IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 2, February 2022
Impact Factor: 6.252

Waste Utilization using Thermal Engineering

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Abstract: *India deals with major environmental challenges related to waste generation. India generates 62 million tonnes of waste each year. About 43 million tonnes (70%) are collected of which about 12 million tonnes are treated and 31 million tonnes are dumped in landfill sites. Current systems in India cannot cope with the amount of waste generated by an increasing population and this impacts the environment and also public health. On the other hand, India is also facing a power crisis and states are warning of power blackouts. States across India have issued coal supplies to thermal power plants, which convert heat from coal to electricity but are running low. To deal with these issues we can simply use the waste to energy utilization technologies, using thermal engineering. We can use the waste as fuel and burn them to generate electricity. This can be done using the boiler system in thermal engineering. In this research paper, we have presented the ideal waste management system in which there is the utilization of waste and minimum pollution.*

Keywords: Waste utilization, thermal power plant, waste to energy

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