

# **Plastic Waste Management**

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**Abstract:** *Plastic waste has become a critical environmental challenge, with traditional disposal methods like burning contributing to air pollution and waste accumulation. This project introduces a novel solution that utilizes heating panels to convert heat from burning plastic into electricity, providing a sustainable energy source. A custom-designed carbon filter captures harmful smoke and converts it into usable carbon residue, which is then processed into ink. Additionally, the remaining plastic ash is repurposed to create concrete materials, ensuring complete utilization of waste. This eco-friendly approach not only reduces pollution but also transforms plastic waste into valuable resources, supporting a circular economy and promoting environmental sustainability. The project demonstrates the potential for innovative technology to address global waste and pollution problems while generating renewable energy and new products..*

**Keywords:** Plastic waste

