## Plastics & Tyres

## Plastics recycling: a 'sunrise industry'

A huge number of opportunities await the 'sunrise industry' of plastics recycling, the BIR Plastics Round-Table in Amsterdam was assured by its Chairman, Surendra Borad of Gemini Corporation NV in Belgium.

By way of example, Mr Borad pointed to a study which has concluded that '7% of the EU greenhouse gas reduction target will be achieved if land-filled plastics are either recycled or recovered into energy'. Recycling can also help to alleviate the 'large deficit in polymers' set to emerge in Europe and the USA. Turning to market conditions in India, Mr Borad described as 'worrying' the



Guest speaker Pieter Kuiper, Project Manager at Auto Recycling Nederland (ARN).

virtual suspension of scrap imports into the important Kandla special economic zone; differences in the interpretation of rules have meant that 'recyclers are facing difficulties in clearing the goods'. Unlike its counterpart in China, the Indian government regards scrap as waste rather than as a raw material, he reminded delegates.

Mr Borad also highlighted 'good business' for US exporters to Indonesia and Vietnam. In China, meanwhile, an oversupply situation has developed owing to a combination of heavy ordering in previous months and the impact on industrial activity levels of the country's early-October holiday, observed Jacques Musa of Veolia Propreté France Recycling. He also noted that plastics collection volumes in

Europe are 30% lower than last year and that the majority of recyclers in France are operating at 60% of their capacity.

## Post-shredder technology

Guest speaker Pieter Kuiper, Project Manager at Auto Recycling Nederland (ARN), explained that his organisation will shortly focus on post-shredder technology at a specially-built facility in Tiel to help the Netherlands in its bid to comply with the EU requirement to recycle 95% by weight of a car by the year 2015. According to Mr Kuiper, ARN has already recycled 18 000 tonnes of car bumpers, 1300 tonnes of grilles, 2200 tonnes of hub-caps and 20 000 tonnes of polyurethane foam.

Fellow guest speaker Ed Flohr, an inde-

pendent industry expert, said that large companies are 'gaining ground' in the waste management and recycling fields, and that 'the intensity of competition will grow'. However, flexible smaller businesses will still be in a position to take advantage of: isolated geographical markets; special materials; new sources; new customers; and 'states of confusion' such as 'a market in flux'.



From left: Peter Daalder of Daly Plastics in the Netherlands, BIR Plastics Round-Table Chairman Surendra Borad of Gemini Corp. in Belgium, and Jacques Musa of Veolia Propreté France Recycling.

## **Used tyres continue to tread new ground**

Recovery and recycling of used tyres has enjoyed strong growth in Europe over the past 10 to 15 years. And a few of the wide-ranging initiatives to improve the sustainability of this ubiquitous product were highlighted at the latest BIR Tyres Round-Table in Amsterdam.

Tyres Committee Chairman Barend Ten Bruggencate indicated that scrap tyres play an accepted role in, among other applications, artificial sports pitches, cement kilns and civil engineering. As a result of the growth of these end markets, Europe has increased its tyre recovery rate from 38% in 1994 to 91% in 2008; the latter figure incorporates 39% materials recycling and 32% energy recovery, according to latest figures from the European Tyre & Rubber Manufacturers' Association (ETRMA).

The management of end-of-life tyres has 'improved very much' - notably among newer EU member states such as Poland, Romania, Hungary, Estonia and Lithuania, Mr Ten Bruggencate told delegates. EU legislation - starting with the Landfill Directive's ban on dumping whole and then shredded tyres - has been a major factor in the recycling rate surge, he added.

Guest speaker Catherine Clauzade

highlighted research efforts within her own organisation aimed at finding and/or developing outlets for scrap tyres. The Director of Research & Development at Aliapur, the French body responsible for collecting, preparing and recycling end-of-life tyres, Ms Clauzade referred specifically to the substitution of foundry coke with shred from used truck tyres. Since foundry coke costs around Euro 200 per tonne, she added, 'it's a very good opportunity for us'. Other areas of study for Aliapur have included the use of processed end-of-life tyres in road drainage systems and equestrian surfaces, she added.

Almost 300 000 tonnes of scrap tyres entered the Aliapur system last year. And given that the used tyre sector remains 'a cost centre', one of body's goals is to reduce its charges for these incoming volumes. Since 2004, contributions have dropped from Euro 2.2 per passenger car tyre to Euro 1.50, Ms Clauzade revealed. Dr Wilma Dierkens, Associate Professor within the University of Twente's Faculty of Engineering Technology in the Netherlands, then told delegates of research into devulcanisation which aims to return at least half of the material for recycling into the original rubber products.