

Renewable energy will be the most significant challenge for the oil industry

1. Introduction

“Renewable energy” technologies are important source to “energy supply” range, since they put in to globe “energy” defense to diminish dependency on “fossil fuels” along with provide opportunities towards moderating “greenhouse gasses”. “Renewable energy” is believed to be critical contributor to the fiscal improvement of rural areas; a way for decreasing need all the way through the making of opportunities and improving the lives. “Renewable energy” was dislike in the previous decades due to exceptional cost to implement. Except for “substantial hydropower, combustible biomass, and bigger geothermal ventures”, the standard expenditure of “renewable energy” were not aggressive by the extensive “energy” and “fossil fuel” costs (Al-Saleh, 2007).

Moreover, there was an enormous development in “renewable energy” segment. The increasing prices of “oil”, problem of not natural climate alteration, “carbon gas release”, violence and opinionated turbulence in “middle east” oil producing countries are the real strengths driving this improvement. “The International Energy Agency” appraises that almost half of worldwide power

supplies should originate from renewable energy sources considering the end goal to decrease “carbon dioxide” release by “50% by 2050” and minimize huge, irreversible ecological alteration influence. In the 5 years time from the end of “2004 – 2009”, overall “renewable energy” developed at the rate of “10-60%” for some advances (Smith & Taylor, 2008). In “2008” interestingly, more “renewable energy” than “convectional power” capacity was included both “European Union and United States”, illustrating “a basic move” of the globe’s energy marketplace towards “renewable energy” (www.worldenergyoutlook.org, 2015).

Most of the oil producing countries is facing the problem which is caused by their oil producing process. It affects the environment badly. Moreover, meaningful and price effectual weather action might be the major factor to unlock market admission for oil sands, the hunger for a tighter amalgamation among these “star-crossed companies” can be now expected (www.renewableenergyworld.com, 2014).

2. Advantages and Disadvantages of renewable energy resources

Initially, amongst the most important points of concern of “renewable energy” is that it in no way expire. Genuinely, “renewable energy” is significant towards public when “fossil fuels” are additionally depleted. By the endless “supply” of “renewable energy”, it feels secure whilst having bounteous “energy supply” to last our “planet, our human race and our economies”, for years. (Khemani, 2011) stated that "as long as human life is there, there will be earth, sun, wind and water and energy from these sources will also be available as long as they are there". With the large quantity of numerous renewable sources and advancement of science and innovation, he firmly trusts that renewable energy can meet the world's energy needs for all times.

Furthermore, another benefit of “renewable energy” is that capacity of giving un-interrupted

power supply when it generally might be debilitated. In a few circumstances, “renewable energy” could be more dependable than different kinds of supply of power. Like, “solar electricity” could be utilized after storms for reaction and recovery. “Renewable energy” technology, like “generators fueled by photovoltaic’s (PV)” could supply “power” if the system fails. It could take a lot of time to repair the “power supply” and reinstate energy to every client. In the event storage “battery supply” could be added to the system, it could provide “electricity” even after the sun goes down or through stormy days. One of the best option for alternate energy is that surroundings could be saved over “acid rain, smog and global warming” from using “fossil fuel”. “Renewable energy” has no “waste items, low carbon dioxide discharge or other toxins substance”. “Renewable energy” deliver much lower “carbon dioxide emissions” rather than “carbon-escalated fossil fuel” such as “oil, coal and natural gas” while they are being utilized just a small measured of “fuel” amidst the assembling of equipment. With “renewable energies”, “energy” is generally altered over from one from to other without making of contaminations. Furthermore, scholar takes “sunlight” based energy from the “sun” could be transformed to “electricity” using “photovoltaic” without the creation of any pollution like “carbon dioxide” or other “greenhouse gasses”. Thus, “wind power energy” depends on moving air and changes over it into electricity without contaminating the world. In this way, it is clear that the non-contamination or insignificant effects on environment are the positive favorable circumstances of “renewable energy” (McDonald, 2010).

The greatest drawback of “renewable energy” is that the expense of the “energy” is moderately higher than “non-renewable energy”. The preliminary cost of “renewable energy” still makes numerous individuals overlook it totally when comparing with “fossil fuel” on 2 aspects: total expense and over the same time period. Such as setting up of “solar energy water heater” costs is

high, so they chose to purchase heater for hot water arrangement. Concurring “Global Wind Energy Council (GWEC) (2008)” stated that “turbine power energy” set up costs \$ 49 billion, where as “thermal power plant” to construct “thermal power station” about \$ 3, 35 billion. He likewise also stated that other incidental costs, like upholding prices and generation prices caused price escalating. It is price that has delayed approaching “renewable energy” as compared to the “fossil fuel” source. Moreover, “renewable energy” relies too much on weather condition and geographic setting which means system cannot be install in every place. Likewise it cannot produce “hydro-electric” without having a fast “streaming water source” such as a “waterway or waterfall” (www.gwec.net, 2008). (Keirstead & Shah, 2013) stated that “despite the fact that most renewable energy sources are more environments friendly they might still have a negative influence on the surroundings”. He further stated that “hydroelectricity projects could cause a dramatic alteration in the expansion of wildlife and ecosystem along the river and flood risks”.

3. “Fossil Fuels vs. Renewable Energy Resources”

“Alternate energy source” is an attractive concept at the time given consideration. In the common culture, its mostly entails “energy” which is shaped from resources excluding our primary “energy supply”. “Fossil fuels. Coal, oil and natural gas” are the 3 kinds of “fossil fuels” which most of the division depends upon for our “energy supply” requirements, from “home warming and power to fuel” for our means of transportation, domestic needs and transport. The trouble is “fossil fuels are non-renewable”. They are restricted in making available and would get exhausted gradually. One cannot escape from this end. “Fossil powers fuels” from “plants and creatures” that existed for many years prior and got to be covered route underneath the earth's surface where their remaining parts on the whole altered in the flammable resources we utilize for “fuel”. In spite of the assurance of option “energy sources”, which is called “renewable

energy” in general they present near about around 9% of the globe’s “energy” requirements (www.ecology.com, 2015). This states that “fossil fuels, alongside with atomic energy” is a questionable, “non-renewable energy source” which are providing 92% of the “world's energy resources”. “Atomic energy”, which is basically created by “splitting atoms”, gives 7% of the “world's energy supplies”. Although, “atomic energy” is not accountable to become a main source of “world energy” use on account of “open weight” and related risks coupled by let loosing the force of the molecule. Yet, the administration observe its profound prospective and are setting up weight on the additional development of “atomic energy”. The “aggregate world energy” requirement is for around “500 quadrillion British Thermal Units” or “BTUs” every year. That is “400,000,000,000,000,000 BTUs! A BTU” is generally equivalent to the “energy” and “heat” produced by a match. “Oil, coal and natural gas supply” almost 87% of the “world's energy” requirements, or near about “350 quadrillion BTUs”. Of this sum, “oil” is the best, giving around 42% of the “world's aggregate energy supplies, or around 164 quadrillion BTUs”. “Coal” gives 23% of the “world's energy, or 96 quadrillion BTU”s, as well as “natural gas” gives the left behind 23%, or “88 quadrillion BTUs” (www.ecology.com, 2015).

“Fossil energizes” exists, and they offer a significant important service. It's fewer that we utilize “fossil fuels” for “energy” which is dangerous, yet it's the indications of utilizing them those grounds for the superior problem. “Fossil fuel” releases more “carbon dioxide”, one of the biggest “greenhouse gas” contributor adding “global warming”. Anyhow, there are considerable perils postured to normal surroundings that outcome from gathering “fossil fuels”, particularly “coal and oil”. “Oil” production has damaged surroundings and “coal mining” had stripped grounds of their essentialness. These amongst others are the necessary drive to cease the importance and towards taping the endless oil holds within the “Arctic National Wildlife

Refuge". A few assessments say that our "fossil fuel stores" would be exhausted within fifty years, whilst others state it would be "100-120" years. The fact of the subject is that none of the one of these projections is exceptionally connecting for a universal community which vigorously depends on "fossil fuels" to gather the fundamental individual requirements. The major issue is that we are going to arise short on "fossil powers" for energy and we must select the option to plan for the new age energy generation since, assuredly, human requests for energy won't diminish. Also, here is one essential element: populace growth. As the populace rises up towards ten billion in the next fifty years, the "world's energy" requirements would increase proportionately. Not just would it be imperative for "renewable energy" to stay conscious of the expanding populace growth, but it should outpace these requests in addition to start supplanting "fossil fuel energy" making in the event that we are to meet potential energy requirements (Amoco, 2006). By "2020", "world energy" use is expected to increase by fifty percentage, or an additional "207 quadrillion BTUs". As it happened that the universal use of "renewable energy sources" remains constant, the globe's available "fossil fuel reserve stores" would be consumed in next "105 years" or prior to schedule in the "22nd century". Evidently, "renewable energy" resources would suppose an unquestionably role in "power generation" throughout the subsequent century (Shell International, 2001).

Let's make it clear with a chart,

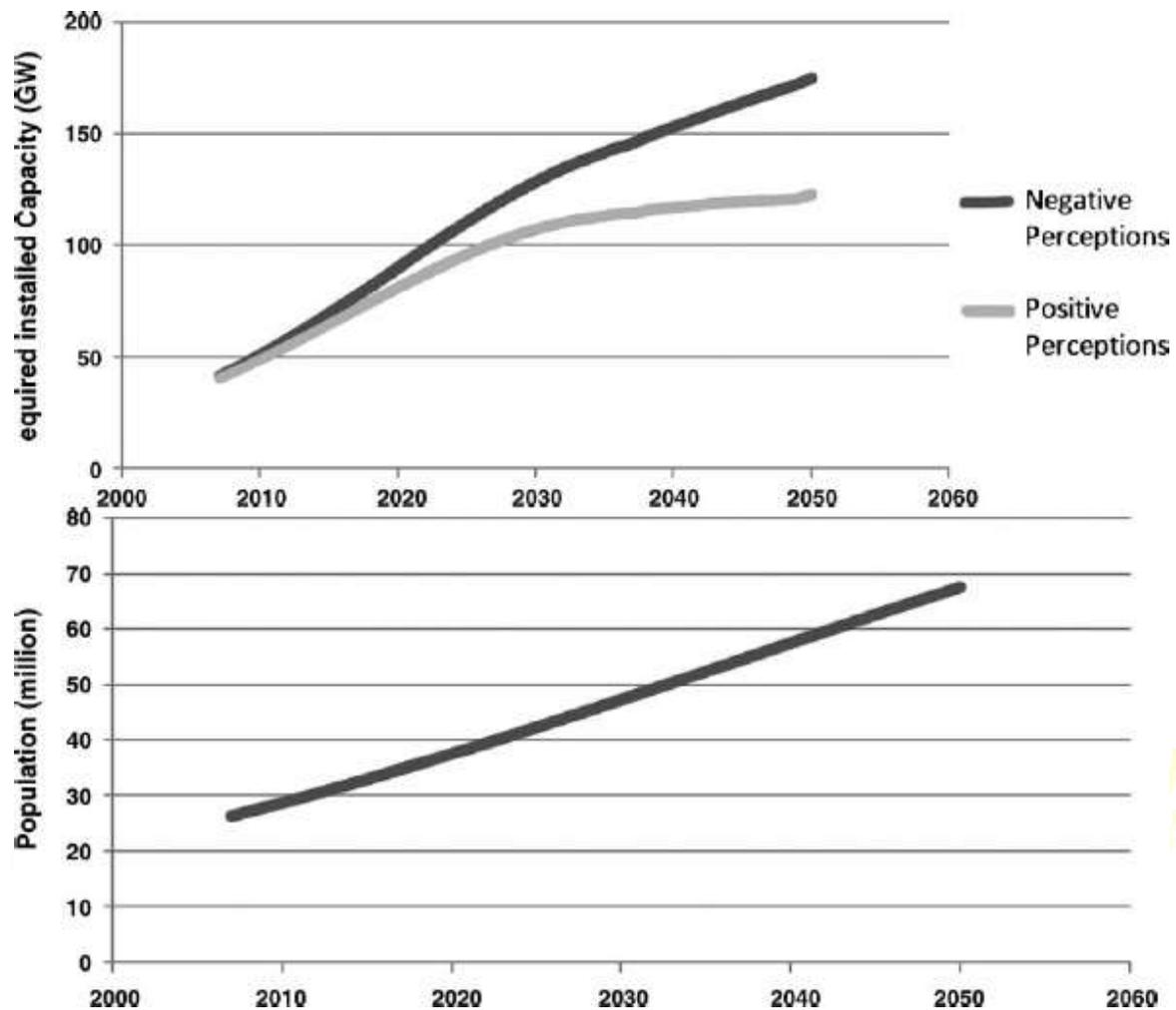


Fig: “Required power installations through to the year 2050”

4. The critical energy sources

“Sun, wind and water” are sound “energy sources” relying upon where we are. They are “non-polluting, renewable and proficient”. Regarding this all you require is “daylight, running water and/or wind”. The usage of “renewable energy sources” not just diminishes the worldwide “carbon dioxide emanations”, yet they as well put in few greatly needed adaptableness to the “energy resource” mixes by moving back our dependency on “limited reserves of fossil fuels” (Carrasco, Bialasiewicz, & Galvan, 2006). In effect, these “renewable energy sources” build

their own “energy”. The thing is to grasp and outfit their “mechanical power” and change over it to “energy” in the most excellent and effectual means possible. There’s every that could perhaps be required “renewable energy sources” to “supply” the bigger division of the globes “energy” requirements everlastingly; though, the examination is to build up the capacity towards adequately and economically catch, stock up and make use of the “energy” when necessary. The last “source of energy” is the “sun”. Its “energy” is found in everything, which includes “fossil fuels”. “Plants” rely on upon the “sun” to build “nourishment, animals eat the plants”, and they overwrought turning in the major basics for “fossil fuels”. The “sun” as well offers adequate “energy” that could be put away for utilize longer after the “sunset” and also in cloudy times. It will be a cost restrictive to create “solar energy” standard for significant world utilization approaching. The improvement is essentially set for few industries and customer requests; however it would be far excessively costly, to supplant the present energy framework utilized for “fossil fuel energy”. As stated by the “European Photovoltaic Industry Association”, “solar power” can give “energy” to further than “one billion” individuals by “2020” as well as 25% of worldwide energy requirements by “2040” (www.renewableenergyworld.com, 2014). “Wind and hydroelectric power”, which were utilized viably for eras, are quickly developing “energy markets”. The guideline following both is that the “force of the wind and water streams” is gone through “turbines” which change over their “energy into electricity”. “Commercial wind energy” is generally gathered by “wind farms” comprising of many “wind turbines (windmills)” put on big plots of area. “Hydroelectric power” is tie together in many distinct ways. The most prominent is through “dams”. The other type of “hydroelectric power” is “tidal power”. It was used from “1900’s”, “tidal power stations” gathers the “energy” made by the movement of the tides to change it to “electricity”. “Biomass energy”, or “energy” from “burning plants” and from

additional natural matters, is an individual initial resource of “energy”. “Wood” was previously the major resources of “energy” for warmth, and it remains so in a wide range of countries till now. It is in this gathering was seen being amongst the primary to change over to “solar heating and energy” since there is no additional accessible foundation to delay its growth (Roberts, 2005).

5. Conclusions

A lot of “the oil-rich” countries were benefited extremely from the current rush in the prices of oil. The oil producing process caused much harm to the environments. The oil producing companies are now engaging more into “renewable energy” as an alternative. By the current “energy” along with ecological apprehension, there is an obvious worldwide eagerness for “renewable energy” options. It was stated that presently this is the most suitable phase to spend in developing abilities within the field of “renewable energy” so as to protect the nation’s prospect for a “sustainable economy” as well as to tackle its fast rising “energy” requirements (Pehnt, 2006). The force towards “renewable energy” must not be observed as a comfort but instead it is a must, as a symbol of superior authority, apprehension for the surroundings and carefulness in oil making strategy.

6. References

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