



End of Life Solution for Plastic Wastes

Ensuring Safe Disposal Of Plastic Waste Is A Conscious Responsibility

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The environment is filled with such plastic wastes which cannot be converted and are but just dumped in one corner of our living land area or sometimes recycled.

All plastics are polymers mostly containing carbon and hydrogen and few other elements like chlorine, nitrogen etc. polymers are made up of small molecules called as monomers which combine and form single large molecule called polymer. When this long chain of monomers breaks at certain points or when lower molecular weight fractions are formed this is termed as degradation of polymer. This is reverse of polymerization. If such scission of bonds occurs randomly it is called as 'Random De-Polymerization'.

In the process of conversion of waste plastic into fuels random De-Polymerization is carried out in a specially designed Reactor in absence of oxygen & in the presence of coal and certain catalytic additive. The maximum reaction temperature is 350° C. There is total conversion of waste plastic into value added fuel products.

The technology has taken over the responsibility of restoring the land area back to conditions as nature handed over to us.

The technology of downstream refining process of Petroleum Hydrocarbon from Crude Oil feed stock derived out of Waste Plastics by catalytic reaction can return us back with various aromatic hydrocarbon solvents, aliphatic hydrocarbon solvents, carbon & it's By-products for various industrial applications like agrochemicals, coating, specialty chemical etc.

The Polymer Energy system uses a process called catalytic pyrolysis to efficiently convert plastics to crude oil. The system provides an integrated plastic waste processing system which offers an alternative to landfill disposal, incineration, and recycling while also being a viable, economical, and environmentally-responsible waste management solution.



The Polymer Energy System is fully environmentally friendly and has Low Emissions and No hazardous Waste. The plastic material can be fed into the system continuously. The plastic waste does not need to be clean or dry prior to processing. The system enables the user to tailor the hydrocarbon mix of final output.

Municipalities world over are seeking a cost effective system by which they can say that they have saved their piece of land from getting permanently destroyed and by setting up exclusive facility for them to process the Plastics waste generated by them to value added petroleum products like Diesel, Furnace Oil, tailor made fractions. So they can reduce their carbon foot prints and avail carbon credits and to improve their image towards "Corporate Environment and Social Responsibility". This opens out for an opportunity to reduce energy cost.

Products range that can be recovered from the crude includes:

- Aromatic Solvents
- Aliphatic Solvents
- Crude Oil
- Waxes
- Carbon
- Solvents to customer specification