

BENEFITS/ADVANTAGES 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.	Rapid turnout	Production can start from 1st day itself & results are produced with-in 24-36 hrs (maximum 48 hrs, depending upon the category of Waste or for very large sizes).
2.	Bulk production	Wood & Brick substitutes can be produced from BULK Wastes & Other shapes/sizes of Wood & Brick substitutes are Boards/Panels/legs/support stands & slabs/ledges/blocks/side beam or border stone.
3.	Natural Resources	Millions of Tonnes of Natural Resources viz. Wood, Soil, Rock, Marble, Granite etc. are saved from being cut, dug or excavated by use of both ESTs on the millions of Tonnes of accumulated e-Waste/WEEE, Assorted & Plastic Wastes.
4.	Simple & Rugged Technology	No high Energy/heating requirement, Nil emission, Zero exhaust, Non Polluting, Nil emissions, Nil byproducts/ end-products as the re-utilization is 100%, No infrastructure necessary, No special training required
5.	Initial Capital cost/downtime	Minimum investment necessary & Nil Gestation or Waiting period, as results are available within days.

6.	Are part of Green, low-emission and climate-resilient development strategies (Green LECRDS)	There is GHG reduction/ Emission Control as Technology has Nil Carbon Dioxide (CO ₂) and nitrous oxide (NO ₂) emissions from waste Combustion, due to all non-biodegradable wastes being re-utilized without any burning Heating or any types of thermal/energy applications.
7.	CH ₄ emissions from landfills	Both of the ESTs fully re-utilize WEEE & 17 other Waste categories, including Plastics in & construction sectors. Thus no requirement for any disposal or burying in Landfill which causes CH ₄ emissions.
8.	Carbon Credits & GHG declaration	Off-sets can be Claimed with Exemptions under ' <i>End of Life treatment of solids</i> ' category of Scope 3, in the GHG emissions inventory account of GHG declaration.
9.	Carbon sequestration, CCS & Accelerate progress on UNDP MDG no. 7.	<p>a. Bio-sequestration increases as reduction in deforestation contributes 20% of GHG (as per Intergovernmental Panel on Climate Change /IPCC).</p> <p>b. ESTs provide a substitute for wood & this will reduce demand which causes deforestation.</p> <p>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.</p>
10.	Life-cycle assessment (LCA)/ life-cycle analysis.	There is an indefinite extension of the 'Life Cycle Span' or 'Product Life Cycle', due to postponement/further moving forward its 'end-of-life' stage & applies to all non-Biodegradable, hazardous/non-hazardous damaged, defective, deteriorated, out dated, second hand, used, end-of-life Waste/goods & many Chemicals/ POPs.
11.	Basel Convention Waste utilization	Many categories of Basel Convention Wastes (WEEE, POP & Chemicals), are fully utilized, instead of being disposed.
12.	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.
13.	Accelerate progress on UNDP Millennium Development Goal (MDG)	Job creation/ Employment generation enabled as no infrastructure/special machinery nor any special Skills/ Qualifications required.

	no. 1 (Poverty reduction)	
14.	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>
15.	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 for the eco- systems.
16.	Energy conservation	1. Reduces Energy consumption (specifically, combustion of fossil fuels) associated with making, transporting, using, and disposing the product or wastes – goods, material & products. 2. No Energy-related manufacturing emissions, viz. CO₂, CO, NO₂, SO₂ etc.
17.	Accelerate progress on UNDP MDG no.8 & Properties of Products manufactured (with WEEE/ Assorted/Plastic waste used as raw material).	These Products/ items prepared with these ESTs are relatively more Economical/Cheaper, Tougher, Durable & Non-Biodegradable (when comparing with an existing product/item/material). They are also Weather/ Wear/ Insect/Rodent/Water /Moisture proof & Fire resistant.