

Energy Generation using Different Alternative Methods

Kiran Kumar M N

College of Engineering Ambajogai, Beed, Maharashtra, India

Abstract: *In this universe earth, nature and all the living things are the type or part of energy “energy neither be created and nor be destroyed it can be converted into one from to another form. It’s been around us since the beginning, we are needed to identify them and utilize them to its full potential. the human civilization search and introduce those factors which are limited and non-renewable. non- renewable sources are severely affected our eco-system which could eventually led to mass extinction because energy is also being utilized in negative forms. we are living in a nature of state where resources are umpteen but needed to recognize them and use them wisely. it’s a continuous process which could be harnessed to its full potential. taking into account our current needs to create effective future planning there is a need to take effective step on this, otherwise we will be responsible for punishing or dragging down the civilization into the pit of modernity. By taking this vow, we must be determined to shadow the light on this subject carefully and effectively.*

Keywords: Energy

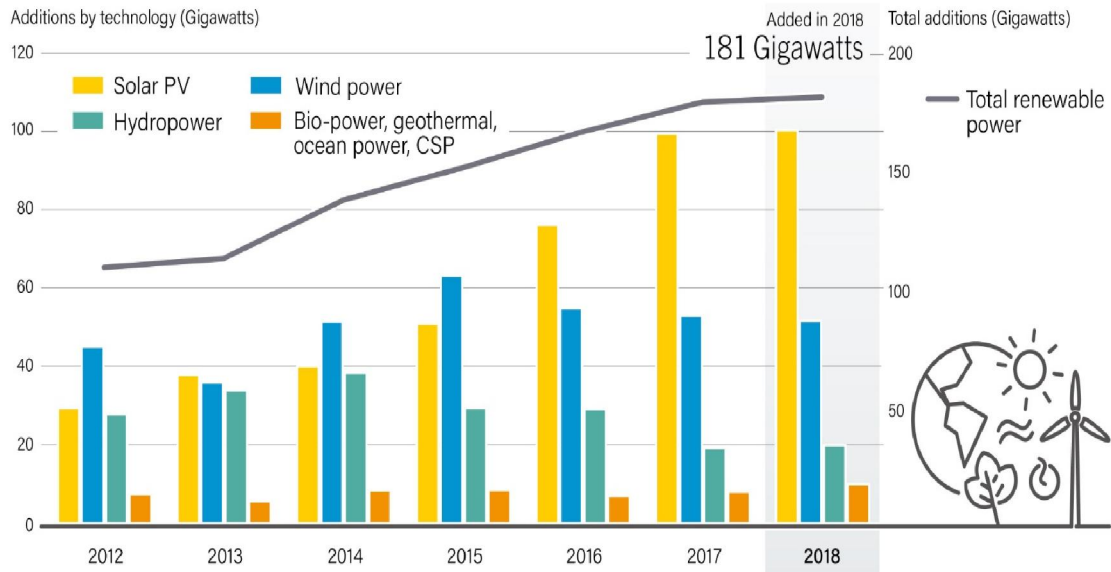
I. INTRODUCTION

Renewable energy is a form of energy which is collected from natural resources which are replenished over a period of time. It can be generated from many ways such as solar energy, wind energy, geo thermal energy, bioenergy and ocean energy.

1.1 Types of Renewable Energy

- **Solar energy-** one of the most common Source of energy which is abundant in quantity.all form of life Are somehow depended on solar energy in one way or other.
- **Wind energy-** another way to harness the renewable energy is wind energy which is clean safe and eco-friendly. It is the fastest growing energy in the world.
- **Bio energy-** when energy is generated through organic matter is termed as bioenergy. It is in highly demand because it could produce very easily
- **Geo thermal energy-** the energy which is produce with in the earth surface is called geo thermal energy. The main source of geo thermal energy is magma. generally, geo thermal energy is available inside the earth surface upto a depth of more than 80 km
- **Ocean energy-** the waves generating from within the ocean which releases energy which is called ocean energy.

Annual Additions of Renewable Power Capacity, by Technology and Total, 2012-2018



II. FUTURE OPPORTUNITIES

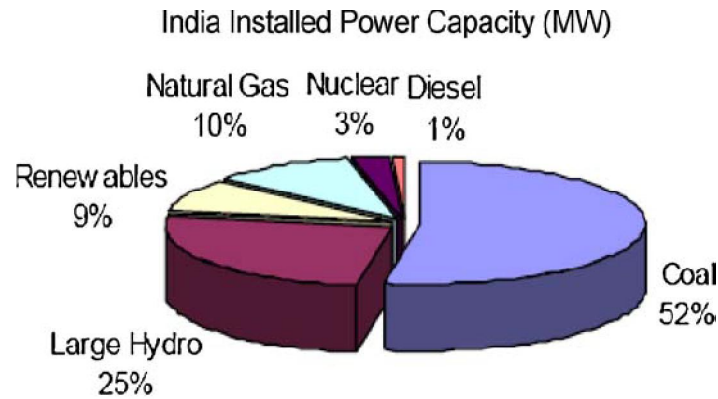
- Find more and more resources help to making research team and finding scheme for rural areas.
- These renewable resources could help in research and development for future planning in order to design the schemes.
- Using those resources, we can make advance technology and solve the problems of present energy crisis.
- Utilizing those resources, we can reduce our dependence on imported fuels
- This sector could create many numbers of jobs which could eventually lead to lesser employment in country.
- Generating energy by using those resources would not emit greenhouse gases which will further reduce the air pollutions.
- This sector offer's ample amount of opportunity to explore various forms of energy such as ocean energy.
- The dream of healthy environment could be achieved by using renewable energy.
- To achieve 5 trillion economy renewable energy must Important factor.

III. CHALLENGES

- Lack of infrastructure- this sector is highly capital intensive which is a Major problem.
- Environmental impact – installing larger projects in open areas could lead to the collision of birds which can endanger the avian life
- It does not produce energy instantly just like other sources.
- Due to structural unemployment prevailing in country, it will be the difficult task to find

large amount of labor force to carry out this business operations.

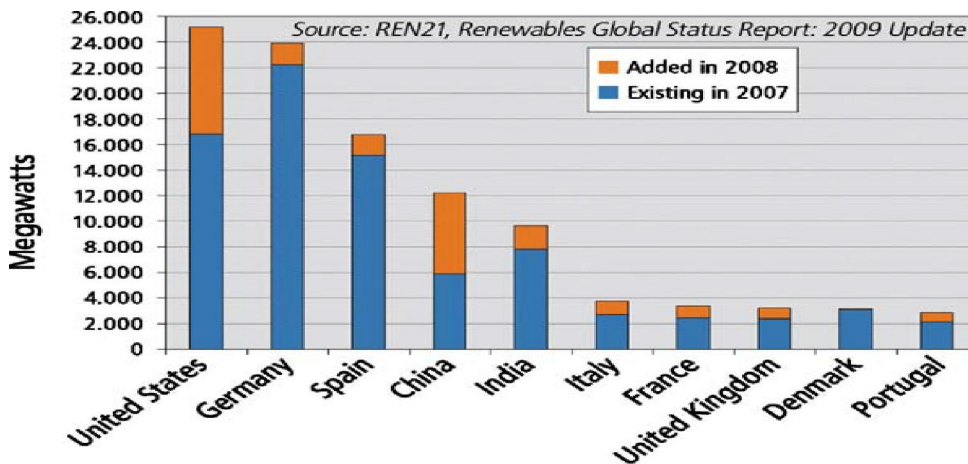
- Working mechanism or setup technology is robust.
- Energy can be used only in one form, for instance in the form of electricity
- Taking into account the terrain of the country it might be a major problem of installing this project.
- Low energy production as compare to non-renewable sources.



Source: CEA, 2008, MNRE, 2008

IV. CONCLUSION

It is the cheapest form of energy which is available for mankind in different forms and is clean, safe and completely eco-friendly and could act as an impetus in the human developmental works. Form 2011-21 renewable energy has grown from 20% to 28% of global electricity supply which has reduced our need of fossil and nuclear energy. Studies conducted by different organizations has found that a global transition to 100% renewable energy across all sectors - power, heat, transport is feasible and economically viable. As India is determined to achieve 5 trillion economies by 2025, renewable energy could be a quintessential part in making this dream comes true.



Source: www.ren21.net/

V. FACTS AND FIGURE

- According to research 54% can be made by coal,37% from renewable energy and 9% from others.
- 26.2% of energy in world should be made with form of renewable energy.
- According international energy agency predict that it will be increases 4% with in 2030.
- In India 80% electricity can be produced from coal and biomass. The coal reserve of India is going to be emptied by 2050.
- India has 3000 hours of sunlight every year and we can produce 5000 trillion K.W of energy from it which is Higher than our yearly consumption.
- With help of wind energy, we can produce 1.6 x 10000000 MW should be produced are much higher than our current energy requirement
- With the help of biomass, we can produce 16880 MW from Agro reduce,500 MW from biogas and 2700 MW from municipal and industrial waste.

India has 5 of the top 10 solar plants in the world.

LIST OF SOLAR PLANTS IN INDIA

- Bhadla solar parks, which are situated in Rajasthan.
- Pavagada solar park, which are situated in Karnataka.
- Kurnool Ultramega solar park, which are situated in Andhra Pradesh.
- Rewa ultra mega solar, which are situated in Madhya Pradesh.
- Charanka solar Park, which are situated in Gujarat.

REFERENCES

- [1]. International Energy Agency IEA. Key world energy statistics. Available at: <http://www.iea.org/Textbase/nppdf/free/2006/Key2006.pdf> [Accessed: 07/ 06/2007].
- [2]. World Energy Outlook. International energy agency; 2008. <http://www.worldenergyoutlook.org/2008.asp>.
- [3]. India installed power capacity MW (fig.3) is taken from A Kumar et al./renewable and sustainable reviews energy