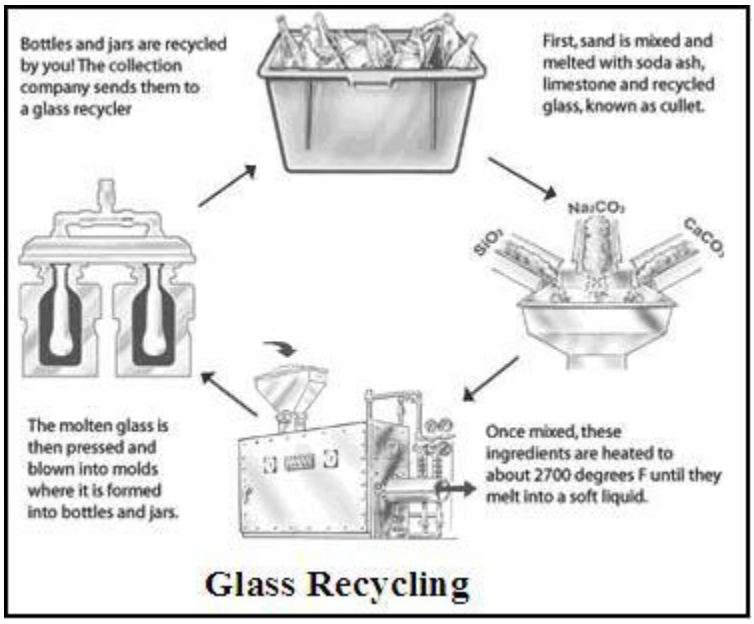
# WASTE GLASS RECYCLING

It is an effective way to save energy and environment

Waste glass is not just waste, but a new resource. Generally, beer, wine bottles and other food jars etc., are among the few normal household glass items put into landfills every day. The glass in these items can take up space in the landfills for up to 4000 years.




A. The beauty of glass is, it is one of the few materials that can be recycled indefinitely, yet only about 22 percent of the glass produced today is from recycled materials. Glass is generally produced from sand, lime and soda and uses about 40 percent more power to produce from raw materials than it does with recycled materials.

B. It may be noted, “For every ton of glass that is recycled to make new glass products 693 pounds of carbon dioxide is saved”.

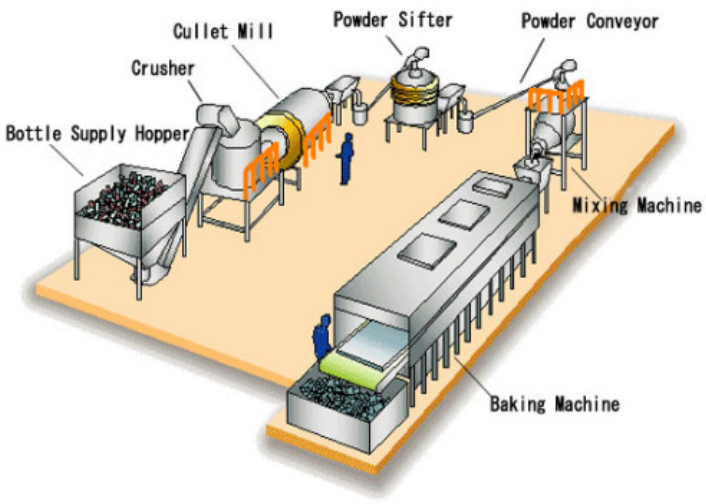
C. However, not all the glass items are recyclable. The glass in light bulbs, cook ware and window panes are not recyclable due to some special additives used to the glass. These additives are ceramics and other impurities that generally contaminate the recycling process. The glass that cannot be recycled only plays a small part of the glass that is put into the landfills though.

D. The process of glass recycling is less extensive than the process of making it from raw materials. Once glass is picked up and taken to the recycle center it is separated by color and then broken into small pieces. The broken glass pieces are then crushed and sorted before being cleaned and added to raw materials to make the final glass product. Crushed glass melts at a lower temperature than the raw materials and therefore the more recycled material that is in the mixture the less energy it takes to melt the materials into glass.

E. Producing glass from all raw materials creates nearly 400 pounds of mining waste and by replacing 50 percent of the raw material with recycled glass about 75 percent of that waste is reduced.

F. Reusing glass is another way to recycle – Even better than glass recycling is actually reusing the glass containers, as this uses no energy at all! Whilst returning bottles in exchange for a refundable deposit was at one time commonplace, nowadays milk bottles are one of the few types of glass bottle which are returned for reuse. You can, however, reuse glass bottles and jars yourself, perhaps for homemade jam etc.

G. The benefits of glass recycling are crystal clear – Because glass containers are almost always recycled into other glass containers. Metals or plastics, on the other hand, often become entirely different products. A recycled glass container is just as strong as one made from virgin material, and it can be recycled again and again without any loss of quality. This makes glass recycling one of the best examples of “closing the loop.”




H. Advantages of glass recycling are given in the following points–

(a) Recycling reduces the demand for raw materials. There is no shortage of the materials used, but they do have to be quarried from our landscape, so from this point of view, there are environmental advantages to recovering and recycling glass. For every tonne of recycled glass used, 1.2 tonnes of raw materials are preserved.

(b) The cost savings of recycling is in the use of energy. Compared to making glass from raw materials for the first time, cullet melts at a lower temperature. So we can save on energy needed to melt the glass.

(c) Glass produced from recycled glass reduces related air pollution by 20% and related water pollution by 50%.

(d) Recycling glass reduces the space in landfills that would otherwise be taken up by used bottles and jars.

(e) Using glass for recycling means there are less glass objects lying around in he landfill or bin.

Source : http://saferenvironment.wordpress.com/2009/06/04/waste-glass-recycling-%E2%80%93-an-effective-way-to-save-energy-and-environment/