## Waste reduction, reuse, and recycle:

Science, Biology



Waste Reduction, Reuse, and Recycle Solid waste could be reduced by first reducing the quantity of material that makes a product without compromising the utility of the product. Secondly, the lifetime of a product could be increased. Finally, the need for a product could be eliminated (Worrell & Vesilind, 2012). Incentives assist in changing the public's use of materials. Increasing waste disposal cost causes companies to have an incentive to implement improved waste reducing manufacturing techniques. The same incentive could work for household waste reduction where the cost of disposing domestic waste is increased to reduce on waste disposal. The waste reduction strategies in my everyday life include carrying my bag to stores, using refill containers as opposed to purchasing new ones and avoiding delivery of junk mails.

Recycling is beneficial as it reduces greenhouse gas emissions and provides raw materials for remanufacturing and use thereafter. It is economical in metropolitan areas due to proximity to refuse supplies and markets.

However, distinguishing wastes by their codes requires manual intervention for separation and is cumbersome and difficult. According to Worrell and Vesilind (2012), location of wastes is an obstacle to recycling due to the prohibitive transportation costs. The low value of material discourages people from recycling. Uncertain supplies due to dependence on cooperation of consumers and willingness of collectors to transport and marketing and product substitution also prohibits recycling. Institutional and administrative constraints, such as unwillingness of communities to pay additional money for curbside recycling programs, prohibit recycling. Legal restrictions such as those prohibiting additional charges for solid waste service cut on funding for

curbside recycling programs. Finally, uncertain markets for recovery facilities which depend on the willingness of customers to purchase their end products could discourage the establishment of such recovery facilities.

## Reference

Worrell, W. A. & Vesilind, P. A. (2012). Solid waste engineering (2nd ed.).

Stamford, CT: Cengage Learning.