

Alternate Energy Sources

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Abstract— Alternate sources of energy are the most widely researched topics and main area of concern for even the researchers and scientists. the main topics and area of research include the kind of alternate energy sources we are looking for ,it can be the solar energy ,wind energy even the ocean thermal energy is also a biggest step to generate energy and enlighten the future. Very often we hear that the there are various advancements in the field of solar energy and wind energy mainly. The area of research not only include the kind of research strategies involved but also include the kind of work done in order to achive that. Peoples of various places develop the sources that generate energy in very large amount. A proper need can be the most efficient way to generate the energy through different ways. These days there are several ways to generate energy in every possible way.

Keywords: wind, oceo thermal, alternate energy

Introduction

With decreasing non renewable energy sources there has came the urgent requirement of generation or invention of alternate energy sources. These sources of energy are very important to survive in future generation and to prevent global warming on other hand. Peoples now days have got this new idea of developing this idea of sustainable development to a higher level. There was always this myth that this idea of developing

alternate energy would be the typical task but at last it came and emerged as the only hope for world. Now the research work has reached to this level that the world is going to sustain on alternate energy only. Research works have proved that these sources of energy are good enough to sustain whole world requirement at low cost and more availability.

A. Wind energy

This paper work describes the use of these natural resources in developing the alternate sources of energy, not considering wind energy this is the most oldest and newest area of scientific research , which is regularly examined I n order to get the proper output at low cost and maintenance. So now considering wind energy projects there are several projects that are regularly done , out of which the most important is the establishment of wind power stations. This is the most important decision that can be taken into account if the space or land has to be saved, this idea of establishment of power stations is all about connecting long wired structures flying up in the sky. just suppose that there is a wind power or mill made of composite material made to keep at high altitudes and tied by long thick wires in ground, their output can be taken in ground . we all know that these days growing building doesn't allow flow of air through mills due to which the area and mills both gets wasted , so this idea will

not only save the lands apace but will also generate a new era of research on different products . at this height from the ground they hung straight made of light composites wired inside and output is taken in ground. Output offices are made on ground at required space. This idea has lots of advantages but the only thing is the checkup of these mills .they are very important parts of it. Now if these are done with regular check up and regular networking this has lots of advantages that are invariably different. Another advantage is that they have increased efficiency in their output level. Probably if the graph is plotted in comparison to the efficiencies it will probably rise to almost much of its place in graph.

B. Ocea thermal energy

ocea thermal powerplant installed in ocean in middle of sides may be shore. It only requires the availability of big turbine and investment to be invested and forming a proper energy system. Several energy system are available today but the one having constant supply of power is only ocea thermal energy systems. For this just consider a single turbine or a row of turbine aligned properly in a sequence . this is connected to a grid at the land , the output is taken their efficiency and the ability to give proper constant supply is analysed . new projects are arriving at several levels that are proposing this idea of ocea thermal energy as the most advantageous one.the area of ocea thermal energy is vast but the application that rae limited by the use of water is limited , this is also an important national and international issue. Probably this can lead to friendship between two nations , there are several ides regarding the use of ocea thermal energy .but considering this is the most important one the other ideas are very minute and are inefficient to be compared to this idea. This has to be taken into consideration that ocea thermal plants have very much scope of

development and efficient way of production of power at required level. Even if there is irregular power supply application of converters can be done, it can be amplifier or any other device working at high voltages to produce power at good level. the output can be obtained very specifically in the output grid of system.

Considering the need of electricity several new ocea thermal systems has developed recently. It involves the installation of turbine in the water underground level and water is allowed to rotate it. The underwater plant is developed and installed in such a manner that it will give maximum output .the installation cost may prevail but the results will give a constant supply for electricity. The range of installation will very very much, but the only thing that has to be known.

C. hydrogen production

Further moving to the other sources of energy that are having scope and cane be developed are not only limited to wind, solar, ocean but are available to the other area of reach also. This includes the use of available energy from public places by desired manner.

Their was this myth some years before that it petrol and diesel will get over then it will be a huge problem for the peoples to run auto moiles . But now the new area of research has evolved that include the deriving to hydrogen from sugar. this is very important task that if possible we can derive this hydrogen from sugar by adding some of the catalyts or by having some of the chemical reactions. Now suppose that if we get success in getting out the hydrogen from the sugar then it will be forwarded by fuel cell to liberate 3 times more oxygen. There is always this process of getting out hydrogen from vegetable waste . this is an important process probably scientists from many years are indulged in this activity only that how to generate hydrogen from

vegetable waste which is converted to sugar . this very important to find any kind of microorganism or any chemical step by which we can just simply extract hydrogen from sugar. if this process of extraction of hydrogen is done then it will be one of the most promising alternate fuel for future.

D.Sludge

Another source of alternate fuel is the sludge. Sludge is nothing but sewage that contain several kinds of particles may be helpful or not in becoming alternate fuel . Probably if the sludge is dried up then it will get converted to solid waste it is powdered then after which it is kept inside the burner to generate direct electricity. it is examined that the burning to sludge can produce the direct way to generate electricity from it. It is very important to know how our energy requirement and consumption rate. it is estimated that some 5-8 million tons of slurry is produced in a day in whole world . What I want tell is very simple and easy concept burning of sludge will only produce electricity . However the process of extraction of electricity is under research is under process.



Sludge



Ocean thermal



Wind mills

II. ABBREVIATIONS AND ACRONYMS

- 1) Alternate energy- another source of sustainable energy.
- 2) Wind energy- energy generated using wind as source
- 3) Ocean thermal- energy that is generated using ocean as source to run turbine.

DIAGRAM

CONCLUSION

So these are the some very important kind of alternate sources of energy available which

can convert our requirement to our regular use. The only thing which we have to concentrate on is all about the formation, use of things stated above . several objects and areas of interest is available in this field of alternate fuels if one wants to work under these then it's a very easy process , research methodologies has to be applied in order to get optimum results . This is one of the most important part of conclusion that the process of research should never stop. It may be solar, wind, ocean energy but are not limited to these, there are more which we other didn't knew. So any how these alterations and innovations can be done again in order to obtain proper output. is any **energy** source that is an **alternative** to fossil fuel.