

PROJECT # 6

ECONOMICAL MINI BIOGAS PLANTS

These incredibly cheap 'Mini Biogas Plants' (MBPs) will be produced from recycled plastics or Styrofoam (expanded polystyrene), painted with special plastic paints to add strength. Mini plants will be almost automatic, continuous processing plants needing minimum attention, normally a few minutes a day. Additionally these will be equipped with critically low temperature and pH alarms, in case auto mechanism fails. These continuous processing MBPs will have a holding capacity starting from one quarter ton to about 5 tons, in the price range of \$99 to \$1000.00, with full back up support and warranty.

The target audience would be businesses, organizations or industries producing relatively big quantities of biodegradable organic wastes like leftover food, fruit and vegetable peelings, over-ripped or spoiled fruits and vegetables, date expired foods, etc., possibly including grass and trees clippings. For example restaurant owners will be happy to find a neat and cheap way of solving their waste management problem, in addition to getting free methane gas for cooking and heating (or air-conditioning). Similarly grocery stores, school cafeterias, etc. can benefit from these proposed MBPs.

The digested slurry from biogas plants is an excellent organic fertilizer and soil conditioner, and its disposal should not be a problem. This can be the best environment friendly activity to reduce greenhouse gas generation.