

# Economy reduces plastics recycling in 2013, call for more source sorting

Plastics SA has just released the nation's latest plastic recycling results for the year 2013 - 280,000 tons of plastic (20.0% of all plastics manufactured in South Africa) were diverted from landfill and recycled during 2013. This equates to a 4.1% increase from the previous year's figures. Of this, 220,400 tons were plastic packaging (30.1% of all plastics packaging) resulting in a year-on-year increase of 8.9%.



Image courtesy of www.freedigitalphotos.net

"We were hoping to see more impressive increases in the latest recycling results but the economic down-turn in the economy during 2013 had a direct impact on both the quantity and quality of plastic packaging that were available for recycling," says Anton Hanekom, Executive Director of Plastics SA, the mouthpiece of the South African plastics industry.

Both recyclers and converters agreed that shoppers spent less money on consumer items during the reporting period, resulting in fewer recyclables entering the waste stream. At the same time, the exchange rate favoured exports, resulting in 18,920 tons of waste plastics being exported during 2013 to be recycled elsewhere, instead of being used to the advantage of the local industry and economy.

"Due to the lack of plastics that were collected from households or businesses, recyclers were forced to source larger quantities of recyclables from landfills and other post-consumer sources; 66% compared to the 59% in 2012."

Recyclers are still of the opinion that the largest growth in recycling would be in post-consumer recyclables during the next few years.

### **Employment**

The formal employment in plastics recycling decreased by 10.6% to 4,510 formal jobs since 2012. Of these, only 7.7% were contract workers (ie workers who were involved full time in the sorting of incoming materials for the recyclers, normally on site. These workers are paid for their output rather than for the time spent on the job).

At the same time, approximately 43,500 informal jobs were created in the collection industry. These collectors collect all recyclable materials and are not only limited to plastics. (The figures are based on 60kg of plastics waste handled per person per day and 200 good collection days per annum.)

"We are glad to have seen that recycling and sorting companies invested in training and on-the-job skills enhancement to improve the productivity of their labour forces, as well as invested in having new and more efficient equipment installed at their premises." As a result, there was a 15% increase in the formal recycling industry of tonnages processed per employee in the last year.

## State of the industry

- The latest research shows that the South African plastics recycling industry continues to grow and new entrants are joining the industry on a monthly basis.
- South Africa currently only uses mechanical recycling and no commercial energy-from-waste plants are yet
  operational. However, small private incineration and diesel-from-waste plants have begun trials, making use of
  materials that are not suitable for mechanical recycling.
- Contrary to many consumers' perception that little or no recycling takes place in South Africa (this is mainly due to
  the lack of visible recycling in shopping centres and conference venues or the two bag collection systems from
  households not being implemented yet by the majority of municipalities), South Africa is amongst the leading
  countries in the world in mechanical recycling,
- According to the most recent data for Europe and Australia (2012 statistics), South Africa recycled 18.6% of all virgin polymer converted in 2013, compared to Australia's 9.2% and Europe's 14.2%
- There is a very high demand for the top five plastic materials of PE-LD, PE-HD, PP, PET and PVC-P. Very little, if any, investment is focused on the other, less common materials.
- Historically, recyclers focused on the local market and no market research has been done for recycled engineering polymers in China and India, for example.

#### Looking ahead

The South African plastics industry recently announced its 'Zero Plastics to Landfill by 2030' objective and is engaging with all levels of government to achieve this target. Looking at the latest figures of the total tonnages of plastics that were effectively diverted from landfill, however, it is clear that there is still a long way to go.

## **Innovative South African processes**

The European plastics industry has stated that the maximum economic recycling rate for plastics is about 35%. South Africa, however, has a number of things in its favour that will allow it to exceed that number. Not only does it have the availability of cheaper sorters, it also has a dynamic and inventive recycling industry that can hold its own and develop its own end markets for recycled materials. One example is the recycling of thin films, where South Africa is far ahead of its European counterparts. Similarly, it is also developing a stronger non-packaging recycling industry for the polyolefins.

South Africa should be able to reach a 40% mechanical recycling rate if the following provisions are in place:

- 1. Access to the solid waste stream it is essential to implement Separation at Source in all the larger metropolitan areas
- 2. The collection of recyclable waste in outlying areas needs to be developed, along with better communication between the role players and consumers in these rural areas
- 3. Improved communication channels between the various players in the value chain, including the waste pickers, the collectors and the recyclers

- 4. More consumer education about what they can recycle and where to recycle
- 5. New markets need to be developed for the materials that are traditionally harder to recycle

#### Clean-Up and Recycle Week

September is traditionally the month in which South Africans from all lifestyles are encouraged to 'spring clean' the environment in celebration of the arrival of spring. This year, the annual Clean-Up and Recycle Week will take place from 15-20 September, culminating in National Recycling Day on Friday 19 September and International Coastal Clean-Up Day on Saturday 20 September.

"South African consumers need to realise that they have an important role to play by separating their domestic waste into recyclables and non-recyclables at home (at source). Higher recycling rates influence and benefit all levels of society. It creates more jobs, it results in a cleaner country and it contributes to a lesser carbon footprint," concludes Hanekom.

For more information, go to www.plasticsinfo.co.za.

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