

Ferrous

China to become big export player in long term?

Scrap arisings in China will increase significantly after 2030 and may well present export opportunities at times when high prices are prevailing on the international markets, it was suggested to the latest BIR ferrous division meeting by guest speaker Curtis Zhu, steel and iron ore markets analyst with UK-based Wood Mackenzie. 'China could become quite a big scrap exporter in the long term,' was his conclusion in Amsterdam.

In a guest presentation that focused on China's impact on the steel and steelmaking raw materials sectors, Zhu maintained that coking coal prices could remain at elevated levels until the spring of next year. He also suggested that the Chinese government could exceed its own target of slashing 150 million tonnes of annual steelmaking capacity within five years, adding that total cuts of perhaps 170 million or 180 million tonnes were possible within that period. This would help support steelmakers' margins and push up their utilisation rates from an average of around 70% at present to 75% or beyond.

Real demand has peaked

BIR ferrous division president William Schmiedel of US-based Sims Metal Management Global Trade Corporation reiterated a concern that 'Chinese officials continually speak of capacity cuts but never speak of production cuts', adding that the country's steel exports 'have not decreased meaningfully' in recent months. In response, Zhu said that the bulk of China's steel heads into South East Asia, East Asia and the Middle East, and he expressed surprise at the high levels of publicity accorded Chinese steel

exports in the USA where, he estimated, they accounted for only around 10% of total imports. The guest speaker acknowledged that an increasing number of trade cases is likely to drive Chinese steel exports lower over the coming years. Zhu also indicated that real demand for steel within China reached its peak in 2014 and that small declines can be expected over the next two years, followed by a period of relative stability in the seven years to 2025 and then a further fall thereafter. And he agreed with Schmiedel that, following on from its huge losses in 2015, China's steel industry now seems to be exhibiting greater self-discipline and focusing more on profitability rather than simply on cash flow.

'Severely challenged'

In his opening remarks to the meeting in Amsterdam, Schmiedel had added the recent 'precipitous' increase in coking coal prices and the possibility of increased ferrous

scrap demand from the integrated steel sector over the near term to a list of unpredictable factors that already included currency manipulations and political upheavals. The industry's ability to predict markets is now 'severely challenged', he said. 'We have become all too familiar with uncertainty.'

George Adams of SA Recycling in the USA envisioned a more positive scrap market for America, Taiwan and South Korea over the short term at least. However, he also underlined to delegates the scale of the recent decline in South Korea's steel scrap imports - from around 10 million tonnes as recently as three years ago to an annual total of nearer 6 million tonnes at present.

Similarly, more positive market conditions in Europe were forecast by Tom Bird of UK-based Liberty Steel for the remainder of the current year. □



Curtis Zhu: scrap arisings to increase.



William Schmiedel: 'We have become all too familiar with uncertainty.'

! Key findings of the January-June 2016 update of 'World steel recycling in figures' from the BIR ferrous division's statistics advisor Rolf Willeke are featured in the ferrous market report on pages 34-37 of this issue of Recycling International.

Bangladeshi steel scrap imports set to surge

With significant new steelmaking capacity scheduled to come on stream in Bangladesh, the country's imports of ferrous scrap are set for a massive increase in the medium term, the BIR ferrous division meeting in Amsterdam was informed by Zain Nathani of the Nathani Group of Companies. Some 1.5 million tonnes of ferrous scrap was imported by Bangladesh last year but this figure is expected to rise to an estimated 4 million tonnes by 2018. India's imports of ferrous scrap amounted to 6.2 million tonnes in

the financial year ending March 31 this year, with a further 1.8 million tonnes bought from overseas suppliers in the ensuing four months, according to Nathani.

Current expectations are that imports into India, Pakistan and Bangladesh as a whole could total 10-15 million tonnes in the next year or so, he added.

Nathani also noted that India is currently working on a policy covering end-of-life vehicles which could lead on to overreaching recycling policies for the country.



Zain Nathani.

Falling commodity prices, reduced scrap availability, uneven manufacturing growth, high regulatory costs and reduced overseas demand are among the many challenging factors that have precipitated a restructuring of the scrap industry in the USA, argued Mark Lewon, president of Utah Metal Works and chair of the US Institute of Scrap Recycling Industries.

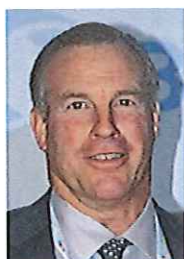
After three difficult trading years in a row, Lewon told the BIR non-ferrous metals division meeting in Amsterdam that the industry is unlikely to revert to its previous form. 'But we can reinvent ourselves,' he insisted to delegates, because 'recyclers are resilient'. He urged companies in the sector to focus increasingly on safety, operational efficiency and product diversification. Making a quality product is also vital - particularly when market conditions are tough, he added.

Lewon also insisted to delegates that free trade in recyclables 'is absolutely a necessity for our industry'.

'Swing capacities'

While China is still driving global commodity markets, Lewon pointed to 'a real narrowing' of the types of scrap in which the country's buyers are interested. Aluminium specialist Holger Ellmann, founding partner of Argentum Metal Management in Germany, also focused on China in his guest presentation, arguing that its producers have been exercising greater discipline over recent times, particularly when prices collapsed in late 2015 and the early part of 2016. 'Swing capacities' were quickly brought into play to create 'a more balanced market situation'.

At the same time, idled capacities - 'mainly in China' - will ensure 'a natural limit on the potential of more significant price rallies', according to Ellmann's presentation. And while official global aluminium stocks have been significantly reduced, there is still uncertainty as to the whereabouts of what he described as 'invisible' off-warrant inventories.



Mark Lewon: 'Recyclers are resilient.'



Holger Ellmann: aluminium smelters at high risk.

Non-Ferrous

Lewon: scrap industry unlikely to return to where it was

The speaker went on to argue that current LME prices and reduced premium levels will continue to put high-cost aluminium smelter operations in the USA and Europe 'at high risk'. At least half of the Chinese smelting industry is using latest technology whereas a relative lack of modernisation in Europe and the USA has resulted in lower overall efficiency levels, Ellmann maintained.

Opening up market

In other developments relating to China, Alexandra Weibel-Natan of Manco in France highlighted the Chinese government's apparent desire to open up the pre-shipment inspection market to competition in a move which should reduce costs and therefore bring 'benefits for raw material suppliers'. She also alluded to increased interest among Chinese investors in

European companies, as evidenced by Chiho Tiande's acquisition of Scholz Recycling and the partnership between Alba Group and Techcent. On this theme, divisional board member Murat Bayram of European Metal Recycling stated in the latest BIR World Mirror: 'For many years, it has been suggested that China could become a net exporter of scrap - and if this were to happen, investments in Western scrap or smelting companies could be a wise move during a period in which purchases, joint ventures and alliances can be agreed more cheaply than would have been the case during the boom times of the previous decade.' Weibel-Natan's review of global non-ferrous markets also mentioned the 'challenging' conditions confronting recyclers around the world and to the re-emergence of payment delays as a significant issue. □

E-scrap: harmonisation headache in Canada

The current 'hodge-podge' of extended producer responsibility (EPR) programmes in Canada has done little to help recycling rates and has made harmonisation difficult, lamented Tracy Shaw, president and ceo of the Canadian Association of Recycling Industries, in addressing BIR's e-scrap committee in Amsterdam.

The guest speaker called on the government to 'lead by example' and on manufacturers to design products so as to minimise environmental impact while also maximising material recovery. She also highlighted the logistical difficulties associated with collecting end-of-life electronics in some parts of Canada, and particularly in its remote northern communities.



Tracy Shaw.

In the USA, she added, 34 states have EPR-type laws while e-recycling laws have been introduced in 25 states. Shaw's presentation also alluded to 'a noticeable trend driven by CRTs towards loosening or repealing EPR'. According to Surendra Patawari Borad of Belgium-based Gemini Corporation NV, the Indian government has framed detailed guide-

lines covering the systematic collection and transportation of e-waste by producers; they are charged with collecting 30% of the e-waste by 2018 and the remaining 70% in the ensuing five years. 'A value chain must be created so that they can take e-waste back from the chain through which they have sold,' he explained to delegates in Amsterdam.



By Ian Martin

Asked about the economic prospects for this high-performance, recycle-rich plastic, Van Roost said that it would be priced according to its properties while also emphasising that it offered the same as typical virgin plastics but with the added bonus of a 50% recycled content.

Dramatic change

The outlook for the plastics recycling industry has worsened, according to BIR plastics committee chairman Surendra Patrawari Borad of Belgium-based Gemini Corporation NV. The economics 'have changed dramatically' and Chinese demand for scrap has diminished substantially because of the smaller gap between secondary and primary prices.

To improve this equation, he called for an increase in landfill taxes and elimination of VAT on goods produced from recycled materials, as well as a lightening of the legislative and administrative burden on non-hazardous recyclables such as non-complex plastics and recovered paper.

On the plus side, he believed strong demand for recycled materials would return 'in the next five years' because a rising global population would push up overall consumption. □

'Recycling of automotive plastics has just started,' according to ARN. Although significant progress has been made to date, it is a challenge that is constantly evolving as the share and diversity of plastics used in vehicles continue to increase, the Dutch car recycling specialist's ceo Arie De Jong explained to the BIR plastics committee meeting in Amsterdam.

He revealed that ARN achieved a materials recycling rate of 87.7% last year while energy recovery took its overall recycling performance to 97% - both figures easily exceeding the legal objectives of, respectively, 85% and 95%. As part of this overall picture, the operation is recovering annually some 3600 tonnes of low-density, 2200 tonnes of average-density and 3500 tonnes of high-density plastics from the post-shredder mix of materials.

But in the case of plastics, he added, new and sometimes difficult-to-recycle materials such as laminated components and composites are being introduced to cars, thereby adding to the complexity of the post-shredder recycling puzzle. Other plastics-related issues for recyclers include PVC contamination in the high-density fraction, thus complicating the process of finding good outlets for this material. And the high proportion of black plastics in automotive applications is rendering colour sorting more

difficult, he told delegates. Fellow guest speaker Herman Van Roost, business development manager for recycling at Total in Belgium, detailed the virgin plastics producer's recent introduction of virgin molecular design incorporating substantial recycle content to form 'circular compounds'. He described this 'breakthrough' product as 'a showcase' to 'break open the minds of people and regulators' and demonstrate the possibility of delivering high performance with a high recycle content.

Tyres & Rubber: No crumb of comfort

More than 90 studies carried out by government, industry and academia have concluded that there is 'no link between cancer and crumb rubber in synthetic turf', the BIR tyres & rubber committee meeting in Amsterdam was told by Robin Wiener, president of the US Institute of the Scrap Recycling Industries. And yet, delegates learned, this material is continuing to suffer a barrage of negative publicity on both sides of the Atlantic.

In the USA, media stories connecting crumb rubber with cancer have undoubtedly contributed to a 30% decline in the market, according to Wiener. And within the last few weeks in the Netherlands, noted Barend ten Bruggencate of end-of-life tyre management company RecyBEM, the Dutch media has been awash with 'sensational' stories based on a TV programme's claim that tyre-derived rubber granulate used in sports pitches is carcinogenic.

With leading industry bodies such as the European Tyre & Rubber Manufacturers' Association now revisiting this topic, BIR will maintain a strong involvement and co-operate in any way with new research, insisted Ten Bruggencate. 'We have to take this extremely seriously at the highest level,' he emphasised. 'This is so enormously important

for our branch.'

The meeting also heard Ruud Spuijbroek, secretary general of European retreading association Bipaver, outline how his organisation's attempts to defend the trade at EU level against cheap new truck tyre imports has been rejected partly on the grounds that Bipaver 'is not suffering any injury' - even though, according to the speaker, more than 100 retreading companies have closed their doors in recent years.

Despite all of the talk about transition to a circular economy, the European Commission's DG-Trade 'has no interest' in the added value provided by recycled or remanufactured products through reductions in waste, raw materials usage and carbon footprints, Spuijbroek complained.



Arie de Jong: car recycling rate of 97%.



Surendra Patrawari Borad: strong demand to return.

Paper recyclers issued with China regulations alert

'Stay tuned.' That was the advice offered by guest speaker Wade Schuetzeberg after having alluded to the distinct possibility that the Chinese government will shortly impose new import controls and regulations. Indeed, he went as far as to tell the BIR paper division meeting in Amsterdam that these new measures 'could eliminate complete segments of secondary raw material imports'. More controls could also be coming to Europe too, he added.

Flashing up a picture of the prehistoric triceratops on the big screen behind him, American Chung Nam BV's executive director for the European region warned that companies failing to adapt to such changes are likely to follow the same path as the dinosaur and become 'extinct'.

China is on course to import perhaps 26 or 27 million tonnes of recovered fibre this year, far more than any other nation. However, as Schuetzeberg pointed out, China has mitigated its import requirements by boosting collections at home to some 80 million tonnes per year. This increased domestic availability effectively means that China now 'has its own legs to stand on'.

'Further to go'

Europe has improved its recovered paper quality 'but still has further to go', the guest speaker went on to contend, adding that 'we need to take a greater role within our industry at self-regulation'. The recently-launched Quality First campaign reminds the industry that the EN 643 standard calls for a 1.5% maximum for non-target materials, to which Schuetzeberg added the comment: 'We need to learn how to apply that standard.' While acknowledging that some controls and regulations are necessary, the guest speaker also underlined the difficulties caused to the business community by their 'inconsistent application'. Authorities across Europe differ widely in their approach and company offices are not always fully informed of changes, leading to commercial 'pain' in the form of delays or even fines.

Increased recovered paper collections not only in China but also in countries such as India and South Korea are impacting the grades booked from Europe and elsewhere, noted Ranjit Baxi of UK-based J&H Sales International. Adding to Wade Schuetzeberg's earlier advice to those wanting to stay in business, BIR's world president and also honorary president of its paper division urged companies to 'look for new markets'. Baxi also spoke of the 'bumpy ride' suffered by the recovered paper industry in 2016, adding that



Wade Schuetzeberg: China now 'has its own legs to stand on'.



Ranjit Baxi: 'Look for new markets.'

margins 'are constantly threatened by forces beyond our control' such as the Brexit vote and legislative developments. Another of these negative forces has been the recent collapse of Hanjin Shipping which, according to anecdotal evidence, left as many as 75 000 containers stranded on the west coast of the USA alone, leading to widespread congestion and associated costs.

Growth in exports

Revisiting the issue of quality, Tarek Al Sharif of Sharif Metals Int'l LLC in the United Arab Emirates confirmed an increasing appreciation in the Middle East of the importance of clean recovered paper. The speaker also pointed to growth in the region's exports of mixed paper, OCC, newspapers and also 'small volumes of



office paper' to, principally, India and Pakistan because of relatively low freight rates.

Re-municipalisation

Earlier, current paper division president Reinhold Schmidt of Recycling Karla Schmidt in Germany reiterated his warning about what he described as the 're-municipalisation' of the recovery sector through increasing incursions by municipalities and also public companies in their search for new income streams. This trend is proving highly detrimental to private businesses which have been providing such services in an efficient manner and at a fair cost to the public for many decades. 'More and more, Europe seems to be saying goodbye to private companies,' he lamented. □

Local winner of Papyrus prize

There was a home-grown winner of the BIR paper division's Papyrus prize in Amsterdam. Dutchman Heiman Bollegraaf (right), until recently the ceo and owner of Bollegraaf Recycling Solutions, was awarded the accolade for what divisional president Reinhold Schmidt described as the building-up of a machinery and equipment company 'known to all in this sector'.

Taking over the business in 1988 when its turnover amounted to around Euro 6

million, Heiman Bollegraaf expanded the firm's geographical presence and also its product portfolio to include, among others, balers, shredders, separators, screens and conveyors, propelling annual sales to nearer Euro 75 million. The company supplies individual units and also turnkey installations, including 13 out of the 17 mega MRFs delivered to North America. Receiving the award was 'a great pleasure', he told delegates.





Trade moves to defend under-threat exports

The textiles recycling industry on both sides of the Atlantic is mounting a concerted bid to persuade the East African Community (EAC) to review its directive to phase out imports of used textiles and footwear by 2019. To this end, a delegation recently visited the region to discuss ways of continuing the trade while helping to deliver on the goals of the six EAC member countries, namely Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda.

The visit was funded by the BIR world recycling organisation, FEDEREC from France and both the Textile Recycling Association (TRA) and Bangor University's Economic and Social Research Council from the UK. A key member of that delegation was Jalia Nabukalu Packwood, sustainability officer-international relations at Bangor University's Sustainability Lab, who suggested to the latest BIR textiles division meeting in Amsterdam that the EAC considered the ban as an essential step towards growing their own textiles industry. A report submitted to the

same meeting by Pol T'Jollyn of Belgium-based Recutex NV indicated that some EAC countries have already rendered export business unworkable by revising their duties.

The balancing argument, according to Packwood, is that used clothing sales represent 'a really big trade in East Africa' that provides employment for many thousands of people in these countries. Her figures suggest EAC imports more than tripled from US\$ 100 million in 2001 to more than US\$ 300 million in 2014.

'Meaningful collaborations'

Based on feedback from her meetings with various key officials in East Africa, Packwood urged the used textiles industry to carry out research aimed at supporting its call for a continuation of the export trade alongside development of the EAC's own textiles industry. The proposed strategy entails exporting countries buying new clothes from the EAC in return for

exporting partners continuing to access the EAC market with used clothing. 'It is important for the exporting countries to consider relevant and meaningful collaborations with the EAC in the textile sector,' she underlined.

Packwood confirmed that the World Bank will take the lead under the Office of Trade and Competitiveness in working with stakeholders and making recommendations to the EAC regarding the directive. Prospective partners will include the US Embassy in Uganda which will be the communication point for America's Secondary Materials and Recycled Textiles Association.

BIR textiles division president Mehdi Zerroug of Framimex in France hailed the delegation initiative as 'the start' of a wider process which interested national federations should look to support.

Brexit plea

Regarding his domestic market, Zerroug confirmed an increase in used textiles collections to 200 000 tons last year despite some operators going bankrupt.

Meanwhile, a slower decline in used clothing values within the UK - and even reports of small increases - were noted in Amsterdam by Alan Wheeler of the TRA. 'This is hardly surprising when you bear in mind the spectacular collapse in the value of the pound,' he added, which has 'temporarily made British exports cheaper'.

On the issue of Brexit and its impact on the domestic textiles recycling sector, Wheeler underlined: 'My message to the UK government is simple: we rely significantly on exports to the EU and on migrant workers from the EU. We need to maintain access to the Single Market and to the EU labour force.'



Jalia Nabukalu Packwood: meaningful collaborations needed.

SMART and TRA take issue with 'inaccurate' media reports

The developed world's relationship with the East African market has been tackled in a strongly-worded statement issued by America's Secondary Materials and Recycled Textiles Association (SMART) and the UK's Textile Recycling Association (TRA). Responding to what the two bodies term 'inaccurate and unbalanced' coverage of the second-hand clothing industry in both Newsweek and the Huffington Post, the statement counters the implication that imports of second-hand cloth-

ing into East Africa are hurting the local textile manufacturing industry.

Even if East Africa were to ramp up local production, it is 'unlikely' that the clothing would be affordable for people residing in the region, SMART and TRA contend. 'With many in the East African Community living on the equivalent of US\$ 1-2 or less per day, second-hand clothing provides many with their only affordable access to quality apparel,' they argue. The second-hand clothing that US and

UK exporters ship to the region 'is prepared and selected specifically to meet the price and quality demands of East African populations', the statement insists. 'They are not unwanted goods dumped in the African market.'

'There are numerous countries around the world, including Pakistan, Guatemala and Honduras, which enjoy both robust manufacturing and second-hand industries,' SMART and TRA add.

For stainless steel scrap processors, the story remains unchanged: margins 'are still not sufficient' and there is 'a big lack of confidence in the economic outlook'. This was the gloomy conclusion reached by Uwe Dierkes of German company Siegfried Jacob Metallwerke GmbH & Co. KG in his global market review presented to delegates at the end-October meeting of the BIR stainless steel & special alloys committee in Amsterdam.

In summing up the sentiments expressed in the committee's latest BIR World Mirror, he singled out the question as to whether mine closure announcements in the Philippines and projections of a global nickel deficit of up to 100 000 tons for 2016 should be 'of serious significance' to the market when balanced alongside 'the estimated stock of 1m tons (of nickel) around the world'.

Implications for margins

In other market developments, steelworks 'have reduced the percentages for nickel units in order to make scrap competitive to ferro-alloys', noted Dierkes. 'The recent chrome price increase has balanced out the decrease in percentages so that

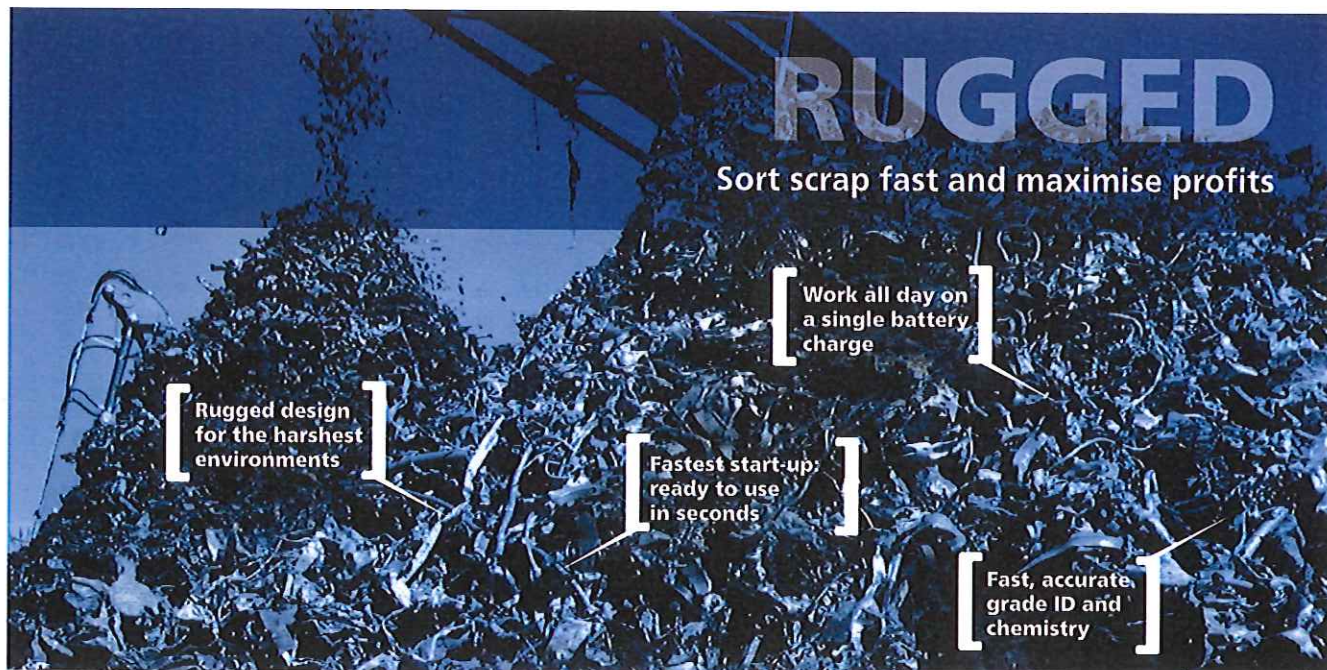
prices remain more or less steady.' A further decrease in percentages would have significant implications for margins, he told delegates. The meeting also addressed the challenge of recycling spent catalysts, metallic oxides and batteries. Guest speaker Stéphane Chorlet, sales & marketing vice president at Valdi-Groupe Eramet in France, explained that his company has developed its recycling knowledge around these three families of industrial waste, with the priorities being to generate zero waste as well as cost efficiency for all parties involved. He went on to reveal that Eramet has invested heavily in

a brownfield project north of Clermont-Ferrand in central France where it will be maintaining the existing production of high speed steel and transferring the recycling technology currently used at two Valdi plants near Lyon and Limoges. Its recycling model, based on the pyrometallurgical approach, will be 'unique' within Europe when operations commence at the beginning of 2017, Chorlet contended. It was also confirmed in Amsterdam that Rick Dobkin, executive vice president of Shapiro Metals, has joined the board of the BIR stainless steel & special alloys committee as representative for the USA. □

Stainless Steel & Special Alloys

Nickel stocks an unshifting market factor

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