

18/3/18: a day to celebrate

The Hong Kong Special Administrative Region of China occupies a mere 1075 square kilometres but punches well above its weight in terms of economic and trading influence. Even so, truly global concern over China's major scrap import rethink provided an even more salient reason why the BIR's decision to stage its latest world recycling convention in this particular corner of the globe was so supremely well judged.

By Ian Martin and Martijn Reintjes

In recent times, thousands of shipping containers have been diverted to Hong Kong after having been refused entry to ports on the Chinese mainland because of the country's more stringent import control regime known as National Sword. And it was this initiative - plus the associated uncertainty among the world's exporting

community - that dominated proceedings at BIR's latest global gathering at the Hong Kong Convention & Exhibition Centre in late May.

A substantial proportion of the BIR meetings on non-ferrous metals, recovered paper, plastics and e-scrap was devoted to this single issue (see specific commodity reports on the pages that follow). In every case, significant question

marks were still hanging over not only the exact categories of recyclables to be affected but also the timetable for implementing the stricter import controls or, potentially in some cases, outright bans.

Confirmed date

On one point, however, delegates were offered complete certainty: the first-ever



Scrap collection bins
in the streets of Kowloon,
Hong Kong.

recycling

BIR-organised Global Recycling Day will take place on March 18 next year to coincide with the 70th birthday of the world recycling organisation. In making the announcement at the second meeting of the World Council of Recycling Associations (WCRA), BIR's world president Ranjit Baxi of UK-based J&H Sales International said the event would provide a focused annual opportunity to inform the general public, governments and policy-makers about the recycling industry's critical role in 'creating a clean and sustainable environment for us all and for future generations'.

Baxi is looking to position recyclables as the planet's 'seventh important resource', alongside water, air, coal, oil, natural gas and minerals. 'If we can get just 5-10% of the Earth's 7 billion people to make one positive recycling change in their lives on Global Recycling Day, then it will have a

massive impact,' he asserted.

Between now and next March, BIR plans to launch initiatives and calls to action, as well as to approach potential partners, in order to help build towards the day of celebration.

While the intention is to co-ordinate pro-recycling activities across perhaps 50 countries, Baxi urged all members and national associations to consider means by which they can help make the event a success. A simple way of promoting Global Recycling Day, proposed by the Bureau of Middle East Recycling's president Salam Sharif, is for recyclers around the world to sign off all their emails with a note underlining their personal commitment to the March 18 initiative.

Hammer home message

Re-elected in Hong Kong to serve a second two-year term as BIR's president, Baxi also emphasised that Global Recycling Day would enable the industry to hammer home the message that its contribution extends well beyond the environmental and into such crucial realms as job creation and trade balances. Indeed, under the umbrella of the WCRA, it is proposed to commission separate studies in order to obtain hard data about the specific economic and social benefits derived from recycling.

The WCRA would also approach the Chinese government for clarification of the practical implications for recyclables trading of its National Sword import control initiative, Baxi confirmed.



At the Hong Kong gathering, BIR president Ranjit Baxi announced the appointment of Arnaud Brunet as the world recycling organisation's director general in succession to Alexandre Delacoux. Prior to joining BIR, Brunet headed Sony Europe's Brussels Office, managing its relationship with the European institutions and with European trade associations.

Draft position on POPs

One of the many other fronts on which BIR is battling to protect the interests of the recycling industry concerns persistent organic pollutants (POPs). The world body has formulated a draft position urging Parties to the Stockholm Convention to reject exemptions for manufacturers that would allow them to market goods containing POPs unless they have first made 'financial provisions in their market places



The World Council of Recycling Associations.

for eventual end-of-life environmentally sound management (ESM), including the separation from those articles/goods of those POP-containing materials and the cost of the POPs' destruction or irreversible transformation', it was explained at the International Environment Council (IEC) meeting.

POPs appear in a range of substances - including flame retardants - and so represent a significant issue for recyclers 'because we have to clean up', IEC chairman Olivier François of Galloo pointed out in Hong Kong. Manufacturers of cars, aircraft and textile goods are among those to have secured exemptions to continue marketing goods containing POPs up to the year 2036 and well beyond, continued BIR trade & environment director Ross Bartley. If this were to happen, the recycling industry might still be handling POP-containing goods deep into the current century. 'Who picks up the costs of the waste collection, separation and hazard-

ous waste incineration gate fee of those goods' POPs at end-of-life in 2050 up to an estimated 2100?' he asked IEC delegates.

With tests having confirmed the presence of POPs in unborn babies, this is a highly emotive issue, said Bartley, and so it is vital for the recycling industry to be 'on the right side of the argument'. François added: 'We will fight, you can be sure, to be heard.'

Seeking behavioural change

An update on the local recycling scene was supplied to the BIR's International Trade Council meeting in Hong

Kong by Hon-Meng Wong, assistant director for waste reduction and recycling within the special administrative region's environment protection department. Only 35% of Hong Kong's municipal solid waste (MSW) is recovered for recycling while the remainder is consigned to landfill at a daily rate of 1.39 kg per capita.

Hong Kong's blueprint for the sustainable use of resources sets the target of a 40% reduction in the waste disposal rate by 2022. To assist in reaching this goal, a quantity-based MSW charging scheme is planned for 2019 in a bid to trigger behavioural change, the speaker explained. ■

BIR's next conventions will be held in:

- October 14-16 2017: Taj Palace Hotel, New Delhi, India (where it is envisaged one day will be devoted to a workshop on recycling in India)
- May 2018: Barcelona, Spain
- October 2018: London, UK

Erdwich waiting for electricity to finalise e-scrap line

BIR's Hong Kong convention provided a trade area platform for some 25 companies - mainly machinery and technology suppliers such as shredding systems specialist Erdwich of Germany. For this company, Hong Kong has become something of a second home and certainly an interesting place to do business. Erdwich has been involved in the building of a Euro 12 million e-scrap recycling line near Hong Kong's international airport for ALBA Integrated Waste Solutions. ALBA will be responsible for the collection and recycling of used electronics from some 7 million Hong Kong citizens.

'This is our biggest contract to date,' confirmed managing director Hans Erdwich.

But, he added, the project has been subject to some delay. 'Our work is almost finished; however, there is no electricity,' he explains. 'And we really need electricity to get the line in operation.'

Erdwich has sent its 20 engineers back to Germany. 'As soon as the plant has connection to the electricity system, we will get them on the first plane to Hong Kong,' he says.

Seeking direct business

The exhibition hall also hosted representatives of Akron - one of Russia's largest scrap metal companies, handling some

700 000 tonnes of ferrous scrap per year. Akron's key export markets are India, Turkey and Germany. According to the firm's Erwin Miller, Akron was in Hong Kong to seek out opportunities 'to do



Akron's Erwin Miller (left), Vladislav Shik and Sergey Fadin.

direct business with end users in China and South East Asia rather than being dependent on traders in Europe'.

High hopes for Hammel

For German shredder manufacturer Hammel, Asia is 'a very important growth market', the firm's managing director Olav Limbeck told Recycling International. 'We have got 80 machines in Japan, 25 in Korea and at least 20 units in Thailand, Malaysia and Taiwan.' It was 'for sure', he added, that the BIR convention in Hong Kong had opened doors to new business in the region.



Olav Limbeck and Christina Elter of Hammel.



Hans Erdwich.



Non-Ferrous

Threat hangs over mixed metal scrap exports to China

Storm clouds are gathering over the international non-ferrous scrap trade in the form of possible import bans into the key market of China. As part of the country's National Sword reforms and its avowed commitment to environmental protection, the Chinese government could go as far as to halt imports of certain items of mixed metal scrap, delegates to the latest BIR non-ferrous division meeting in Hong Kong were warned by Ma Hongchang.

The BIR's advisor on China's policy and regulatory developments went even further, indicating that copper and aluminium scrap imports will be subjected to a 'tough' review - possibly after 2020 - in order to determine whether imports into China will be allowed to continue.

This major issue is still surrounded by an element of conjecture given that, at

the time of writing, the Chinese authorities have yet to issue timetables for import bans or details of the categories of scrap to be affected. But it was the view of BIR's divisional president David Chiao of Uni-All Group that 'very severe weather is coming towards us'.

'Declining all the time'

Focusing specifically on copper scrap, guest speaker Hong Yang - deputy general manager of Minmetals Germany GmbH - highlighted the shifting interplay between China's import volumes and its domestic supplies, with the latter having surpassed the former for the first time in 2015.

And the gap widened last year given that scrap imports 'are declining all the time', he said, whereas domestic volumes are expected to leap 17% this year alone.

Copper scrap imports from Western Europe and the USA have been on the decline whereas Asian countries are increasing their share of total shipments to China. More encouragingly, however, Hong believes China will 'continue to play an important role' on the international market.

Asked whether China will become a net exporter of copper scrap in the foreseeable future, Hong concluded that this is 'not probable any time soon'. Supply in China is still short and total consumption of copper scrap is still increasing, to the extent that requirements are expected to reach 4.4 million tonnes by 2020.

Further comfort came from fellow guest speaker John Browning of Hong Kong-based boutique futures broker Bands Financial who contended that the 'long-term cyclical upturn' on which base metal prices had embarked in 2016 could run for 'five to 10 years'.

E-scrap: China more rigid on WEEE imports, BIR e-scrap committee told

In the expert opinion of Dr Steve Wong, executive president of the China Scrap Plastics Association, his government's determination to prioritise environmental protection will make it very difficult - or perhaps even impossible - in the future to import contaminated WEEE scrap. Standards are being rigidly applied and the flexibility shown previously to, for example, computer scrap is no longer apparent, he added at the BIR e-scrap committee meeting in Hong Kong.

At the same gathering, it was revealed that work has begun on the committee's meta study of available information relating to global e-scrap generation and flows. The aim is to present the findings at BIR's convention in New Delhi this October.

RECYCLING WASHING | SEPARATING | DRYING

SIMPLY THE BEST

» We had the choice between several suppliers for our PET bottle to bottle plastics recycling plant. We decided to purchase our equipment from HERBOLD in Germany. The excellent after-sales team was the deciding reason we chose to work with HERBOLD. They bridged a distance of more than 5,000 miles and helped my staff get moving quickly and helped us start production and maintain the system. HERBOLD offers simply the best technology for size reduction, washing, separation, and drying of PET bottles.«

*George Gatlin, General Director
INVEMA San Pedro Sula, Honduras*

HERBOLD
MECKESHEIM

Herbold Meckesheim GmbH | Industriestr. 33 | 74909 Meckesheim |
Postfach 1218 | 74908 Meckesheim | Deutschland |
Tel.: + 49 (0) 6226/932-0 | Fax: + 49 (0) 6226/932-495
E-Mail: herbold@herbold.com | Internet: www.herbold.com



Ferrous

Steel scrap set to be China's 'rising star'

Despite recent swings in buying activity, among other challenges, the ferrous scrap industry is 'on a much sounder footing' than at the same time last year, the BIR ferrous division's meeting in Hong Kong was assured by its president William Schmiedel of US-based Sims Management Global Trade.

In addition to volatile exchange rates, the sector has been tested in recent months by a drop-off in scrap purchases by India and Turkey. However, Indian purchases have been showing signs of improvement while Turkish mills have exceeded normal buying levels since reducing their bookings by around 50% in March and April as they awaited the outcome of the country's constitutional referendum.

'Temporary phenomenon'

A focus of concern at previous BIR conventions, China's steel exports fell 26% across the first four months of this year partly as a consequence of domestic induction furnace closures, but those same capacity shuts have driven Chinese steel scrap into the export channel,

Schmiedel pointed out. Displaced tonnages have been heading into India, Japan, South Korea and Taiwan despite China's 40% export duty, it was reported by Tom Bird of Liberty Steel in the UK.

Schmiedel's opinion was that these flows would be 'a temporary phenomenon' given the good potential to melt significantly higher volumes of scrap within China over the coming years. And he was supported by Li Shubin, secretary general of the China Association of Metal Scrap Utilization, who told the World Council of Recycling Associations meeting in Hong

Kong that the exports would be 'only temporary'.

While official figures indicate that China's steelmakers consumed 90.1 million tonnes of scrap last year, execution of the country's Five Year Plan will boost domestic scrap use 'considerably', Li said, adding that usage will rise to 150 million tonnes by 2020 as China pursues a 30% scrap ratio by 2025. The country's scrap utilisation per tonne of crude steel produced was 111 kg last year.

Divisional guest speaker Dr Ye Chen of the Shanghai Futures Exchange agreed that scrap steel is going to be 'a rising star' in China owing to cost concerns and environmental considerations. It is therefore the right time, he contended, for his organisation to explore scrap futures in China and to 'accelerate research and development' in this area. He went on to insist: 'We want physical delivery futures in China.'

Outlook 'relatively positive'

In his overview of the global steel scrap market, Bird concluded that 'the outlook for 2017 remains relatively positive' given that 'demand should stay healthy and there is a good supply/demand balance'. Scrap flows in the USA have been 'steady' amid 'underlying strength in the steel sector' while reasonably upbeat market sentiment in Europe is being tarnished by concerns that finished steel prices will come under pressure in the short to medium term.

The BIR ferrous division launched the eighth edition of its 'World Steel Recycling in Figures' publication in Hong Kong (see this issue's ferrous market report for the highlights). Divisional statistics advisor Rolf Willeke also noted a suggestion that Pakistan's steel scrap imports could reach 4 million tonnes in the current year. ■

World shredder population totals 914

The BIR shredder committee's latest list of plant locations, unveiled in Hong Kong, reveals that more than a third of the world's 914 shredders are in the USA, which has an estimated 322 units. Of the 300 units in Europe, Italy heads the league table on 52, followed by France on 45 and both Germany and the UK on 39. Of the 292 shredders located elsewhere in the world, Japan has a population of 110 units while a further 73 are to be found in China.



Paper

Freight rates likely to stabilise after 'explosion'

There are persistent 'tensions' with the paper manufacturing industry which sees opportunities in the EU's Circular Economy package to 'restrict exports of recovered paper outside Europe'. However, this 'short-term vision' must be resisted given that the European market's 'structural oversupply' rendered healthy export flows necessary to 'support collection, increase recycling rates and maintain competitive prices', stated Thomas Braun of Germany's BVSE secondary raw materials association in his role as vice president of the European Recycling Industries' Confederation.

International trading issues dominated the latest BIR paper division meeting in Hong Kong. An 'explosion' in container rates 'had nearly dealt a death blow to the shipping of recovered paper' from Europe to Asia, according to outgoing divisional president Reinhold Schmidt of Recycling Karla Schmidt, also of Germany. Levels of US\$ 2000 per container have been 'a real concern', he conceded.

No audience with lines

Freight costs to China soared more than US\$ 1000 per container - or US\$ 40 a tonne - in the opening months of 2017, delegates were told. However, rates are likely to stabilise around US\$ 1200-1400 per container over the coming months, according to BIR world president Ranjit Baxi of J&H Sales International.

Even though Europe's recovered paper industry shipped huge volumes to Asia, 'we never have an audience with the shipping lines' in order to convey the huge problems created by violent upswings in freight rates, he pointed out.

Concerns over the impact of China's National Sword import regime were also aired during a panel discussion in Hong Kong moderated by Recycling Interna-

tional's chief editor Martijn Reintjes. Baxi understood China's rationale of outlawing imports that are contaminated and unsuitable for use as secondary raw materials; at the same time, he warned that sorting systems are unable to achieve 100% purity and so a 'zero tolerance' approach by the Chinese authorities 'would affect us all'.

'A notch higher'

Imports of recovered fibre are of continuing importance to Chinese mills in order to make up for the generally lower quality of the country's rising domestic collections - but Europe must still aim to 'move its quality a notch higher', Baxi insisted. Brian Taylor of US-based Recycling Today magazine argued that any tonnes deflected from China by National Sword 'will go somewhere' although market problems might arise in the short term. And Reinhold Schmidt insisted: 'China will still buy good-quality material.'

Baxi also contended that exporters should 'look at other markets', although he recognised that Japan holds a significant advantage in Asian markets owing to its shorter delivery times.

Given the high levels of investment in Africa, he suggested this continent could absorb at least a portion of any lost export volumes in a few years from now.

Consolidation trend

Guest speaker Nobuyuki Shiose of Daiwa-Shiryo Co., Ltd provided an overview of latest developments affecting Japan's recovered paper sector in which he pointed to a growing preference among domestic paper mills for dealing with those fibre suppliers able to offer larger tonnages. 'It is possible to get higher prices if you can offer more volume,' he said. This trend could lead to consolidation within the supply sector and create a competitive environment in which 'small companies will be the losers'.

In his European market report, newly-elected paper division board member Martin Soth of Sběrné suroviny UH sro in the Czech Republic highlighted the sharp recent decline in OCC and mixed paper prices, which was followed by a recovery of almost equal proportions. ■

AGENTS WANTED



Total FREEDOM

Wherever you want, they can go!





MOBILE BALER GC-L RANGE



MOBILE BALER GC-M RANGE



MOBILE SHEAR-BALER H-S RANGE



TRANSPORTABLE SHEAR-BALER H-A-B RANGE

Industrias Hidráulicas, s.a.

P.I. Malpica, calle E, nº 54-55 - P.O. Box 662 - 50080 ZARAGOZA - Spain
moroshsa@moros.com - Tel. +34 976 57 34 10* - Fax +34 976 57 23 54

www.moros.com

Engineering · Design · Manufacturing

Free trade vital for a strong used clothing industry

BIR and its partners are continuing to negotiate with the East African Community in their bid to persuade its members - Burundi, Kenya, Rwanda, Tanzania, Uganda and South Sudan - to revisit their proposal to phase out imports of used textiles and footwear by 2019. A strong used clothing industry 'is synonymous with growth' while the success of this market depends not only on the know-how of sorters but also on a commitment to free trade, the BIR textiles division meeting in Hong Kong was told by its president Mehdi Zerroug of France-based Framimex.

In the European market, reported Alan Wheeler of the UK's Textile Recycling Association, demand and prices for high-quality original clothing have been 'stable'

Textiles



but sorters are reluctant to process lower qualities because these are 'difficult to sell at reasonable prices'. And for Europe's wipers and recycling grades, conditions

remain unchanged with 'very low or even negative' prices.

Wheeler went on to urge the new UK government to 'listen seriously' to industry fears over Brexit and to ensure continued access to the EU labour force as well as 'unfettered access to EU markets and free movement of goods across EU frontiers'.

Stainless scrap trading 'increasingly a regional business'

Last year's global 18/8 scrap ratio of 44% was 'definitely a long-time low point' as decreases were seen in every region of the world, sectoral expert Markus Moll of Steel & Metals Market Research in Austria pointed out to the BIR stainless steel & special alloys committee meeting in Hong Kong. The ratio was substantially higher at 49.3% in 2015 and 48.4% in 2014. Moll also observed that intercontinental stainless scrap trading accounted for only 8% of the market in 2016, suggesting this is 'increasingly a regional business'.

Global production of crude stainless steel can be expected to surge 4.8% from just under 47 million tonnes in 2016 to 49.2 million tonnes this year, with a further increase of 3.6% to 50.94 million tonnes anticipated for 2018, according to Moll. Crude stainless production in China jumped 10.7% last year to 25.45 million tonnes and a further hike of 5% to 26.72m tonnes is projected for the current year.

The analyst went on to note signs that substitution of 300 series stainless steel appears to be reversing, going on to predict that its share of global stainless output will climb from 54.1% in 2016 to 55.2% by 2021 whereas the 200 series is expected to sustain a fall from 20.8% to 18.7% over the same period.

Moll also predicted that the nickel price will recover to around US\$ 10 000 per tonne by the end of 2017.

Collection innovation

The report submitted by Osamu Shoji of Shoji & Co., Ltd in Japan confirmed normal domestic collections of original used clothing over the previous six months while prices have been unchanged for a year at just a third of their peak of some three or four years ago. Quality is rendering 50% of originals 'useless', he lamented.

Sales of used clothing are not permitted in China and so collected material must be reprocessed for use in new products, it was explained by guest speaker Luo Hong Jian of Sheng Dong Hua. His own company produces, for example, gloves as well as school bags and backpacks with a 30% recycled content.

The firm employs truly modern innovations, such as high-tech collection units in retail outlets where the public can receive credits on their smart devices when donating used textiles; these credits can then be used to obtain discounts on a wide range of products sold online. ■

Fears and rumours grow over China's import intentions

In the worst-case scenario from the five- to 10-year perspective, 'I don't think China will import plastic scrap any more'. This was the stark opinion conveyed to the latest BIR plastics committee meeting by Dr Steve Wong, executive president of the China Scrap Plastics Association. He also relayed a circulating rumour that Chinese imports of film scrap could be stopped as early as September this year.

Under the Chinese government's National Sword clampdown, plastic scrap imports are being subjected to '100% container checking at most ports' while the overall cost of bringing in the material is 'so high', Wong lamented.

If China's imports are ultimately suspended and if it were to take another 10 years for them to resume, there is no other country in Asia with the ability to take up the 7 million-plus tonnes that the Chinese

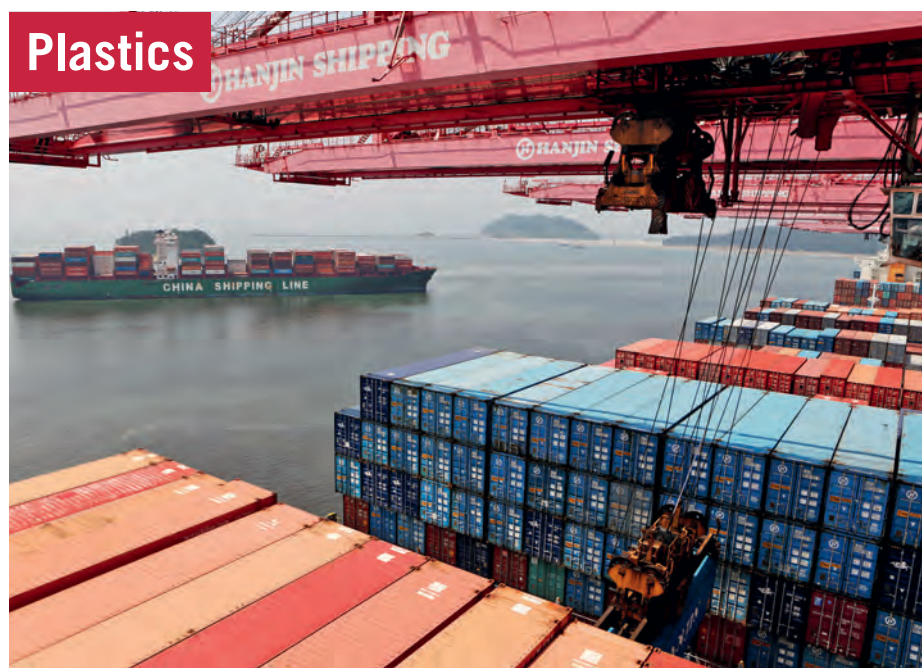
have been buying internationally on an annual basis, Wong underlined to BIR delegates in Hong Kong. In these circumstances, the 'most effective solution' for the scrap plastics market would be increased processing and recycling at source - especially given 'yo-yoing' freight rates, the expert observed.

'Panic' and 'bloodbath'

BIR plastics committee chairman Surendra Patawari Borad of Belgium-based Gemini Corporation agreed that India could not fill the market gap. With the Indian authorities still regarding recycled plastics as 'harmful to human health', the country's imports are 'less than 5%' of those of China and import licences are restricted to only around 30 companies. 'Though the country is growing very well,' he said, 'I do not expect an increase in the plastics scrap trade into India.'

The import upheaval in China has impacted far and wide. In the US market, Borad continued, 'panic' over customs clearance issues and a possible ban in China have persuaded many exporters to stay away. Prices of certain lower grades have slumped 'more than 50%, and in some cases to near-zero levels' while a 'bloodbath' among the higher grades has seen values sliding 15-20% in just two months.

On the issue of transportation, guest speaker Deepak Saxena of Kerry Logistics in Hong Kong argued that structural changes within the shipping sector will underpin freight charges. 'Rates will not come down so low,' he asserted. ■



Crumb rubber industry toils under 'cloud of uncertainty'

Although more than 90 separate pieces of research have concluded no risks are attached to the use of crumb rubber in synthetic turf, the issue 'is not going away' and will not do so until 'a definitive study' has been published, according to Robin Wiener, president of the US Institute of Scrap Recycling Industries. Negative media reports surrounding crumb rubber use in artificial turf have prompted some US jurisdictions to delay purchasing decisions or to opt for alternative infill materials 'to avoid controversy'. This year alone, 13 bills in eight

US states have 'targeted crumb rubber and synthetic turf'. The pervading 'cloud of uncertainty' has led to a 30% decline in the US crumb rubber market over recent years and also to job losses, Ms Wiener told the BIR tyres & rubber committee meeting in Hong Kong.

'Industry-wide issue'

She warned that this represented 'an industry-wide issue affecting all recyclers, regardless of commodity' and that it is therefore essential to 'work together, sharing information and strategies'. In

this context, she highlighted the RecycledRubberFacts.org microsite which carries information on 'all the various studies out there that have demonstrated the safety of this material'. Dutch public health and environment institute RIVM and the European chemicals agency ECHA have both insisted recently that the health risks associated with rubber granulate are 'negligible', it was also noted by BIR tyres & rubber committee chairman Barend Ten Bruggencate of Recybem in the Netherlands.