Recycling – Reclaim and Reuse

As governments worldwide introduce legislation to enforce plastics recycling, there is a growing need for public education and new technologies to ensure the future of the plastics industry.

The annual worldwide production of plastics stands at 100 mt, and even developed countries such as the US recycle only about 27% of plastics waste, says Frost and Sullivan (F&S) technical insights analyst Don Rosato. Over the past year, countries including Taiwan, Australia, Ireland, Bangladesh, South Africa, Great Britain and Singapore have imposed or are considering restrictions, additional taxes and even bans on the use of plastic bags.

F&S reports that as a result, plastics raw material suppliers and converters supplying those countries are going out of business. More than 400 companies in Taiwan and Bangladesh have closed and this is a warning to the plastics industry to take immediate remedial measures to survive the crisis, says Rosato.

Restrictions and taxes are being introduced to reduce the vast quantities of plastics entering the waste stream. But to reduce waste it is necessary to educate the public on the correct use and disposal of plastics.

The plastics industry and organizations such as the American Plastics Council have been working toward this goal encouraging economically and environmentally responsible and sustainable plastics recycling. Consequently the US plastics recycling business has grown three-fold since 1990, with the plastics industry investing more than $1bn to support increased recycling.

Although biodegradable products are now more expensive than traditional plastics, once they catch on they could provide a fresh lease of life to the packaging industry as it proves itself to be more ecologically sensitive.

Researchers in the department of chemical engineering at North Carolina State University have developed a unique recycling process for some of the most common kinds of polymers, which they hope will allow a greater portion of plastics to be reclaimed after initial use.

Recycling polyethylene terephthalate (PET) bottles poses challenges because of contaminants or impurities. Efforts are on to develop a process where the waste polymer can be converted back into the material from which it was made. In the process all the impurities are removed from the polymer.

The conversion is done under efficient processing conditions and is a one-step environmentally benign procedure. In addition the process can be tailor-made for materials of different molecular weights. The researchers are now working on making the process industrially feasible.

Source: Chemistry & Industry, 6 October, 2003.

ENVIS Website 'hits' a new high!

www.envis-icpe.com

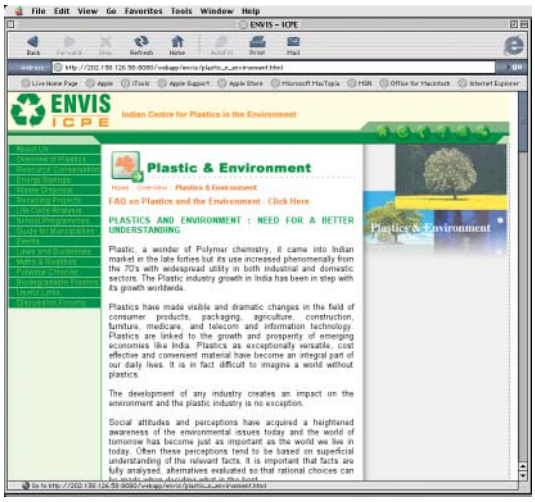
Home Page:

The uploading of latest information on plastics, environment and other related information has helped increase the hits of ENVIS Website.

During the last 2 months the tracking of the website has given the following results:

January 2004 – No. of hits: **27,265**

February 2004 – No. of hits: **28,982**



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