# Electricity Generation Using Municipal Solid Waste

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**Abstract** - Summary in general, waste products are increasing day by day everywhere. Landfill areas are increasing. As the population increases, waste production also increases. As the amount of waste increases, pollutionalso increases.We are doingthis project to control waste generation and reduce pollution, the purpose of this is to control the production of products resulting from waste and heat. Energyproductionmethodstoreducepollution.Wecollectedandsortedthewasteourselves. Large, dry, wet etc. We do not use glass or petroleum products that affect the heating process.

**Index Terms** - Solar Panels, Heating Sensor, Electrostatic Precipitator, Voltage Stabilizer

## I. INTRODUCTION

It is the unwanted or discarded material produced as a result of human activities in homes, hotels, schools, laboratories,agriculture,workplacesoranyworkplace.Anaverageof0.8kgofwasteisproducedperperson per day in major cities of India. Annual municipal solid waste (MSW) in India is estimated at 68.8 million tones. The average collection rate of municipal waste is 22% - 60%. At least 2.01 billion tons of municipal waste (municipal waste) are produced worldwide each year, of which 33% results from poorly managed safetyin the environment. And worldwide, the average amount of waste produced per person perdayis 0.74 kg, although the range is wide from 0.11 to 4.54 kg. Although developed countries account for only 16% of the world's population, they produce approximately 34% of the world's waste (683 million tons). By 2050, global waste is expected to reach 3.4 billion tons. India produces 62 million tons of municipal solid waste (MSW) every year. Of this, approximately 43 million tones (70%) were collected, 11.9 million tones (20%) were processed, and approximately 31 million tones (50%) were disposed of in landfills. Types of waste by location: Household: Garbage from buildings, houses, dwellings, food, vegetables, plastics, books, fabrics, Glass, etc. It refers to the waste generated.

**Institutions:**The search schools,colleges,publicschools,etc.They are waste products produced by institutions.

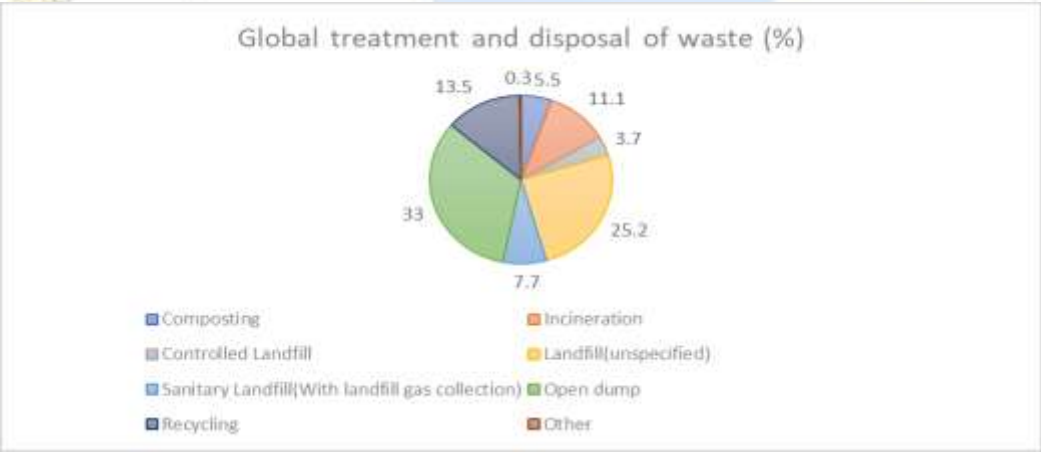
**Industry:**These wastes are mainly glass,metal,stores,restaurants,hotels,stores,shoppingmalls,ash,etc.Includes.

**Biomedical:**Biomedical waste such as hospitals,medical facilities,pharmacies,syringes,etc.Wastes producedby.Itcan also handle animal or human body parts, needles, blood, etc. may also include.

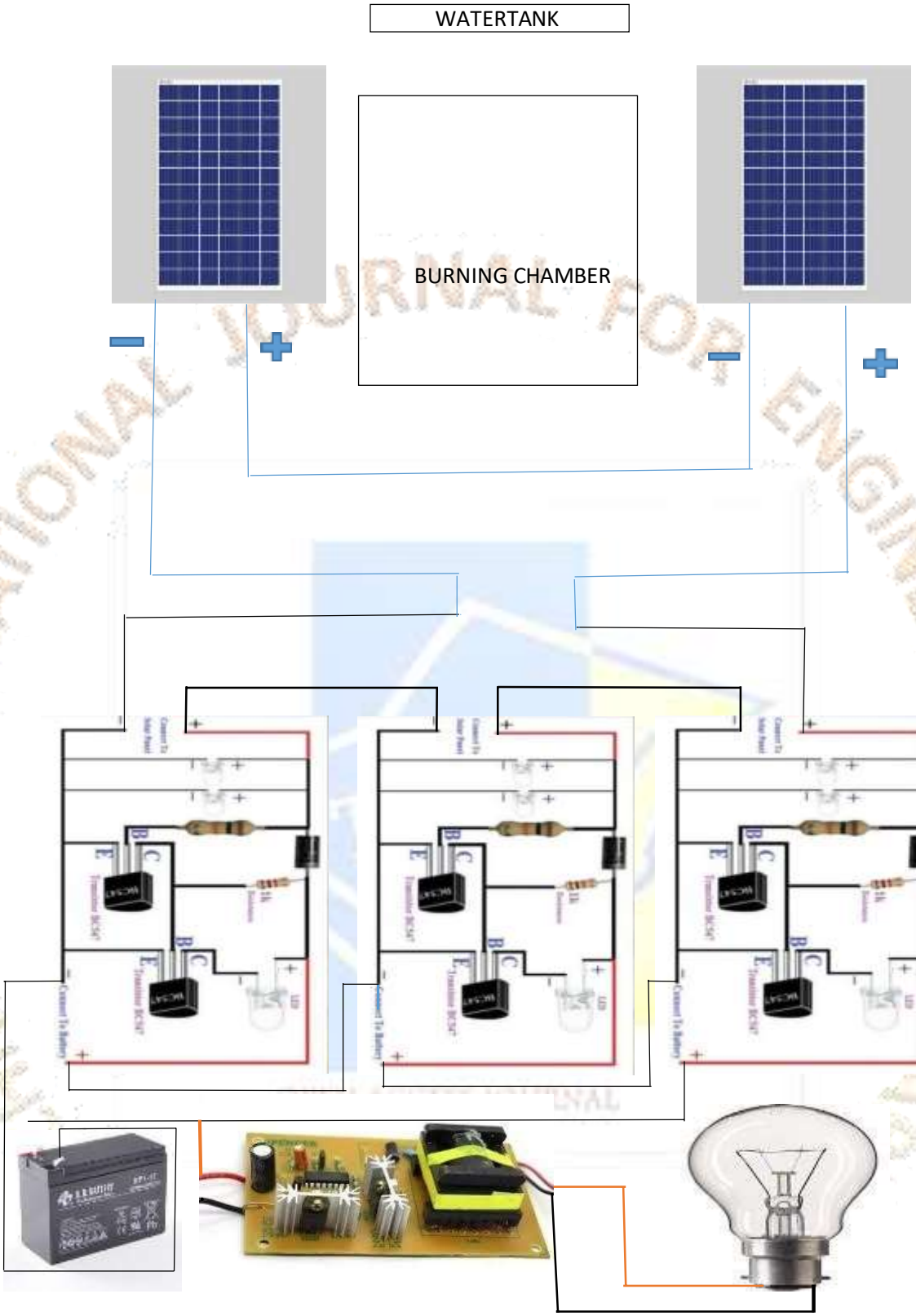
**Municipal:**Wastes including sludge residues from treatment plants,construction waste,dust,construction and demolition, construction, maintenance residences, etc.

## II. LITERATURE SURVEY

Generating electricity from municipal solid waste is an area of research that aim utilize various wastes teams as valuable resource for sustainable energy production. It focuses on the technique and technologies used for electricity generation from municipal solid waste(MSW).It provides an overview of in generation and land fills gas recovery processes, discussing their advantages, challenges and environmental impacts



**III.CIRCUIT DIAGRAM**

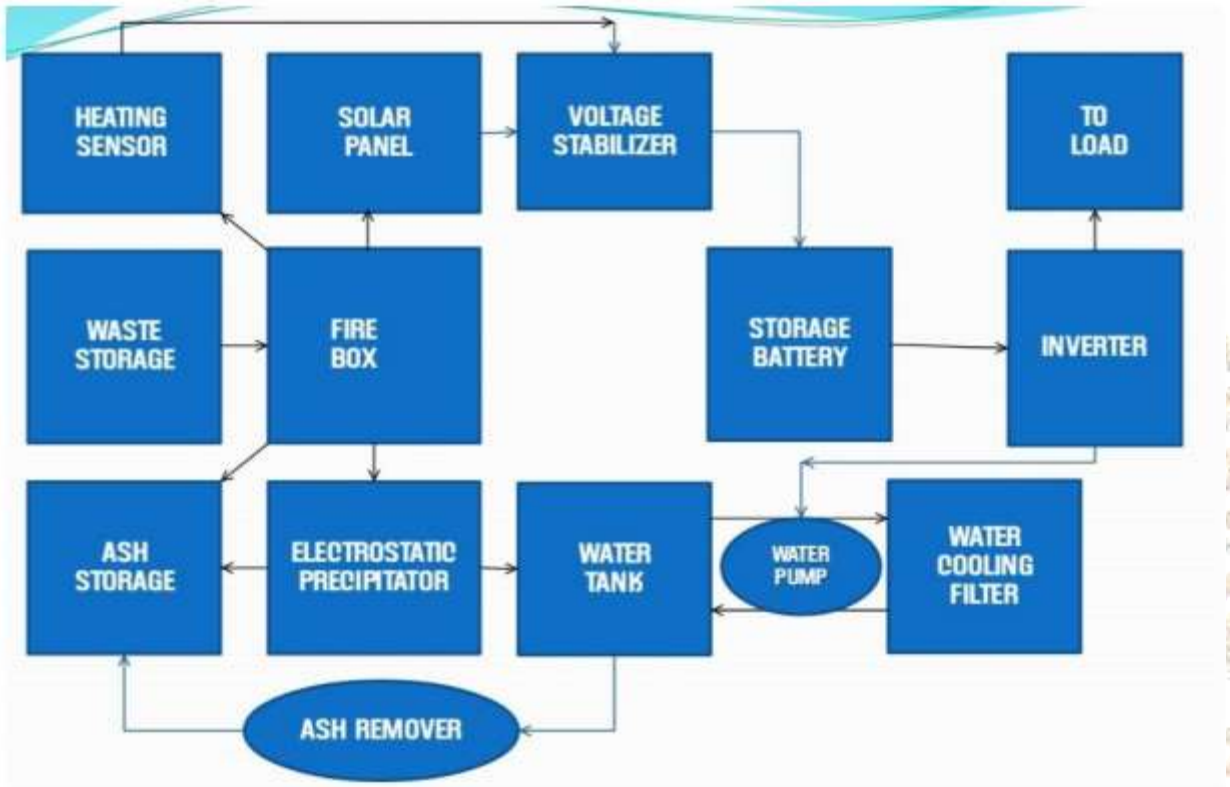


## IV.OBJECTIVE

- Design to Generate Electricity Using Municipal Solid Waste
- Recovery of energy from food waste and solve land fill resource problem
- The advantage of using this Generation method is to reduce land Pollution
- Provide land for waste material store purpose

## V.METHODOLOGY

The operation of this project depends on solar panels. Therefore, the principle of solar panels is the working principle of the project.When the waste is in genrated,solar panels convert this light energy into electrical energy. The energy then goes into the battery an disstored there. And through the battery,energy enters the capacitor.The heating pad is 6V and the LED is 3V, so far we have connected this resistor to the LED to resist the flow of change. To keep the flowof change going. A unidirectional diode is used. The electricity generated here is supplied to street lights and filters. And a contamination cooling filter is used.




**Advantages**

- Power plants that convert waste to energy produce less air pollution than coal-fired power plants.
- No need for fossil fuels of any kind.
- Plant size is much smaller.
- Combined heat and power technology available

**Disadvantages**

- We can only generated Electricity when plastic and waste burning.
- Wecannotcontrol100%pollution.
- We cannot burn petroleum products

## VI.APPLICATION

- This project can be used in a cold place as they always burn a fire to keep their houses warm. They can generate electricity for their basic needs.
- Still there is no electricity in many villages in India; it can be used to generate electricity.
- It can be use in an in cineration where waste is burn.so,that polluted gases can be filter out before releasing in an air.

## 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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