

TO GENERATE ELECTRICITY FROM WASTE MATERIAL AND TO REDUCE AIR POLLUTION

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ABSTRACT

Traditional fuels for the manufacture of strength are becoming scarcer by the day, and it is becoming increasingly important to identify potential assets that can be utilized as fuel for the production of energy, particularly in emerging countries like India. The main goal stated at the end of this document is to reduce pollution, recycle and reuse garbage, and eventually generate electricity from waste. We use the process of converting biomass strength into electricity, which is then changed into strength, to produce strength. In a way, the phenomena of biomass strength and this biomass electricity will be changed into power, and by doing so, pollutants will be reduced and the impact of global warming will be reduced. Keywords: Conversion efficiency, Conversion technology, Energy scenario, Solid waste materials, Waste sources.

1. INTRODUCTION

For both financial and environmental concerns, excessive volatility in fuel prices in the recent past, as well as the resultant turmoil in strength markets, has forced several countries to look for alternative sources of strength. The Indian trash to energy sector is set to grow at a rapid pace in the next years, thanks to rising public awareness about cleanliness and increasing pressure on the government and local governments to manage waste more efficiently. The simultaneous pressing needs for trash management and a reliable renewable energy source are presenting appealing opportunities for waste to electricity merchants and project developers. In India's urban areas, roughly 55 million tons of municipal stable waste (MSW) and 38 billion gallons of sewage are generated each year. In addition, industries produce significant quantities of solid and liquid waste. In India, the garbage era is predicted to expand dramatically in the future. Consumption levels are likely to climb as more people migrate to cities and as wages rise, as are waste technology charges. It is expected that when we burn waste materials and fire box, heat is generated and the heating panel begins to heat convert electricity, which we can see by the LED Bulb glowing, and that electricity is then sent to the circuit and then to the battery, where it begins to store power.

2. BLOCK DIAGRAM

In this Block Diagram, you can see that when we burn waste materials and fire boxes, heat is generated and the heating panel begins to heat convert electricity, which we can see by LED bulbs glowing, and that electricity is then sent to the circuit and then to the battery, where it is stored. When the electricity is stored in the battery, the heating sensor turns on the output power supply, the LED bulbs begin to glow, and the pollution control filter begins to work. What is the issue?

The most pressing issue today is the amount of waste thrown by individuals. Because these materials take over 400 years to degrade, there is a pressing need to decrease waste. Current generating power plants burn these materials, emitting alarming levels of air pollution that are hazardous to our health. Excessive amounts of hazardous gases can deplete oxygen levels, resulting in lung problems.

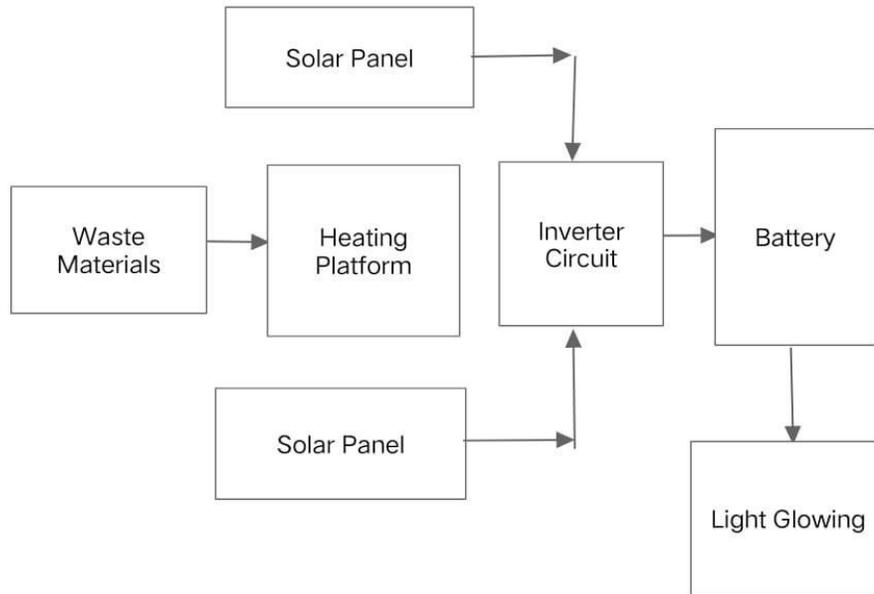


Fig -1: Block Diagram

2.1 HARDWARE COMPONENTS

Heating panel works by allowing photons, or particles of light or heat , to knock electrons free from atoms, generating a flow of electricity. Heating panels actually comprise many, smaller units called photovoltaic cells. (Photovoltaic simply means they convert heating or light into electricity).

A p-n junction is formed by placing p-type and n-type semiconductors next to one another. The p-type, with one less electron, attracts the surplus electron from the n-type to stabilize itself.



Figure1. Solar Panel

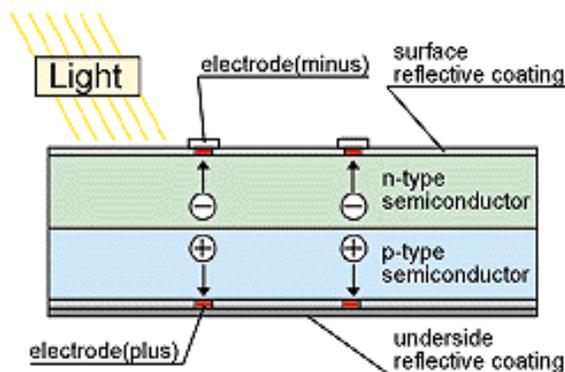
SN	Component	Range
1	Solar Panel	9-13 volt
2	Solar Circuit	12v,8 A
3	Battery	12v,8 A
4	Inverter	230 volt
5	Heating Platform	30*20 cm
6	LED Bulb	3*5 watt
7	Wires	As required
8	PCB	1

2.2 Battery

An electric battery is a device consisting of one or more electrochemical cells with external connections provided to power electrical devices. Such as flashlights, smartphones, and electric cars. When a battery is supplying electric power, its positive terminal is the cathode and its negative terminal is the anode. The terminal marked negative is the source of electrons that when connected to an external circuit will flow and deliver energy to an external device. When a battery is connected to an external circuit, electrolytes are able to move as ions within, allowing the chemical reactions to be completed at the separate terminals and so deliver energy to the external circuit

3. Working Principal of Project

This Project Working Depend On Heating Solar Panel So Heating Solar Panel Principle is Project Working Principle Simply put, a Heating panel works by allowing photons, or particles of light or heat , to knock electrons free from atoms, generating a flow of electricity. Heating panels actually comprise many, smaller units called photovoltaic cells. (Photovoltaic simply means they convert heating or light into electricity.) Introduction related your research work Introduction related your research work Introduction related your research work Introduction



4. 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 .

5. FUTURE SCOPE

Waste to Energy Potential in India. The solid waste generated from the cities/towns in India has present potential to generate power of approximately 500 MW, which can be enhanced to 1,075 MW by 2031 and further to 2,780 MW by 2050.

6. REFERENCES

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