

Generate Electricity by using Waste Material

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Abstract: *The gigantic growth in the amount of waste materials produced in India and their potentially dangerous results in the environment and human health Which have led to create several disease in Human bodies, So we need to ingurgitate scholarly methods for safe arrangement of garbage. This is an innovative idea of generating electricity Using solid waste. Which lead to decrease pollution by stoping to produce almost all dangerous gasses like CO₂, CO, SO₂, NO₂ and Heavy metals such as mercury to a huge number. With a population of millions India produces large number of waste every day to Contemplate about this idea. So, we felt that it is valuable working on this project and it is high time to inject the idea of Waste to Energy in India. Firstly, a map plan was carried out for research to collect the fact of total waste generation in India. During this research it was found that some locals were generating electricity using this process ago which encouraged the researchers to carry forward this Project.*

Keywords: Solar Panels, Heating Sensor, Electrostatic Precipitator, Voltage Stabilizer

I. INTRODUCTION

The Purpose of Making this Project is to generate electric energy from waste Materials such a plastic, rubber, waste and waste etc. and to convert that less electricity energy into more high power electricity energy by electric coil , this process is called boosting Process . Normally waste is any undesirable substances which has been obtained as a outcome of all those Humans and Animals activities. which includes rotten food stuffs, treated biomedical solid wastes etc. This is basically an advanced process where cost of generation of electricity is also been saved as we didn't need to use fossil It also includes all those waste materials which is been collected by Municipals Corporation also fuel, coal, or any other raw materials which costs high and it also produces less harmful gases as compare to other methods of generation. The large amount of waste can generate a large amount of heat energy by burning it in a controlled manor. In this Process we generate electricity by burning waste that is collected from the door to door, mostly house wastes. The main components used in this methods are heating panels, boosting coils, diodes, LEDs, capacitors, resistors, battery, PCB board etc. The demand of Electricity is increasing day by day, thus it is necessary to find out the different types of source which can be used as the input in production of the electricity especially for developing countries like India. This method is one of the best methods to generate electricity. The greatest advantage of this project is that it does not require any other fuel except waste.

II. LITERATURE OF REVIEW

Waste to Energy generation is basically a form process for the generation of electricity directly or through heating first in both process we get Electricity as an output to use for the process. is process is basically completed in 3 steps and in last step we get the output All these steps involves firstly waste materials is been collected from door to door from every places which is been useful for a long time After which in second step this waste material is been purified according to their calorific values and then in third step this waste is been burrned out in a container where heat is been generated and in result we find to get Electricity as an output. Compared with other form of technology this is most attractive method of generation of electricity because of low cost, low pollution and easy way. This project has been carried out in some of the areas of bihar also by a small unit call "HUSK POWER SYSTEM" which is one of the worlds leading off grid utilities which provides 24 hours a day power in rural areas.

III. PROBLEM STATEMENT

Nowadays, percentage of pollution is rise day by day. 1. Because of this we face environmental changes and climate changes. 2. Apart from this improper waste disposal can also have adverse health effects on humans as over the years it has been responsible for causing several diseases and in some cases even death. 3. Plastic is not disposal it affects the nature and produce harmful gases.

IV. SOLUTION STRATEGY

For minimize the pollution this project is important. which is 1. Generate electrical energy from waste material. 2. minimize the pollution. 3. From this project 1250 hectares of land is save from storage of wastage

V. METHODOLOGY

When we burn waste materials , then heating panels convert heat to electricity and Red LED bulb glowing by electricity for showing electricity power ,After that circuit take electricity and give to battery for Battery Charging , And waste materials burning running in burning box , and there is heating sensor and when heating sensor is heated by heating ,Then Heating sensor turn On the LED bulb, (Because Heating sensor work as a on/off switch). After that You can See Full successfully Generating Electricity by Waste Material.

VI. APPLICATION AND SCOPE

The aim of this project is to find a good solution to optimize pollution. □ □ □ The main challenges and barriers for reducing plastic waste in mixed waste and residual waste streams, hereby stimulating prevention and recycling of plastic waste. Promoting recycling of plastic polymers as a substitute for virgin plastic. The main application of these system is to generate electricity. This is the only major application of this project. After the generation of electricity, we can use it for other application such as agriculture, industrial, residential use, etc.

VII. CONCLUSION

In This Project we show How to Generate Electricity by waste materials is successfully and we show in project how to control pollution by Pollution control filter , When we making complete our project then we check it's full working ,that time he's working is very good without any problem So our Project is best for working and Showing , How to Generate Electricity by Waste materials .From this project we generate electrical energy from waste material with minimum pollution is about 50%.Because of this project 1250 hectares of land is save from storage of wastage. As compare to thermal power plant it generate less pollution is about 0-5%.

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- [3]. GENERATE ELECTRICITY BY USING WASTE MATERIAL Rohit Patil*1, Rushikesh Ghate*2, Vinayak Karande*3, AmolBhingardeve*4, Bhagyashri Patil*5 *1,2,3,4B.Tech Student, Department Of Electrical Engineering, SSIET, Ghogaon, Maharashtra, India. *5Assistant Professor, Department Of Electrical Engineering, SSIET, Ghogaon, Maharashtra, India.