

Leading role for recycling sector on India's road to sustainable economic growth

BIR World Recycling Convention (Round-Table Sessions) in New Delhi (14 - 16 October 2017)

The Indian government aims to set up scrap-based steel mills in the north and west of the country, it was announced at the BIR World Recycling Convention in New Delhi on October 14 by India's Minister of Steel, Dr Chaudhary Birender Singh.

During a full-day BIR workshop dedicated to India's recycling potential, Dr Singh confirmed the country's steel production capacity is to increase to 300 million tonnes by 2030. 'Recycling can play a significant role in achieving this target,' he told delegates. And he also revealed that the country's first car shredder is expected to start operation by the end of 2018; a government-initiated joint venture will set up both this facility and a network of collection and dismantling centres in the greater Delhi region.

The initiative is one of the outcomes of a major economic and environmental transformation under the leadership of India's Prime Minister Narendra Modi, who had endorsed the BIR World Recycling Convention in a written personal message. Boosted by a rapidly-expanding middle class, India's GDP is expected to grow to around US\$ 7 trillion by 2028 from US\$ 2.3 trillion at present. The latest GDP forecasts (Oxford Economics, August 2017) for 30 Asian cities predict that those in India are set to grow the most; indeed, Delhi is expected to be the fastest-growing city in Asia over the next five years.

'India continues to offer huge potential for growth due to major infrastructural development over the next 10-15 years,' stressed BIR President Ranjit Singh Baxi in his opening address to the world recycling organisation's first-ever convention in India. 'This is the start of strengthening our bond of partnership and friendship between the global members of BIR that have joined this convention, with over 200 Indian companies present.'

According to Mr Baxi, India today is 'at the forefront of growth and soon to be the second largest steel producer in the world', clearly offering major opportunities for the country's metal recycling sector.

Metal recycling in India offers 'a huge untapped potential', agreed B.B. Singh, Managing Director of Indian scrap trading company MSTC. He estimated India's current recycling rate to be 20-25%. 'By the year 2020, domestic scrap generation in India will reach 43 million tonnes, whereas demand would be around 53 million tonnes - a deficit of 10 million tonnes that needs to be imported,' he stressed.

India's recycling potential

According to Mr Singh, 'some hundred' shredder plants will be needed to handle India's growing domestic scrap volumes. 'In the far future, once you have this capacity, India would no longer depend so much on imports of scrap,' he said. 'However, given this lack of recycling capacity and infrastructure, imports of scrap remain crucial over the coming years in order to feed growing scrap demand.'

Mr Singh sees huge opportunities for automotive recycling in India, boosted both by rapidly-growing car sales and the rising number of end-of-life vehicles (ELVs) becoming available. 'The potential scrap generation from ELVs can contribute 10% of the total domestic scrap market,' he said, adding that the first car shredder to be installed next year would be a major step in that direction.

At the same time, however, India's recycling industry is facing major challenges such as a 2.5% metal scrap import tax as

well as complex legislation and regulation which continue to frustrate day-to-day business operations for recyclers and traders both within and outside of India, such as through delaying container loads of scrap at the country's main sea ports.

In her presentation, Dr Aruna Sharma, Secretary of the Ministry of Steel, hinted at the strong possibility that the government will do its best to temporarily lift, or at least reduce, the scrap import tax.

"Keep it simple and workable"

In his presentation, BIR's Director General Arnaud Brunet called for better regulation. His message: keep it simple and workable. 'Legislation is not an end to itself: it is a means to deliver tangible benefits and address common challenges,' he stated. Furthermore, he called for: 'fair enforcement against companies that are under the radar, rather than repeated checks on the largest and most compliant'; and for promotion, implementation and enforcement of multi-lateral agreements by, among others, the World Trade Organization and the United Nations.

Another challenge is presented by what is often described as the 'informal sector'. New Delhi alone is home to some 100,000 waste-pickers while many millions of these informal workers find a living from scrap across India, often working in unhealthy and dangerous conditions. 'We see waste mountains collapse and kids die, and we just need to change this,' said KPMG consultant Dr Jaijit Bhattacharya.

Rita Roy Choudhury, Assistant Secretary at the Federation of Indian Chambers of Commerce and Industry, believes the informal sector 'needs to be integrated in the formal sector and helped to build better life opportunities'.

Aluminium recycling in India: the best is yet to come

India's demand for secondary aluminium will increase by 8-10% per year, mainly boosted by the country's rapidly-growing automotive industry, according to Akshay Agarwal. The Executive Director of Century Metal Recycling, a major producer of aluminium and zinc die-casting alloys and India's largest aluminium scrap importer, told at the meeting of the BIR Non-Ferrous Metals Division in New Delhi: "This growing scrap appetite will be met primarily by increased aluminium scrap imports."



NF-metals with tradition: Dhanvantari made of brass from India

Secondary aluminium accounts for 30% of India's overall aluminium consumption of 3.3 million tonnes per year. In the past six years, secondary aluminium demand has almost doubled to 1.1 million tonnes, of which some 90% is imported. By 2021, demand is expected to reach 1.5 million tonnes.

Largely unorganised scrap collection

In 2016, some 120,000 tonnes of aluminium scrap was generated in India, with the automotive and power segments together accounting for 75% of the total. India's domestic scrap market may be fast-growing but still has a long way to go, believes Mr Agarwal. "There is largely unorganised scrap collection and insufficient awareness, leading to a major proportion of scrap going to landfill rather than recycling," he told.

On the positive note, new initiatives are underway to boost recycling - including the first car dismantling and depollution

facility which is scheduled to be running before the end of this year, to be followed by the country's first car shredder. These were described by Mr Agarwal as "baby steps to a future where you may abort scrap import dependency". And he emphasised that, although India's domestic scrap industry is trying hard to modernise, this can be achieved only with regulatory support.

Fellow guest speaker Deepak Mahendra, former Managing Director of Chassis Brakes International, also acknowledged the major potential for "large-scale adoption of aluminium" within India, particularly in car manufacturing. At present, he pointed out by way of example, "only 10% of cars in India carry aluminium wheels".

Trend for e-rickshaws

Navin Sharma, CEO of major lead producing and recycling business Gravita India Ltd, focused on his country's lead recycling potential and on what he sees as a bright future for his sector. One of the emerging drivers is the country's National Electric Mobility Mission which is targeting sales of 6-7 million hybrid and electric vehicles by 2020, thus clearly boosting demand for batteries. "Where China has seen an increase in e-bikes, we see the trend of e-rickshaws (three wheelers) growing by 20% in the coming years," said Mr Sharma. "Also, the first electric buses are on the streets already and thousands more have been ordered."

"This is all work in progress," declared the BIR Non-Ferrous Metals Division's Senior Vice President Dhawal Shah of Metco Marketing (India), who chaired the meeting in the absence of the Division's President David Chiao of Uni-All Group. In summarising India's long road to becoming a modern economy with a fully-grown recycling sector, he said: "True, we have to undo decades of inefficiency and corruption. But the good news is, India is the seventh biggest economy in the world with 65% of its population below the age of 35. Every day, 30 km of new road is being added; there are already one billion telephone connections. We're not there yet, but the good days will come."

According to Mr Shah, there will only be more growth. "There is huge opportunity thanks to a fast-growing middle class. Imagine, there are now only 19 cars for every 1000 people; there is only a 4% penetration of air-conditioners whereas China has 51%."

Ambitious plans to tackle India's mounting tide of e-waste

The BIR E-Scrap Committee's meta study of reliable generation and flow data is already in draft form and will be published in the coming months to give an opportunity for all interested parties to digest its contents ahead of a full discussion at its May 2018 meeting in Barcelona. So said E-Scrap Committee Chairman Thomas Papageorgiou of Greece-based Anamet SA.

The study includes a summary of per capita e-scrap production around the world and forecasts of the situation in the year 2025, from which it is evident that more than half of the world's e-scrap will arise in the Asia-Pacific region, said Mr Papageorgiou. Also covered are e-scrap flows in different parts of the world, described by the E-Scrap Committee's Chairman as "the most difficult part of the study".

One of the countries anticipating a sharp increase in e-waste generation is India. The E-Scrap Committee's guest speaker B. K. Soni, Chairman and Managing Director of e-waste management specialist Ecoreco, indicated that 3.2 million tonnes is generated annually in India but that a United Nations report forecasts a figure of 20 million tonnes for the year 2020. Around 98% is currently dismantled within the so-called "unorganised" sector in ways that are harmful to health and the environment, he pointed out.

India: sharp increase in e-waste generation

In response, the Indian government is backing an "ambitious" scheme to train 300,000 scrap dealers nationwide over a 10-year period through a network of training centres. "Heavy" investment is still needed in, for example, establishing more collection centres and putting technology in place, Mr Soni added.

Regarding latest market developments, stricter customs controls have meant that the cost of bringing scrap into China is "as high as US\$ 10,000 per container", it was reported by Dr Steve Wong, Executive President of the China Scrap Plastics Association. In a market update read out in his absence by BIR Plastics Committee Chairman Surendra Borad Patavari of Gemini Corporation, Dr Wong added: "WEEE scrap plastic recyclers have no choice but to either close down their operations or

move to South East Asian countries to continue their businesses.”

Mr Papageorgiou said that the impact of the new Chinese import policy is also being felt in Europe and that China is not alone in implementing rules that hinder trade, pointing out that the government of Serbia has recently decided to channel export applications through a special committee for approval or otherwise.

China needs to understand “we are the good guys”

BIR's International Environment Council (IEC) meeting in New Delhi was devoted almost entirely to the issue that is preoccupying great swathes of the recycling industry: China's import ban affecting certain secondary raw materials.

During a panel discussion moderated by BIR World President Ranjit Singh Baxi in the absence of IEC's Chairman Olivier François of Galloo, it was explained by Robin Wiener, President of the US Institute of Scrap Recycling Industries (ISRI), that the latest policy developments in China reflect a multi-pronged strategy published in July, the goals of which include: prohibiting imports of solid waste that entail “major environmental hazards and intense public reaction” by the end of 2017; halting imports that can be replaced by domestic resources; greater customs enforcement; refinement of laws, regulations and related systems; and increased domestic recycling.

From these pointers, Ms Wiener said, it becomes apparent that self-sufficiency in scrap is “an important driver” for the Chinese government. Also noting that the

strategy calls for a raising of thresholds for imports, she said a proposed 0.3% contamination ceiling for carried waste constitutes “an effective ban” because, from all the recyclers to which she has spoken on this issue, “no-one thinks they can meet that threshold”.

For the USA, China's actions have the potential to affect US\$ 6.5 billion of annual exports and 150,000 related jobs. The fact that some US municipalities have stopped accepting certain papers and plastics in their kerbside collection programmes has been “a big force for us in raising this issue with the US government”, Ms Wiener said. Meetings have already taken place with the White House and US Congress among others, she added.

Specific impacts of China's policy

For Europe, the Secretary General of the European Recycling Industries' Confederation Emmanuel Katrakis explained that his organisation's response has included gathering information from members about the specific impacts of China's policy so that the European Commission can be armed with “hard data” when mounting its case.

Panellists underlined the crucial need for the global recycling industry to continue to work together on common arguments and to encourage the involvement of China's manufacturers and consumers of imported secondary raw materials, with several contributors to the debate arguing that the import ban has the potential to be highly damaging to China's own businesses.

BIR's Director General Arnaud Brunet focused on the lessons that must be learned

from recent policy developments in China, calling on national recycling associations to watch for “signals” of similar changes taking place in other countries - “because we have to be ready”, he stressed. Governments need to be shown the benefits of partnering with recycling industry professionals, he added, “because we have good practices, we are the good guys”. Mr Brunet is scheduled to travel to China where he hopes to meet key officials and to gain an understanding of “the next step” and “where they are going”.

BIR is “in a good position”

Michael Lion, President of Everwell Resources in China and Chairman of BIR's International Trade Council, laid emphasis on the fact that China's President Xi Jinping has taken “a very personal interest” in the improvement of the country's environment. The challenge for recycling industry representatives, he said, is to gain access to people “at the highest political level” within China and to explain - “in a helpful and respectful way” - how the recycling industry can work with them to a solution that is “commercially and socially advantageous to them”.

In reviewing BIR activities at the level of intergovernmental organisations, its Trade & Environment Director Ross Bartley pointed out that a UNEP-Basel Convention Expert Working Group is to review various annexes of the Convention which have key relevance to waste and scrap. BIR is “in a good position” regarding this debate, not least because it has “engagement in the Expert Working Group”, he added.

Emissionsrechtehandel – Stahlindustrie bleibt in ihrer Wettbewerbsfähigkeit bedroht

Mit Unverständnis reagiert die Wirtschaftsvereinigung Stahl auf die am 9. November 2017 bekannt gewordene Einigung im Trilog zwischen Europäischem Parlament, Ratspräsidentschaft und EU-Kommission zum Emissionsrechtehandel der vierten Handelsperiode (2021 – 2030).

„Mit diesem Ergebnis ist es Brüssel nicht gelungen, Klimaschutz mit der industriellen Wirklichkeit der Stahlindustrie in Einklang zu bringen“, kritisiert Hans Jürgen Kerkhoff, Präsident der Wirtschaftsvereinigung Stahl. „Die Stahlindustrie in Deutsch-

land und Europa steht in einem intensiven globalen Wettbewerb mit Konkurrenten aus Ländern, die keine CO₂-Kosten zu tragen haben. Nun wird sie für das gesamte kommende Jahrzehnt mit einer erheblich zu geringen Zuteilung von Zertifikaten konfrontiert, die sie nicht durch technische Maßnahmen ausgleichen kann – dies ist eine existenzielle Bedrohung für ihre internationale Wettbewerbsfähigkeit.“

Zwar sei es richtig, dass die für die Industrie insgesamt verfügbaren Zertifikate allgemein angehoben werden sollen. Die

Weiterführung der Kompensationsregelung für emissionshandelsbedingte Strompreissteigerungen sei ebenfalls ein wichtiges Element zu Wahrung der industriellen Wettbewerbsfähigkeit, auch wenn sie in der heutigen Form noch nicht ausreichend sei. „Unsere Appelle zu einer für die Stahlindustrie besonders wichtigen Korrektur der nachgewiesen technisch nicht erreichbaren Benchmarks sind hingegen unbeantwortet geblieben“, bemängelt Kerkhoff. Dabei hatte das Europäische Parlament sogar entsprechende Vorschläge vorgelegt.