pdf, April 16, 2013 U. S. Energy Information Administration (2013). "Country Analysis Note", Retrieved from http://www.eia.gov/countries/country-data.cfm?fips=gm, April 16, 2013 Naturalgas. org (2004-2011). "Natural Gas History", Retrieved from http://www. naturalgas. org/overview/history. asp, April 16, 2013 Damaschke, Nate (N. D.). "Natural Gas", Retrieved from http://www.tc. umn. edu/~dama0023/naturalgas. html, April 16, 2013 ENEA (2012). "The renewable energy industry in Germany", Retrieved from http://www.enea. it/it/produzione-scientifica/EAI/anno-2012/n.-3-maggio-giugno-2012/therenewable-energy-industry-in-germany, April 16, 2013. Windturbinesnow. com (2013). "Advantages and Disadvantages of Wind Energy Reviewed" Retrieved from