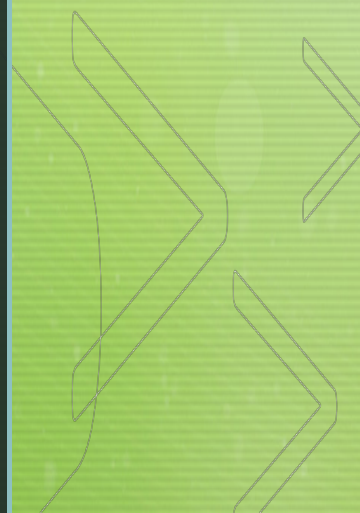




For eCoexist

What happens to waste?



Plastic

“The only way to get rid of [plastics] is by burying them. Plastics are regularly used, therefore, at landfill sites. Considering, however, that **India generates 15,342 tonnes of plastic every day**—a fourfold increase since 1999 – there will never be enough sites to fill. **“We are sitting on a plastic time bomb”**, as the Supreme Court has said. **The need, therefore, is the reduction, recycling and reuse of plastic.** But the norms laid down by the municipal solid waste (management and handling) rules are still not strictly observed. Unless remedial measures are quickly taken, a grim future awaits the cities.”

The New Indian Express, 05th April 2013.

Recycling statistics on plastic:

- Almost every hour, nearly 250,000 plastic bottles are dumped. It is not surprising that plastic bottles constitute close to 50% of recyclable waste in the dumps.
- The average time taken by plastic bottles to decompose in a landfill is close to 700 years.
- Plastic not only adds to landfill space and takes forever to decompose. Used plastic dumped into the sea kills and destroys sea life at an estimated 1,000,000 sea creatures per year!

Paper

The annual global paper & paperboard production was approximately 382 million tonnes in 2006 and 402 million tonnes in 2010. It is expected to reach 490 million tonnes in 2020. As per ITC & Indian Agro & Recycled Paper Mills Association (IARPMA) the projected demand for fresh paper will be reached by 21 million tonnes with in next few years. In India per capita paper consumption has increased up to 9.18 kg in 2009-10 as compared to 8.3 kg during 2008-09. Due to the economy growth in India per capita paper consumption will be expected to reach near to 20 kg by 2020.

As per above data and research by ITS & IARPMA per year paper consumption or requirement is increasing by 8% to 9%. For that paper industry need millions of trees, required millions letters of water, hug requirement of energy and creating tons of Carbon. All these factors impact directly on environment & global warming.

In India we produce approximately 14.6 million tonnes of waste paper every year out of that we recycle only 26% where as Germany recycle 80%, Sweden recycle 69%, Japan recycle 60 % and USA recycle 49% according to the IARPMA estimates.

E-Waste

“Even as India is trying to devise environmental friendly ways to dispose garbage, **the specter of Electronical-waste (E-waste) destroying the balance of the nation’s ecological health has already started looming over.** More worrying is the absence of a regulatory framework to dispose or recycle e-waste further compounded by a lack of general awareness.

According to a report named “E-waste in India” by Rajya Sabha Secretariat, E-waste from old computers would jump by 400 per cent on 2007 levels in China and by 500 per cent in India by 2020. In addition, E-waste from discarded mobile phones would be about seven times higher than 2007 levels and, in India, 18 times higher by 2020. **Such predictions highlight the urgent need to address the problem of E-waste in developing countries like India where the collection and management of E-waste and the recycling process is yet to be properly regulated.**”

Rubber

“Currently urban India is facing a massive rubber waste disposal. Rubber waste, when untreated, leads to various environmental concerns and wastage of natural resources which stresses the need to recycle rubber. Apart from environmental benefits recycling waste rubber also has tremendous potential of generating wealth. There is no Indian policy document which examines waste as part of a cycle of production-consumption-recovery or perceives waste through a prism of overall sustainability and hence waste rubber recycling has been neglected.

With the phenomenal increase in number of automobiles in India during recent years the demand of tyres as original equipment and as replacement has also increased immensely. As every tyre is destined to go to waste stream for disposal/recycling/reclamation, despite its passage through retreading process, the number of used tyres being discarded is going to increase significantly. Recycling used tyres will combat various problems like increasing cost of raw material, resource constraints, environmental problems including fire and health hazards associated with the stockpiles of the used tyres. Globally over 1 billion tyres are manufactured annually. The global rubber scrap figure stands at 10-16 million tons and almost 60% of this comes from tyres.”

Metal

Some environmental benefits of Metals Recycling:

Energy saved using recycled material versus virgin ore

- 74% for iron and steel scrap
- 95% for aluminum scrap
- 85% for copper scrap

Recycling 1 Tonne of steel saves

- 1.2 tonnes of Iron Ore
- 0.7 tonnes of Coal
- 0.5 tonnes of Limestone

Recycling 1 Tonne of Aluminum saves

- 8 tonnes of Bauxite

ore

- 14 megawatt hours of electricity

Reduction in CO2 emissions by using scrap

- 58% for iron and steel scrap
- 92% for aluminum scrap
- 65% for copper scrap

Metal Scrap is a mine above earth and any wastage of scrap or impediments in recycling is a crime against future generations.

Sources

- Slide Two - <http://www.all-recycling-facts.com/recycling-statistics.html>
- Slide Three - <http://greenotechindia.com/paper-recycling/>
- Slide Four - https://zeenews.india.com/exclusive/e-waste-a-growing-concern-for-india_6082.html
- Slide Five - <http://www.sparktherise.com/projectdetails.php?pId=5399>
- Slide Six - http://www.mrai.org.in/about_recycling.html