

**Benefits of Environmentally Sound Technologies/EST (for Full & Direct re-utilization of
WEEE/e-Waste, Assorted & Polymer/ Plastic waste)**

<u>S.NO</u>	BENEFITS OF ENVIRONMENT SOUND (EST) TECHNOLOGIES	DETAILS
1.	Green, low-emission and climate-resilient development strategies (Green LECRDS)	GHG reduction/ Emission Control as there is Nil Carbon Dioxide (Co ₂) and nitrous oxide (No ₂) emissions from waste Combustion, due to all non-biodegradable wastes being re-utilized using emission free technologies.
2.	CH ₄ emissions from landfills	Both of the ESTs fully re-utilize WEEE & 17 other Waste categories, including Plastics in manufacturing & construction sectors. Thus no requirement for any disposal or burying in Landfill & no emissions.
3.	Carbon Credits	Claim offsets and exemptions under ' <i>End of Life treatment of solids</i> ' category of Scope 3, in the GHG emissions inventory account, GHG declaration.
4.	Carbon sequestration & Accelerate progress on UNDP MDG no. 7.	a.Bio-sequestration increases as reduction in deforestation contributes 20% of GHG (as per Intergovernmental Panel on Climate Change /IPCC). b. ESTs provide a substitute for wood & this will reduce demand which causes deforestation. c. Prevent/reduce digging & excavation of Mountains for Soil, Rock, Marble, Granite etc, thus maintain the potential for future Geologic Carbon Capture and Sequestration (CCS) activities to be carried out.
5.	Basel Convention Waste utilization	Many categories of Basel Convention Wastes (POP,WEEE), are fully utilized, instead of being disposed.
6.	Land cultivation/ habitat	Considerable land area will be saved from being used for land filling & this can be used for cultivation or dwellings/ habitations etc.
7.	Accelerate progress on UNDP Millennium Development Goal	Job creation/ Employment generation enabled as no infrastructure/special machinery nor any Qualifications & No special skills required.

	(MDG) no. 1 (Poverty reduction)	
8.	Waste re-utilization	<i>Waste Electrical and Electronic Equipment (WEEE)/ e-Waste & 17 other Waste categories, including Plastics wastes are fully & directly re-utilized as raw materials.</i>
9.	MDG no. 7 & Conservation of precious Natural Resources	A substitute of Wood etc is available & saves the fast depleting natural resources like Wood, Rock, Marble as this is more economical, durable and long lasting.
10.	Energy conservation	1. Reduce Energy consumption (specifically, combustion of fossil fuels) associated with making, transporting, using, and disposing the product or material that becomes waste. 2. No Energy-related manufacturing emissions, viz. CO ₂ .
11.	Accelerate progress on UNDP Millennium Development Goals (MDG) no.8 with ideal Properties of Products manufactured (when WEEE/Assorted & Plastic waste is used as raw material).	These Products/ items are relatively more Economical/Cheaper, Tougher, Durable & Non-Biodegradable (when comparing with an existing product/item/material). They are Weather/ Wear/ Insect/Rodent/Water /Moisture proof & Fire resistant.

- Rahul Nagpaul