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WORDS FROM THE

President



Ranjit Singh Baxi
J&H Sales International Ltd
(GBR)
BIR President

2016 was not an easy year, neither for the industry nor for BIR. The overall economic and political conditions continued to be challenging and unsettling. The unexpected decision of the British people to leave the EU surprised most of our European partners. In the same way, the outcome of the US Presidential Election showed us once again that today's certainties can quickly change and only leave speculation for the future.







Markets remain volatile and challenging for most of our commodities, although for some there seems to be hope appearing on the horizon. We all know that, eventually, prices will go up again, but in the meantime we have to pay our bills. One of the main challenges faced by our industry today is the increasing burden of legislative controls that does not help in the promotion of a smooth and efficient system of waste collection, segregation and transportation of recyclables. Facilitation of free and fair trade must remain the core principle of our industry globally.

Very low commodity prices have depressed collection volumes; some recyclers have gone out of business while others have consolidated. Consuming industries have suffered too, and so there are fewer customers for recyclers.

When we are at a low point, we can only hope that the markets move higher. The recycling industry has always shown tremendous adaptability and resilience in tough times and, despite difficult market conditions, we always try to move on. Of course, our ultimate wish is that the use of our recycled raw materials picks up so that we can continue to perform our vital role for the benefit of the environment.

BIR has continued to work relentlessly to support its members through legislative representation, development of great networking opportunities and a constant information flow.

As you will read in the report presented by our Convention Committee Chairman, we organised two highly successful conventions in Berlin and Amsterdam last vear - two European destinations which will counterbalance our two conventions in Asia planned for 2017. During the course of 2016, the BIR leadership gave much thought to the need to open up Asian markets to members by holding our international recycling conventions in Hong Kong and India. Exploring and promoting new business opportunities for our members has always been one of BIR's foremost objectives, and BIR has never been afraid of taking risks for the longterm benefit of its affiliated companies and associations. I hope that our members will continue supporting us and I wish to reassure you that this investment will certainly be rewarded.

During our event in Amsterdam last October, we held the first meeting of the World Council of Recycling Associations. This body was created to give a unified voice to the international recycling industries in our bid to develop awareness

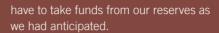
BIR'S Financial Situation

Our 2016 General Assembly in Berlin endorsed my nomination as BIR's new Treasurer, and I was very honoured by the trust that the organisation placed in my abilities.

2016 was a year of many challenges. Given the enduring adverse global economic conditions, we had foreseen a conservative budget. Finally, the year turned out more positively than we had expected, to the point that we did not



Tom Bird *Liberty Steel (GBR)*BIR Treasurer



The state of our finances allows us to continue to offer a valuable service to our members, not least through our biannual conventions. The continued positive turn-out of registered delegates in 2016 confirmed that these conventions remain a unique meeting point for key decision-makers from the worldwide recycling industry.



bolstering our services to members.

among policy-makers, legislators and the general public of the economic, social and environmental contribution of the recycling industry. It is the aim of the World Council to help promote best sustainable practices around the world - particularly in developing countries.

Worldwide, the recycling industry is responsible for creating millions of jobs as well as a cleaner, healthier and more sustainable planet. The World Council will therefore spearhead the drive for further academic studies and research that will provide factual and statistical confirmation of the recycling industry's contributions to, for example, GDP, employment and landfill reduction.

One major project on which the World Council will be focusing is the

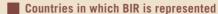
implementation of the first Global Recycling Day. This project was further developed in 2016 with the definition of a clear scope for this ambitious initiative, summarised in a very attractive brochure which will help spread the message to important stakeholders and the wider public. We also created an Internet presence in the form of a small, dedicated website which will obviously grow as the project evolves. With the help of an online petition form, we are reaching out to a large number of supporters who can add their voice to ours by endorsing this initiative and by contributing their own online message of support.

Along the same line of thought, I attended the latest climate change conference (COP 22) in Marrakech last November to advocate the establishment of the Global Recycling Day and to highlight the benefits of recycling in terms of climate change mitigation. I was particularly proud to be able to meet in person H.E. Salaheddine Mezouar - President of COP22 and also Minister of Foreign Affairs and Cooperation of the Kingdom of Morocco - and to present him with a copy of the Global Recycling Day brochure while outlining the main reasons for this important initiative.

Much was achieved in 2016 and much remains to be done in the years to come. BIR draws its strength from the great quality of its members, the dedication of the BIR leadership and the great professionalism of our team in Brussels. I would like to take this opportunity to express to you all my gratitude for your support of our great world organisation over the past 12 months.

Membership

SPREAD 2016





Western Europe

Austria Belgium Cyprus Denmark Finland France Germany Greece Iceland Ireland Italy Luxemburg Netherlands Norway

Portugal Spain Sweden Switzerland United Kingdom

Russia & Eastern Europe

Albania Belarus Bulgaria Czech Republic Hungary Latvia Lithuania Poland Romania Russia Slovenia Ukraine

Asia

China India Iran Japan Malaysia Pakistan Republic of Korea Singapore Taiwan (China) Thailand Vietnam

Central & South America

Brazil Chile Cuba Ecuador El Salvador Haiti Honduras Mexico Trinidad and Tobago Uruguay

Turkey & Middle-East

Bahrain Israel Jordan Kuwait Lebanon Libya Saudi Arabia Turkey United Arab **Emirates**

North America

Canada USA

Australia & Pacific Rim

Australia New Zealand

Africa

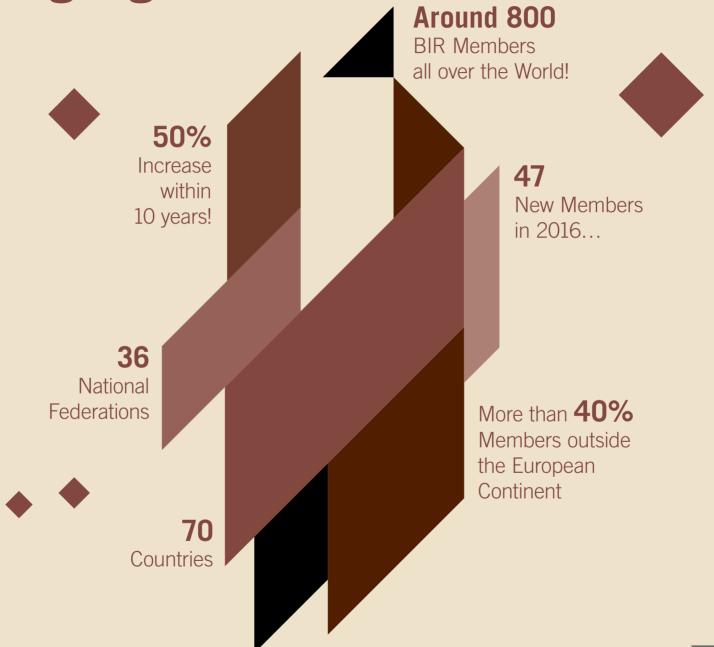
Egypt Morocco Reunion Island South Africa Tunisia





MEMBERSHIP

Highlights



LIST OF BIR

Member Federations



AUSTRIA

Austria Recycling (AREC)

BELGIUM

COBEREC Textiles

CANADA

 Canadian Association of Recycling Industries (CARI)

CHINA

- China Association of Metal Scrap Utilization (CAMU)
- China Nonferrous Metals Industry Association Recycling Metal Branch (CMRA)
- China Resource Recycling Association (CRRA)
- China Scrap Plastics Association (CSPA)

CUBA

 Union de Empresas de Recuperacion de Materias Primas (UERMP)

CZECH REPUBLIC

 Aporeko Svaz Průmyslu Druhotných Surovin (SPDS)

FRANCE

 Fédération des Entreprises du Recyclage (FEDEREC)

GERMANY

- Bundesvereinigung Deutscher Stahlrecycling- und Entsorgungsunternehmen e.V. (BDSV)
- Bundesverband Sekundärrohstoffe und Entsorgung e.V. (BVSE)
- Verband Deutscher Metallhändler e.V. (VDM)

HUNGARY

 Hungarian Waste Management Federation (HOSZ)

INDIA

- All India Non Ferrous Metal Exim Association (ANMA)
- Inland Importers & Consumers Association (IICA)
- Metal Recycling Association of India (MRAI)

ITALY

 Associazione Nazionale Imprese Recupero (FISE – UNIRE)

JAPAN

- Japan Iron & Steel Recycling Institute (JISRI)
- Japan Recovered Paper Association (JRPA)

NETHERLANDS

- Dutch Waste Management Association (DWMA)
- Federatie Nederlandse Oudpapier Industrie (FNOI)
- Metaal Recycling Federatie (MRF)

POLAND

- Economic Chamber of Non-Ferrous Metals and Recycling (IGMNiR)
- Scrap Economy Chamber of Industry and Commerce (IPHGZ)

ROMANIA

 Organizaţia Patronală Şi Profesională "REMAT"

SOUTH AFRICA

 Metal Recyclers Association of South Africa (MRA)



SPAIN

- Federación Española de la Recuperación (FER)
- Gremi de Recuperació de Catalunya
- Asociación Española de Recuperadores de Papel y Cartón (REPACAR)

TURKEY

• TÜDAM Değerlendirilebilir Atık Malzemeler Sanayicileri Derneği

UNITED ARAB EMIRATES

• Bureau of Middle East Recycling Inc. (BMR)

UNITED KINGDOM

- British Metals Recycling Association (BMRA)
- The Recycling Association
- Textile Recycling Association

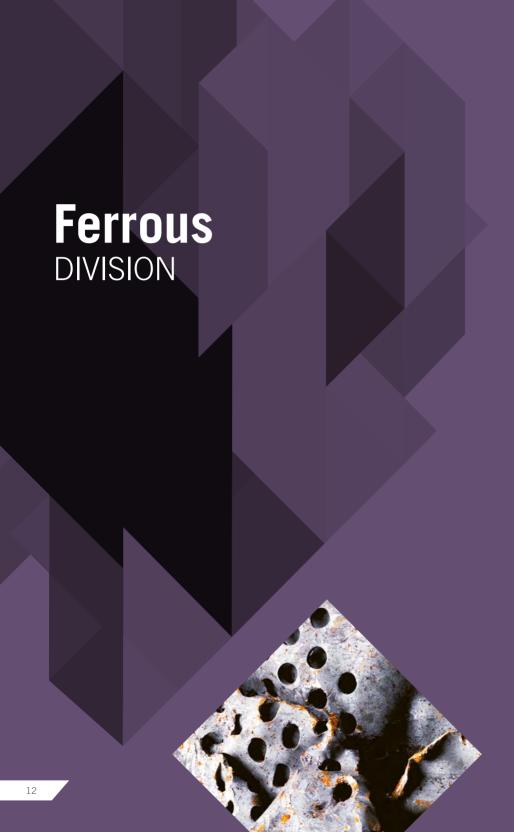
UNITED STATES

• Institute of Scrap Recycling Industries, Inc. (ISRI)



Divisions AND **Committees**

Each Commodity Division and Committee represents a specific material and is headed by a president/ chairman who in general is supported by an elected board. Two additional BIR committees cover cross-commodity issues pertaining to trade and environmental matters: the International Environment Council and the International Trade Council.





William Schmiedel
Sims Metal Management
Global Trade Corporation (USA)
President Ferrous Division

2016 redefined the word "volatile" in every ferrous scrap producer's lexicon. At our divisional meeting in Berlin last May, I used the phrase "tremendous volatility" to capture a relatively short period in which bulk prices for ferrous scrap soared from US\$ 175 per tonne to US\$ 330. The overall market, and most importantly the scrap collection infrastructure, barely had time to digest this meteoric rise in values before prices collapsed, losing more than US\$ 100 per tonne from the peak.

The latter months of 2016 brought a rise in global steel prices, fuelled by increases in raw material values. Coking coal and iron ore made significant price gains, and ferrous scrap followed suit to the extent that shredded material was once again attracting more than US\$ 300 per tonne on the international market as the year drew to a close. In the last few days of 2016, however, coking coal values were moving decisively in the opposite direction.

If we take November as an example of these late-year developments, iron ore prices started out strongly as a result of increased tightness in the coking coal market and the

"IT IS DIFFICULT TO PREDICT THE TREND OF THE TRUE MARKET WHEN THERE IS SO MUCH SPECULATION THAT BEARS NO RELATION TO THE PHYSICAL MARKET."







upward movement of the biggest casino in terminal markets – otherwise known as the Shanghai and Dalian futures market. On the whole, however, iron ore was extremely volatile, increasing by US\$ 10 per tonne between November 7 and 11 before declining by US\$ 7 on November 15. By the end of the month, the price was going up and then down the trading limit on consecutive days. Chinese billet prices followed the same trend, increasing by almost US\$ 65 per ton during the first half of November and then giving back almost 70% of that increase by the month's end.

Suffice it to say, it is difficult to predict the trend of the true market when there is so much speculation that bears no relation to the physical market.

We had exceptional speakers addressing our divisional meetings in 2016. In Berlin last May, Jason Schenker of Prestige Economics provided us with ample evidence to suggest that the negative market factors were outweighing the positives at that time, specifically casting doubt on International Monetary Fund forecasts of 6.5% real GDP growth in China for last year. He also privately predicted Trump to win the US presidency.

By the time we reconvened in Amsterdam last October, sentiment had certainly improved although currency manipulations, political upheavals and the like still prompted me to preface my comments to delegates with the words: "We have become all too familiar with uncertainty."

Our guest speaker on that occasion was Curtis Zhu of research and consultancy group Wood Mackenzie, who scattered some seeds of optimism by suggesting not only that the increasing number of trade cases against China was likely to dampen the country's steel exports over the coming years, but also that the Chinese government's target of cutting 150m tonnes of annual steelmaking capacity was entirely achievable within five years and that the total could even rise to 170-180m tonnes within that period. As I have said on a number of occasions, hopefully the reduction phase in China will extend not just to steel capacity but also to steel production.

Uncertainties persist for 2017 - not the least of which are currency depreciations in ferrous scrap consuming markets. However, the real question is will we see the supply-driven market transformed into one that is demand-driven? Positive signs include an acceleration of economic improvement in key countries: the USA appears at this early point in time to have benefitted from the Trump effect while China has posted several months of an increasing Purchasing Managers' Index of over 50. Also on the upside, there has

been an easing of political uncertainties in major consuming areas, as well as Chinese government statements and actions that should lead to a reduction of domestic steel production and hence exports.

The answer to the basic question outlined above will dictate the true physical market over the next few months.

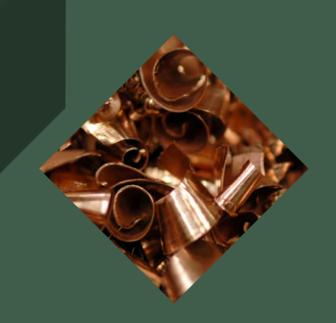
Key Facts

Global crude steel output in 2016: +0.8% to 1.628bn tonnes

Steel scrap usage in producing crude steel (January-September 2016)

	TOTAL (MILLION TONNES)	% CHANGE YEAR ON YEAR
EU-28	66.02	-5.3
USA	35.00	-4.4
Japan	24.59	-1.9
South Korea	20.94	-6.9
Russia	12.77	-3.8
China	64.70	+3.5
Turkey	19.72	+5.1

Non-Ferrous Metals DIVISION





David Chiao
Uni-All Group Ltd (USA)
President Non-Ferrous
Metals Division

In 2016, our sector was subjected to a dizzying combination of volatile market prices and currency exchange rates, as well as a rapid succession of eye-opening, jaw-dropping political developments. There was the surprise result of the US Presidential Election and the UK's unexpected Brexit vote, which drove down the pound to 30-year lows against the US dollar.

Of more immediate relevance to our own companies, we have seen the unwanted re-emergence of payment problems as a significant issue while the collapse of Hanjin Shipping triggered major shipment delays and steeply rising shipping rates, with freight costs and journey times likely to increase further in the longer term owing to heightened merger activity in the shipping industry.

These events, plus the uncertainty hanging over forthcoming elections in Germany and elsewhere, has swelled "wait-and-see" sentiment within the metals sector, we were told at our October meeting in Amsterdam by Christian Schirmeister of Amalgamated Metal Trading.

A widespread sense of uncertainty also surrounds the leading market globally for

"OUR BOARD COMPRISES A YOUNG AND ENERGETIC TEAM THAT IS NOT ONLY FULLY REPRESENTATIVE OF THE GLOBAL MARKET BUT ALSO BURSTING WITH FRESH IDEAS AND ENTHUSIASM."





our non-ferrous scrap. Last year, China recorded some of its lowest GDP growth rates since the global financial crisis, partly as a result of which the country's appetite for imported scrap has been less acute. Murat Bayram of European Metal Recycling told our meeting in Berlin last May that no market was of anywhere sufficient magnitude to replace China, even though India was becoming ever more important and some positive signs could be discerned from Europe.

In 2016, we also witnessed a growing trend towards Chinese enterprises investing overseas, such as Chiho Tiande's acquisition of Scholz Recycling and the partnership between Alba Group and Techcent; at the same time, foreign investment has been leaving China.

On the plus side, massive infrastructure developments involving China will ensure that the country continues to be a dominant force in our industry's activities. Indeed, Eugen Weinberg of Commerzbank AG told us in Berlin that China would remain a hugely significant factor not only in the physical market but also through its metals exchanges.

There are also signs of greater maturity in the Chinese market. At our meeting in Amsterdam, guest speaker Holger Ellmann of Argentum Metal Management contended that the country's aluminium

producers had exercised greater discipline when prices collapsed in late 2015 and early 2016, although the country's idled capacities would ensure a natural limit to the potential for more significant price rallies. At the same gathering, we also heard an interesting presentation from Robert Fig about the LME's new products and initiatives.

In our Division's final World Mirror publication of 2016, we were also able to offer up some good news about China. Despite high-level debate in Beijing about the possibility of banning imports of mixed metal scrap, our advisor on China's regulatory and policy developments Ma Hongchang relayed indications that there would be not only a continuation of imports of such materials in 2017 but also an improvement in international trade with China this year.

Furthermore, third-party agencies will be able to apply to AQSIQ for permission to carry out pre-shipment inspections of solid wastes usable as raw materials to be imported into China, thus opening up this important part of the trading process and potentially leading to lower costs for overseas companies supplying China with scrap.

Looking to the future, we have good reason to be optimistic, not least because our BIR Non-Ferrous Metals Division board comprises a young and energetic

team that is not only fully representative of the global market but also bursting with fresh ideas and enthusiasm. Although we have endured a number of consecutive years of extremely difficult trading conditions, I believe we are strongly placed to take advantage of the upturn when it presents itself, as it inevitably will.

Don't just take my word for it. Addressing our meeting in Amsterdam, the US Institute of Scrap Recycling Industries' Chair Mark Lewon conceded that our industry was unlikely to return to its previous state but confidently predicted that "we can reinvent ourselves" because "recyclers are resilient".

Key Facts

World refined copper production from scrap (January-October)

2015: **3.230**m tonnes 2016: **3.419**m tonnes

Year-on-year change: 6%

LME prices (US dollars per tonne)

START OF 2016 END OF 2016

Copper **4600**

5500

Aluminium 1460

1710







Mehdi Zerroug *Framimex (FRA)*President Textiles Division

At a time when economic conditions were already tough for our businesses, 2016 presented the textiles recycling sector with another major challenge. As discussed at great length during our meetings in Berlin last May and in Amsterdam five months later, the six member nations of the East African Community (EAC) are considering the introduction of an import ban on used clothes, shoes and other leather products by 2019.

The EAC has long been an important market for used goods exported by recyclers in various parts of the globe. For this reason, I am delighted to report a high level of collaboration between many different parties – including BIR – in attempting to find a solution to this issue that would satisfy not only the export community but also, and very importantly, the EAC's member countries of Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda. The message throughout this process has been one of meaningful collaboration to achieve a mutually equitable compromise.

"TRADE PROHIBITIONS, TARIFFS OR NON-TARIFF BARRIERS WOULD ENDANGER THE JOBS OF THE MANY THOUSANDS OF PEOPLE EMPLOYED IN THE LONG-ESTABLISHED WHOLESALE AND RETAIL SELLING OF USED CLOTHES, SHOES AND OTHER LEATHER PRODUCTS IMPORTED INTO THE EAC."

The EAC has argued that a ban would be helpful in the development of the region's own textiles production industry. However, it is BIR's contention that trade prohibitions of this type, as well as tariffs or non-tariff barriers, would not only fail to provide such a boost to the local industry but also endanger the jobs of the many thousands of people employed in the long-established wholesale and retail selling of used clothes, shoes and other leather products imported into the EAC.

BIR has actively supported initiatives designed to convince the EAC of the many positive reasons for reconsidering the ban, including impact assessments. Most notably, our world organisation joined FEDEREC from France and both the Textile Recycling Association and Bangor University's Economic and Social Research Council from the UK in funding a delegation to the region last year in order to discuss possible alternatives to a ban with key local officials. Another BIR delegation visited Kenya in early 2017.

I would like to put on record the BIR Textiles Division's thanks to Jalia Nabukalu Packwood and her colleagues at Bangor University's Sustainability Lab for their tireless efforts in making the case for a continuation of this valuable export trade. I would also like to thank her for joining us in Berlin and Amsterdam last year in order to update us personally on latest developments regarding this important matter.

As noted above, the issue of the EAC's proposed import ban has followed us into 2017, as have many of the other topics that came – or returned – to prominence in 2016. Keeping to the theme of export barriers, for example, the Ukrainian authorities have imposed an "entry price" mechanism on all used clothing from the EU – a hurdle that the EU's trade directorate allowed into its agreement with Ukraine without any consultation with its used clothing sector. As with any measures that pose a threat to the free and fair trade of goods, BIR will continue to monitor this closely and take action where appropriate.

Other familiar and ongoing issues aired at our meetings in Berlin and Amsterdam included: the difficulties associated with finding new markets for our industry's products; the strong competition presented by new, cheap textiles from China; the adverse effects on product sales of terrorism and social

unrest in many importing countries; differing rules for cash payments which have the capacity to distort competition; negative effects on established recycling businesses as a result of municipalities becoming ever more involved in the market; and the re-emergence of the scourge of bogus collectors and "illegal" containers continuing to offer unfair competition for approved collectors of originals.

Adding in the political uncertainties created by the likes of Brexit and Donald Trump's arrival in the White House, it is easy to predict that 2017 will be another challenging year even for the most experienced textiles recycling businesses.

Key Facts

East African Community imports of used clothes, shoes and other leather products:

2001: **US\$ 100m** 2014: More than **US\$ 300m**





Reinhold Schmidt
Recycling Karla Schmidt (DEU)
President Paper Division

In many ways, recovered paper prices were the least news-worthy aspect of our business in 2016 given that no major declines were suffered during the course of the year; indeed, some significant gains were recorded along the way. The real drama lay elsewhere for our sector.

Shipping rates had ended 2015 at multi-year lows and this downward drift extended into 2016, but trading experts - including many from our own recycling community - were continuing to warn that these low prices could not possibly last for ever. And so it proved: having been becalmed for a long period, a storm finally whipped up in the ocean freight market in the latter months of 2016 in the aftermath of the demise of Hanjin Shipping. On the Europe-Far East route, for example, freight rates effectively tripled in a matter of just two or three months.

Shipping issues were debated at both of our divisional meetings last year. In Berlin last May, for example, John Paul Mackens of Kühne + Nagel outlined important new requirements to declare a Verified Gross Mass (VGM) for all loaded containers.

While transportation became a prominent factor in 2016, some even more familiar issues for our sector have certainly not

"THE CIRCULAR ECONOMY CONCEPT IS DOOMED TO FAILURE IF IT IS MERELY REGIONAL RATHER THAN GLOBAL IN ITS REACH."



gone away. In many parts of Europe, for example, the incursion of public companies and municipalities into the recovery sector has continued unabated, damaging private businesses that have been providing a highly-efficient, fairly-priced recycling service for generations. In my own country Germany, tendering conditions for municipal contracts have been little short of hostile towards private recycling firms, creating a regulatory discrimination that has been hindering fair competition.

At a time when the world is embracing the circular economy concept, it is outlandish that one of the established pillars of circularity – the recycling industry – should be brushed aside in this way. As our Paper Division's Honorary President Dominique Maguin told the BIR Convention in Amsterdam last October, the circular economy is "the normal way recyclers have been doing business for years".

Mr Maguin was joined by BIR World President Ranjit Baxi, also an Honorary President of our Division, in issuing a warning that policy-makers should ignore at their peril: the circular economy concept is doomed to failure, they argued, if it is merely regional rather than global in its reach. What would happen, they asked, to the 9m tonnes of recovered paper collected in Europe that was surplus to the continent's own requirements? And wasn't

China in need of imported fibre so that it could continue to make the packaging in which to export products Europe wanted to buy? Isn't this the very essence of a virtuous circle?

Of course, the quality of this fibre must be as good as we can realistically make it. Our customers around the world have continued to apply pressure for consistently high-quality supplies with minimal non-paper components. In Amsterdam, our divisional guest speaker Wade Schuetzeberg of leading buyer American Chung Nam BV made clear that increasing collection volumes in China were handing the country's mills more choice and that quality controls on imports were therefore likely to become stricter rather than more relaxed

Our sector has responded with renewed efforts and initiatives to match those heightened customer expectations. In Amsterdam, for example, we were informed that The Recycling Association in the UK had just launched its Quality First campaign with the aim of delivering tangible improvements in UK-origin feedstock through engagement with the entire supply and regulatory chain. It was also encouraging to hear confirmation from Tarek Al Sharif of increasing awareness in the Middle East of the importance of recovered paper quality.

Guest speakers at our meeting in Berlin also identified some other key trends in our sector. Stefan Geibel of Veolia Umweltservice Wertstoffmanagement GmbH in Germany and Bill Moore of Moore & Associates in the USA both pointed to the precipitous slump in graphic paper volumes over recent years, adding that this would result in even more conversions of newsprint machines for packaging production.

Clearly, such developments will have a massive impact on the volumes entering our processors' facilities and on the types of fibre requested by our customers. Indeed, with so much happening in our sector, there will be fresh dramas for us in 2017.

Key Facts

Chinese recovered paper imports (million tonnes):

 2011
 27.28

 2012
 30.08

 2013
 31.65

 2014
 27.36

 2015
 28.86

2016 (estimated) between 26 and 27

CASE STUDY

BIR'S new initiatives:

The World Council of Recycling Associations and Global Recycling Day



In a world moving inexorably from a linear to a circular economy, the recycling industry is an established environmental brand with a great story to tell. The challenge is to find the most effective ways of conveying this positive message.







The BIR is taking the lead by spearheading two initiatives designed to communicate not only the major role of recycling in conserving our planet's limited natural resources but also the supreme contribution of the recycling industry to climate change mitigation, employment and economic well-being.

In order to engage the public and policy-makers alike, this communication process hinges on delivering a regular flow of positive, well-researched and constantly-updated messages. Hence, a major focus of the new BIR-led World Council of Recycling Associations will be to co-ordinate the drive for academic studies and research that will quantify the recycling industry's wide-ranging contribution.

A recent BIR-commissioned study confirmed, for example, that the recycling industry's activities worldwide prevent more than 700m tonnes of carbon emissions every year. But we need yet wider research to prove the worth of the recycling industry in such areas as GDP development, job creation and landfill reduction; we need hard facts, hard data.

Bringing together key associations from around the globe in a "United Nations of Recycling", the World Council will also promote best sustainable recycling practices around the world, helping developing countries in particular to build on their recycling programmes by investing its support and expertise. And echoing BIR's own principles, the World Council will: campaign for free trade in recyclables; promote the environmentally sound

"IN 2017, WE WILL CONTINUE OUR VISIONARY WORK TO MAKE THE GLOBAL RECYCLING DAY A REALITY."

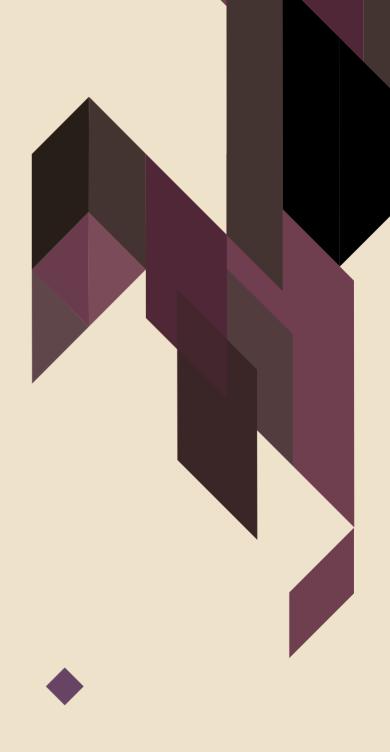
BIR World President Ranjit S. Baxi

management and use of recycled materials; encourage manufacturers to design their products with a heightened focus on recycling at end-of-life; and co-ordinate actions in defending the interests of our industry as a whole.

In addition to, and dovetailing with, our new World Council initiative will be BIR's ongoing crusade to establish a Global Recycling Day that will serve as an annual celebration of all the good things that recycling and the recycling industry do for our planet, raising their profile and inspiring people around the world either to embark on new recycling-related initiatives or to redouble their existing recycling efforts.

It is hoped these positive messages will resonate with the current crop of decision-makers. But if our industry's social, economic and environmental contribution is to be better understood by policy-makers of the future, it is vital that a positive image of recycling is created in the minds of the younger generation whose views will shape future attitudes. Global Recycling Day will provide a great opportunity and a focal point for developing recycling-related initiatives within schools and other learning environments. And once the children become enthused by recycling, there is every chance that parents will be swept along by the same momentum.

If we are to win the hearts and minds of our world leaders of the future, then a Global Recycling Day seems the perfect place to start.





Joost van Kleef ORYX Stainless BV (NLD) Chairman Stainless Steel & Special Alloys Committee

Stainless Steel & Special Alloys COMMITTEE

In 2016, as in preceding years, China remained the epicentre of global stainless steel output, accounting for well over half the world total. Preliminary figures suggest the country's production growth was approaching 13% last year, easily outstripping the output gain for the world as a whole.

China witnessed a significant upturn in domestic demand for stainless steel products in 2016 but its substantial exports continued to cause consternation, leading to the high-profile imposition of import restrictions on certain qualities by both the USA and Europe. In India too, imports of stainless steel from China doubled in the 2015/16 fiscal year, prompting a debate about protection of the domestic stainless steel market through increased duties. India's stainless steel production has been on a constant upward trajectory in recent years, not least because domestic consumption has been soaring by, typically, 25% per annum.

Another key characteristic of the stainless steel market throughout most of 2016 was the generally upward momentum in the values of its component ingredients. Nickel

"CONDITIONS REMAINED DIFFICULT THROUGHOUT THE COURSE OF LAST YEAR FOR STAINLESS STEEL SCRAP PROCESSORS AND MILL PRODUCERS ALIKE, WITH PROFITS FALLING SHORT OF THE LEVELS REQUIRED TO ENABLE ADEQUATE REINVESTMENT IN OUR BUSINESSES."



prices, for example, enjoyed a much stronger second half to 2016: having dropped below US\$ 8000 per tonne at one stage early in the year, the metal's value on the London Metal Exchange subsequently climbed well beyond US\$ 11,000 before settling back to around US\$ 10,000 at year-end.

The increase was fuelled in large part by the combination of threatened nickel mine closures in the Philippines and forecasts of a nickel market deficit of potentially 100,000 tonnes for 2016, although it should be added in mitigation that an estimated 1m tonnes of nickel continues to be held in stock around the world. At our May meeting in Berlin, the International Nickel Study Group's Salvatore Pinizzotto argued that a sustained reduction in stocks would hold the key to nickel price developments going forward.

Chrome, molybdenum and iron also followed the general uptrend experienced by the metals complex. This increase in raw material values helped to propel stainless steel prices to higher levels around the world in 2016, even though often-lacklustre demand was not always supportive of such gains. And of course, these higher prices also enticed larger

volumes of stainless steel scrap into the supply pipeline. However, these higher numbers have not applied equally to margins; conditions remained difficult throughout the course of last year for stainless steel scrap processors and mill producers alike, with profits falling short of the levels required to enable adequate reinvestment in our businesses.

On a more positive note, our BIR Stainless Steel & Special Alloys Committee was further strengthened in 2016 by the addition of three new members: Uwe Dierkes of Siegfried Jacob Metallwerke in Germany; Ruggero Ricco of Nichel Leghe in Italy; and Rick Dobkin of Shapiro Metals in the USA.

Also last year, we maintained the high quality of our meetings with two excellent guest presentations in Berlin and Amsterdam, with the former gathering also featuring another of our popular "fireside chats" where delegates are given the opportunity to pose questions to a knowledgeable panel. As mentioned above, Mr Pinizzotto guided us through some of the key facets of the nickel market at our meeting in Berlin whereas the challenge of recycling spent catalysts, metallic oxides and batteries was the focus

of the presentation made by Stéphane Chorlet of Valdi-Groupe Eramet at our later get-together in Amsterdam.

Shifting our focus now to 2017, I guess we would all echo the views expressed by Mr Pinizzotto in Berlin when he underlined the need for raw material prices to develop in such a way that would enable all players along the chain to make acceptable sums of money. After several years of challenging business conditions for our sector, greater certainty and profitability would be a truly welcome development.

Key Facts

Crude stainless steel production in 2016:

Global total: +8.3% (or 3.5m tonnes)

to **45.71m** tonnes

China: **+12.76%**

to **24.73m** tonnes

Europe: **+1%** to **7.23m** tonnes

ISA: **+6.35%**

to 2.49m tonnes

Source: Macquarie.









Surendra Patawari Borad Gemini Corporation NV (BEL) Chairman Plastics Committee

Although I have never been short on optimism for the future of plastics recycling, it would be wrong of me to claim that 2016 was a good year for our sector. The markets were generally stable but subdued, and political developments around the world certainly helped to dampen overall demand for plastics scrap. However, there are solid reasons to believe that optimism may be more justified for 2017.

Importantly last year, the key market of China continued to import significantly lower volumes of plastics scrap and its government has made clear its desire to promote environmentally-sensitive imports and to close down those factories failing to meet anti-pollution standards. So while the country will remain an important destination, the world's exporting regions may have to look increasingly to other emerging markets as outlets for their plastics scrap.

India always figures large in debates about alternatives to the demand from China. In 2016, however, trade with India was choppy, to say the least. Still under the misapprehension that plastics scrap should be considered "waste", the Indian authorities implemented a ban on imports

"THERE ARE SOLID REASONS TO BELIEVE THAT OPTIMISM MAY BE MORE JUSTIFIED FOR 2017."



that was quickly amended to enable some of the plastics recyclers operating in India's Special Economic Zones to resume buying from overseas. But trade flows were stemmed once again when, in November, the government's controversial demonetisation measure impacted cash flows and prompted importers to become more cautious.

A guest speaker at our October meeting in Amsterdam, Marc Pruijn of the Netherlands' Ministry of Infrastructure and Environment, highlighted the challenge of secondary plastics demand being larger outside of Europe than within it. Of relevance to export opportunities, there has been a significant trend towards increased local demand at the point of origin as emerging countries continue to pursue their own plastics recycling agendas.

The pressure to achieve circular economy goals is also tempting major business entities into the plastics recycling arena. In Amsterdam, Herman Van Roost of Total fascinated us with a description of how the plastic producer's virgin molecular design approach incorporates substantial recyclate content to form "circular compounds".

One of the guest speakers at our May meeting in Berlin - Thorsten Diephaus of Panalpina Welttransport - warned of imminent freight rate increases given the "huge" operating losses sustained by most carriers in 2016. For the plastics recycling sector, massive rate increases duly hit us in the latter months of the year following the collapse of Hanjin Shipping, with some exporters from Europe seeing their shipping costs triple in just a couple of months.

This issue followed us into 2017, heightened by the usual turn-of-year shipping concerns about avoiding arrival times that interfere with import licence renewals and Chinese New Year holidays. So while shipping was a virtual nonissue in 2015 and for the majority of 2016, it became a major bugbear in the latter months of last year and heaped considerable pressure on our businesses.

Despite the turbulence of 2016, perhaps one of the main reasons for my continued optimism regarding plastics recycling is that the sector continues to exercise the minds of highly intelligent and innovative people who are constantly investing their time and money in seeking out ways to make the sorting and processing of plastics even more efficient.

Our meetings last year emphasised this point and also underlined a number of opportunities in plastics recycling that have yet to be fully exploited, such as plastics from automotive applications.

Arie De Jong of Dutch car recycling pioneer ARN Holding explained that his organisation had achieved a materials recycling rate of 87.7% while energy recovery took its overall recycling performance to 97%. Challenges still to be tackled include PVC contamination in the high-density fraction and the emergence of new and sometimes difficult-to-recycle materials such as thermosetting resins and carbon fibre reinforced plastics.

Linking these various themes, ALBA Group's Stephan Schwarz spoke in Berlin of the need for a flexible business approach to tackle "regulatory volatility" and of the likelihood of an increase in the demand for recycled plastics in the future. Both these thoughts need to remain at the forefront of our minds as we move forward.

Key Facts

US plastic scrap exports in January-November 2016

To China

-13.5% year on year

To the rest of the world:

virtually unchanged (including increases to India, Vietnam, Mexico, Malaysia and Thailand)





Barend Ten Bruggencate Recybem B.V. (NLD) Chairman Tyres/Rubber Committee

As the years have rolled by, we have celebrated the graduation of end-of-life tyres (ELTs) from environmental nuisance to wellutilised raw material. Growth figures have been nothing short of sensational with recycling rates in Europe, for example, now at well over 90% compared to less than 50% as recently as 1999. In terms of recycling performance, the likes of Japan and the USA are not far behind Europe while many developing countries are now far more aware of tyre recycling issues and are looking to put suitable recovery programmes in place.

However, one of the material recycling routes that has contributed hugely to this transformation of the ELT market has come under ever more serious threat in recent months. In BIR's 2015 Annual Report, there was an acknowledgement of health concerns in some quarters surrounding use of ELT-derived granulates in synthetic sports pitches. However, BIR and its member associations have also underlined that all scientific evidence to date concludes no such health risks exist.

"IF THE CIRCULAR ECONOMY IS TO WORK, IT SHOULD NOT BE AT THE EXPENSE OF EXISTING INDUSTRIES THAT ALREADY CONTRIBUTE MASSIVELY TO OUR WORLD'S ENVIRONMENTAL, ECONOMIC AND SOCIAL FABRIC."





But despite being keenly aware of the various facets of this issue, nothing could have prepared us for the scale of the latest explosion of negative publicity late in 2016, triggered by a Dutch TV programme's claim that ELT-derived rubber granulate used in sports pitches was carcinogenic. The topic was embraced by every mass media outlet and the shock waves spread far and wide.

At our October meeting in Amsterdam, the Institute of the Scrap Recycling Industries' President Robin Wiener spoke of a 30% decline in the market for this material over a two-year period in which the health concerns debate had been sweeping the USA. She also pointed out that more than 90 related studies conducted by government agencies, industry and academia had reached the same conclusion: that there is no link between cancer and crumb rubber in synthetic turf. But despite the copious research into this matter, the entire tyre recycling chain cannot afford to take this issue lightly even for a moment. With assistance every step of the way from BIR, further in-depth studies will be carried out which, I confidently believe, will rule out any serious health risks.

This was not the only substantial issue to be discussed in Amsterdam. Annemiek

Tubbing, a Dutch environmental lawyer specialising in waste regulations, explained the disappointing lack of progress made in establishing end-of-waste status for secondary raw materials following the high-profile collapse of efforts to agree criteria for paper. And Ruud Spuijbroek, Secretary General of European retreading association Bipaver, lamented the failure of the EU authorities to support its domestic trade against cheap new truck tyre imports despite the added value provided by recycled or remanufactured products through reductions in waste, raw materials usage and carbon footprints. If the circular economy is to work, he quite rightly argued, it should not be at the expense of existing industries that already contribute massively to our world's environmental, economic and social fabric.

At our earlier gathering in Berlin last May, Jean-Pierre Taverne of the European Tyre & Rubber Manufacturers' Association emphasised the potentially huge positive impact of Green Public Procurement on achieving circular economy objectives and urged a revision of guidelines to encourage public authorities to boost demand for secondary raw materials and develop new market opportunities.

The same meeting also heard fascinating technical presentations from Wilma

Dierkes of the University of Twente and Jan van den Brand of Rumal Kargro, also of the Netherlands. The former updated us on some of the different approaches to tyre recycling and their relative promise, while the latter focused on a new pyrolysis venture that "upcycled" carbon black, oil and gas from ELTs.

To end on a personal note, I would like to take this opportunity to thank my predecessor, Ruud Burlet, for all of his excellent efforts in furthering the work of our Committee. A change of job meant that he had to step down as our Chairman, and I would like to wish him every success in the future.

Key Facts

US scrap tyre destinations in 2015 (by %)

Tyre-derived fuel 48.6
Ground rubber 25.8
Civil engineering 7.0
Miscellaneous uses 7.1
Landfill 11.4

Source: Rubber Manufacturers Association.





Thomas Papageorgiou

Anamet Recycling Industry SA
(GRC)

Chairman E-Scrap

Committee

In our already-complex area of business, formidable barriers still exist to the reuse and the recycling of e-scrap, including a lack of information from manufacturers regarding the content of their products and also design foibles that render disassembly more difficult and thus more expensive. It is imperative, therefore, that recyclers and manufacturers work together to dismantle these barriers so as to ensure that cost-effective reuse and recycling are maximised.

Extended producer responsibility (EPR) schemes should serve as a powerful tool for the promotion of this collaboration, while at the same time avoiding the imposition of unnecessary burdens on the recycling industry.

These issues were debated at our two meetings in 2016. Last May in Berlin, Thomas Opsomer of the technology repair guidance provider iFixit Europe identified non-removable batteries and the increasing use of adhesives as just two of the hurdles to disassembly that manufacturers could prevent through smarter, more enlightened design. Also to help achieve maximum reuse and recycling, he made the perfectly reasonable request of manufacturers to

"IF WE ARE TO REPRESENT THE INTERESTS OF OUR SECTOR EFFECTIVELY, WE RECOGNISE THAT WE SHOULD BE ABLE TO CALL UPON UP-TO-DATE, ACCURATE STATISTICS WHEN MAKING OUR ARGUMENTS WITH POLITICIANS AND POLICY-MAKERS."



♦

assist in the development of a centralised, cloud-based database of disassembly information.

The complexities of the e-scrap sector are compounded by the fact that materials recycling and reuse are not the only routes to sales and, hopefully for our businesses, profitability. Other potential paths include the provision of data security/asset management services when computers are to be discarded - a subject discussed in some detail in Berlin where Andrew Noel Brown of Sims Recycling Solutions Europe suggested that 80% of corporate lap-tops contained sensitive information that could seriously damage brand reputations if a breach were to occur.

Our meetings in 2016 also provided first-hand perspectives from two countries where ever-mounting e-scrap generation is certain to have an increasingly potent effect on the world market: in China, there were discussions during the course of the year of the possibility of a ban on imports of plastics scrap; and in India, a ban on such imports was actually implemented - although subsequently amended to enable some of the plastic recyclers operating in the country's Special Economic Zones to buy from overseas once again.

The Chinese market is currently grappling with overcapacity and a sharpened

government focus on pollution control, leading to the closure of some factories that lack the appropriate facilities to process scrap in an environmentally sound manner. In India, meanwhile, the government has introduced an extended producer responsibility system for e-waste aiming at a 30% collection target for the first two years, rising to 70% in the seventh year.

As discussed at our October meeting in Amsterdam, many countries are a long way further down the path of EPR but are still searching for the approach that works best. In Canada, for example, EPR programmes covering end-oflife electronics are facing accessibility issues in remote parts of the country, according to Tracy Shaw of the Canadian Association of Recycling Industries. She also maintained that the proliferation of EPR schemes has made harmonisation difficult and has resulted in a minimal positive impact on the overall recycling rate. Clearly in the case of EPR, practical experience in one part of the world can and should inform decisions when such schemes are being established elsewhere so as to ensure best practice and fitness for purpose.

Also in Amsterdam, the WEEE Forum's Pascal Leroy took us into the area of statistics in alleging that the outcome for

two-thirds of the e-waste arising in Europe remains unknown owing to, for example, a lack of proper reporting and illegal exports. He argued that authorities should step up enforcement action and support regular public awareness campaigns to ensure e-waste was returned to collection points.

The issue of obtaining statistics is certainly important to us on the E-Scrap Committee. If we are to represent the interests of our sector effectively, we recognise that we should be able to call upon up-to-date, accurate statistics when making our arguments with politicians and policymakers. For this reason, the committee is continuing to prioritise the streamlining of data collection and information provision, a process which has already included a survey of e-scrap studies and statistics.

Key Facts

India has introduced an extended producer responsibility system for e-waste:

The country has more than **one billion** phone subscribers while domestic sales of refrigerators and washing machines are expected to reach, respectively, **66,000** and **36,000** units per day by 2020.

International Environment COUNCIL



Olivier François *Galloo Group (FRA/BEL)*Chairman International
Environment Council

Last year's high-level meetings at a host of venues and covering a plethora of subject matters highlighted once again not only how global recycling has become but also the reach, respect and influence our world organisation now commands. From Kenya to Guatemala, from Uruguay to Kyrgyzstan and Croatia, BIR attended and regularly addressed decision-making forums where matters of crucial importance to the world recycling sector were under debate.

For example, BIR Trade & Environment Director Ross Bartley journeyed to Nairobi for the 10th Open-Ended Working Group that prepares decisions for the Parties to the Basel Convention to agree at their 2017 Conference of the Parties. The UN-EP Basel Convention, which affects directly the 183 countries that are Parties and 53 countries that are Signatories, covers such key areas for recycling businesses as environmentally sound management. Companies recycling hazardous and other wastes covered by the Convention will need to be able to demonstrate that they are environmentally soundly managed, particularly if they need to import such wastes for recovery and recycling.

"THE SCRAP AND STEEL SECTORS ARE NOW TREATED BY GOVERNMENTS AND OTHERS AS KNOWLEDGEABLE PARTNERS RATHER THAN AS GUILTY PARTIES WHEN A RADIOACTIVE SOURCE IS FOUND IN METALLURGICAL SCRAP."

Also last year, our radiological expert Dr Alvaro Rodriguez de Sanabria was invited to a workshop in Guatemala to promote the International Atomic Energy Agency's Code of Conduct as well as best practice in preventing, detecting and responding to inadvertent radioactive material occurring in metallurgical scrap. Fully implemented, this code offers enhanced peace of mind to all involved and has the potential to save the metals industry many, many millions of dollars. The value of our deep participation in the development and promotion of this code is that the scrap and steel sectors are now treated by governments and others as knowledgeable partners rather than as guilty parties when a radioactive source is found in metallurgical scrap, thus sparing companies the worry that potentially vast expense and commercial disruption will result from the discovery of a radioactive source.

It was in 2016 too that BIR attended the first face-to-face meeting of the UN-EP Informal Group on Household Waste, defining wastes from households and small businesses such as paper, plastics, glass and metal scrap, and deciding who should have access and ownership. The group is responsible for: developing guidance documents and manuals on the environmentally sound management

of this waste; promoting dialogue among government and non-government stakeholders; fostering best practice; and making recommendations.

Of course, BIR's International Environment Council also hosts meetings of its own, and last year's gatherings in Berlin and Amsterdam provided excellent opportunities through their wide-ranging programmes to inform delegates on matters of relevance to their businesses. Our array of expert guest speakers covered such topics as: Green Bonds; the Make It Work initiative to improve European legislation; the "socialisation" of waste management and recycling in Germany; the debate within the European Commission about raw materials from "conflict" regions and the possibility of excessive control of supply chains affecting a range of metals; and the increasing cost pressures imposed on recycling companies in satisfying regulatory requirements.

Another presentation, from Rainer Hans of Infotech GmbH, chimed perfectly with calls from BIR and the European Recycling Industries' Confederation for the instigation of more modern, paperless control procedures for transboundary waste movements as a means of cutting the time and money spent on securing

authorisations. The guest speaker made it clear that e-based systems of this type are no longer science fiction but science fact.

Again with a view to smoothing the international flows of our industry's commodities, the Environmental Goods Agreement at World Trade Organization level was another important topic of debate in 2016 as this entails removal of barriers to trade in goods listed as "green" that are deemed crucial for the environment. BIR is continuing to garner support for the inclusion of recycled commodities on this list of environmental goods when this comes up for revision.

To conclude my report, I would like to reflect on our global marketplace. Signs are evident of a growing trend towards protectionism all over the world. Forty years of globalisation seem to have made the wealthier even more wealthy and the middle classes of what were once termed developed countries poorer. The Brexit vote and the outcome of the US elections are the people's reaction to this development. Therefore, it is likely that trade barriers will increase. It is BIR's task and intention to give its members a clear vision of these developments and guide them through what will be a new trading jungle. Better to be helped than left alone, and the sooner the better.



Michael Lion Everwell Resources Ltd (CHN) Chairman International Trade Council

International Trade COUNCIL

Last year was characterised by a resurgence in protectionist culture as a number of countries around the globe took action to reassert control over their own borders and international trading activities. Most notably in the USA, the new administration in Washington wasted no time before underlining its desire to back away from the Transatlantic Trade and Investment Partnership (TTIP), a long-negotiated alliance intended to lower tariffs and non-tariff barriers to trade and remove costly regulations on business between the EU and America.

At this point, it is worth reminding ourselves of one of the key reasons for the formation of the Bureau of International Recycling in 1948. In a world still dealing with the fallout from the global conflict that had ended only three years earlier, our industry showed remarkable and commendable foresight in launching a world organisation founded on the principle of free and fair trade. Etched into our communal DNA, that principle

"ETCHED INTO OUR COMMUNAL DNA, THE PRINCIPLE OF FREE AND FAIR TRADE REMAINS AS DEAR TO OUR INDUSTRY TODAY AS IT DID WHEN BIR WAS FORMED ALMOST 70 YEARS AGO."



remains as dear to our industry today as it did when BIR was formed almost 70 years ago. To this end, BIR's officers travel the world to defend the right of our companies to trade their recyclable commodities wherever consuming industries have a need for these invaluable secondary raw materials.

It is not only on the principle of free and fair trade that BIR defends the interests of its members. Through our world organisation, this industry's voice is heard on a vast range of issues in all of those forums where decisions affecting its future are being made, including the United Nations, the OECD and the European Commission. In this way, we are able fully to engage in the process of shaping rules and regulations, influencing decisionmakers by presenting them with the facts about recycling and about its supreme contribution to social, economic and environmental well-being.

For example, BIR's Trade & Environment Director Ross Bartley attended the OECD Global Forum on Trade last November which brought together trade policy-makers, academics, industry representatives and other experts from OECD and non-OECD countries. It was made clear at this event that the mounting

protectionist rhetoric was undermining trade agreement negotiations and hence the achievement of liberalised crossborder goods and services flows.

Over the years, OECD research has consistently underlined the many economic benefits of open markets.

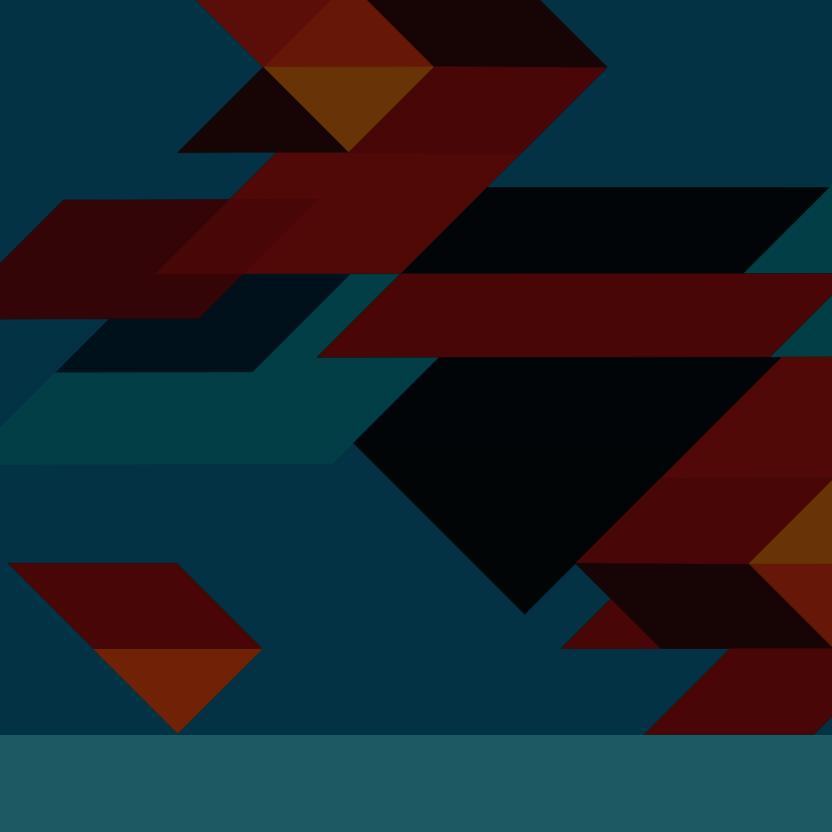
BIR is a member of the Business and Industry Advisory Committee to the OECD, through which it continues to encourage the OECD to communicate the benefits of trade, cross-border investment and open markets to governments, policy-makers and the public.

From such lofty vantage points, BIR is able to keep its members fully informed and updated about legislative developments, thereby helping them to plan their day-to-day business with optimum efficiency.

BIR also provides members with essential updates through its twice-yearly Conventions. Even before the outcome of the US Presidential Election, for example, we were already aware of the troubles and misgivings surrounding TTIP negotiations following the presentation by Dr Christian Bluth of Bertelsmann Stiftung in Germany to BIR's International Trade Council meeting in Berlin last May. Talks were "deadlocked" and public opinion

surrounding the partnership had become "increasingly sceptical" in some countries, he told us. In the USA, for instance, a major fear was that TTIP would result in a loss of American jobs - a concern that both presidential candidates and their respective parties had in common.

As well as providing updates on legislation and trade agreements, our International Trade Council meetings also educate BIR members on latest technological developments that have the potential to make their trading activities simpler and more secure. Again in Berlin. Dale Didion of AKUA Secure Logistics in the USA explained his company's security devices for containers which transmit an alert if tampered with or if temperature/ humidity variations occur, thus pinpointing unscheduled stopping-off points for containers in their journey from exporter to final customer. According to Mr Didion, US cargo theft alone amounts to as much as US\$ 50bn a year - a staggering figure that underlines why, unfortunately, container theft and fraud must remain central to our committee's activities in 2017 as part of our unstinting efforts to protect reputable recycling companies trying to go about their legitimate business in the global arena.



Special Committees

The BIR Special Committees deal with organisational and administrative matters concerning the general structure of the organisation.



Mark Sellier
OneSteel Recycling Hong Kong Ltd
(CHN)
Chairman Convention

Committee

ConventionCOMMITTEE



Amid another challenging and turbulent market for recycled commodities in 2016, BIR Conventions continued to be the leading global forum where the "Who's Who in Recycling" meet to network, discuss, debate and highlight industry issues. These events continue to attract large multi-nationals and small-to-medium private enterprises, processors, consumers, traders, agents, consultants and national association representatives.

BIR hosted two successful meetings in Europe last year. More than 900 participants attended our event at the Intercontinental Berlin in late May - a city we had last visited in 2004, 23 Conventions ago. The programme was packed, with more than 33 presentations across the various Divisions and Committees. We were extremely fortunate to have Klaus Töpfer, a former German government minister and Executive Director of the United Nations Environmental Programme, as our keynote speaker. Jason Schenker returned once again to give us his take on the ferrous markets and to chat with Salvatore Pinizzotto of the International Nickel

"IN 2017, AND FOR THE FIRST TIME EVER, BIR WILL HOST TWO CONVENTIONS OUTSIDE OF EUROPE IN THE SAME YEAR. THIS RE-EMPHASISES THE GLOBAL ROLE THAT BIR PLAYS WITHIN THE WORLD OF RECYCLING."



Study Group about the nickel and stainless markets. The extremely full programme also included an LME Workshop, a Latin America Workshop and an International Trade Council meeting, as well as the usual commodity sessions.

Last October at the Okura Hotel in Amsterdam, the Convention attracted more than 800 participants and featured 20 presentations over a two-day period. During the Non-ferrous Metals Division meeting, we said goodbye to Manfred Beck, the Editor of Recycling International, who retired in 2016. Manfred had been a regular fixture at BIR Conventions for some three decades and will be missed.

The overall framework conditions of the Amsterdam event were quite challenging and my special thanks go to the whole BIR team which did an excellent job in pulling together and ensuring that the Convention and the exhibition were a success.

In 2017, and for the first time ever, BIR will host two Conventions outside of Europe in the same year. This re-emphasises the global role that BIR plays within the world of recycling. May 2017 will see us meet at the Hong Kong Convention and Exhibition Centre. Hong Kong is often seen as the gateway for business into China and

is a travel hub for much of Asia, so we anticipate a large turnout. By moving to a convention centre location, we hope that there will be less opportunity for "lobby rats" to ambush members who have paid to attend and support the infrastructure that BIR provides. Registered delegates meeting unregistered ones only encourages people not to pay registration fees and may jeopardise the sustainability of the infrastructure provided by BIR.

In October 2017, BIR will make its first visit to India with a three-day event to be held at the Taj Palace Hotel, Delhi. BIR has long recognised the significance of India as a marketplace for recycled commodities. We have a World President of Indian origin and so it is fitting that we make our first journey there during his tenure. The programme will include a session on "Doing Business with India" to help those businesses that are new to trading there.

Organising and promoting two Conventions that are a long distance from BIR's Brussels office is a significant challenge for our secretariat. They work tirelessly to ensure that our events are successful and that the product we offer and deliver is the best value for money in the industry. They support the Convention Committee's decision-making and without

them we would not be able to provide the service to members. They make my job as Convention Chairman a pleasure, so thanks to you all.

The secretariat and Convention
Committee have worked very closely with
the Exhibitors Committee to ensure a
successful product is delivered to those
members and non-members who provide
services and equipment related to our
industry. The number of repeat exhibitors
and non-members who exhibit and then
take up membership is growing each year.
BIR Conventions are not just networking
events but also showcase equipment and
highlight technological innovation within
our industry.

BIR Conventions are an important place to build a brand and, as such, we now have a dedicated sponsorship team which will help find the best package that suits any company's goals and budget.

Thanks as always go to the World President, Treasurer, Divisional Presidents, Past Presidents, Special Committee Chairs, Ambassadors and the secretariat for all that you do to help maintain BIR Conventions as the number one event on the global recycling calendar.



Kamiel van Wijk
Aurubis Netherlands BV (NLD)
Chairman Communications
Committee



While the international recycling industry was continuing to face difficult economic conditions in 2016, BIR persevered with its efforts to provide members with fast and reliable information, to increase their networking opportunities through our excellent biannual Conventions, and to enhance the visibility and reputation of the recycling industry in the public eye.

After our World President Ranjit Baxi launched the idea of a Global Recycling Day in 2015, BIR created a special task force to focus more specifically on this important initiative. Defining the scope and summarising our findings in a position paper were accomplished in the first half of 2016. We then devoted our attention to producing an appealing brochure that would help convey the most important messages to our members, to major external stakeholders and to the wider public.

This brochure was presented to our members at the BIR Convention in Amsterdam last October and a dedicated Global Recycling

"WE WELCOMED MORE THAN 50 JOURNALISTS TO OUR CONVENTIONS AND, FOR THE BENEFIT OF OUR MEMBERS, WE EMAILED AND POSTED ON OUR WEBSITE JUST UNDER 80 NEWS ITEMS COVERING A WIDE VARIETY OF TOPICS, MANY OF PARAMOUNT IMPORTANCE TO OUR MEMBERS' EVERY-DAY BUSINESS ACTIVITIES."



Day website was subsequently launched to reinforce the content of the brochure and to help members keep track of any new developments relating to this initiative. People can also sign an online petition in support of our drive towards establishing a Global Recycling Day; these signatures will help us in our quest to attract partners and supporting organisations such as the United Nations.

At the United Nations Climate Change Conference (COP 22) in Marrakech in November 2016, President Baxi represented the interests of the recycling industry in this important international forum and used the opportunity to put the case for a Global Recycling Day to highlight the benefits of recycling. Making reference to our 2016 update of the BIR's scientific study on the environmental benefits of recycling, he stressed the contribution of the recycling industry to climate change mitigation in that its activities save at least 700m tonnes of CO₂ emissions every year.

2016 also saw the birth of BIR's online newsletter - the eBrief - which was published for the first time in July. The purpose of this new service with its very distinctive branding is to draw our members' attention to the most important projects and topics on which the BIR secretariat is working. This, together with our efforts to enhance BIR's activity on Twitter, is aimed at achieving even greater transparency with regard to some of our behind-the-scenes activities on behalf of our members and of the recycling industry as a whole.

One of our most important membership services, the BIR Membership Directory, received a major makeover during the course of last year. The aim was to make the book lighter while still offering the same level of detailed information. By changing the way the information was displayed, we not only achieved this ambitious goal but were also able to offer numerous new advertising opportunities which improved the way our members could use the Membership Directory as a promotional tool.

Media and press relations were also actively pursued in 2016. We issued over 30 press releases to the international trade press and selected general media, which resulted in the publication of a vast number of articles and news items relating to BIR. We welcomed more than 50 journalists to our Conventions and, for the

benefit of our members, we emailed and posted on our website just under 80 news items covering a wide variety of topics, many of paramount importance to our members' every-day business activities.

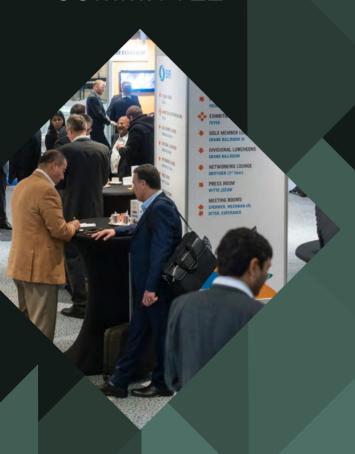
For our very successful BIR Conventions in Berlin and Amsterdam last year, the Communications Department developed individual brandings and a dedicated Convention website, and issued all post-Convention material such as speeches and event proceedings. A total of 52 speakers provided fascinating insights into a variety of topical subjects, and again it was the Communications Department that managed and promoted their participation in these must-attend events.

BIR's World Mirrors on ferrous and non-ferrous metals, paper, stainless steel and plastics continued to provide members with a regular snapshot of the global recycling markets. In addition, the Latin America Committee started publishing a Mirror on important topics and market conditions in their region and will now produce three issues per year. Meanwhile, the Ferrous Division continued with its highly successful statistical analysis of the market entitled "World Steel Recycling in Figures".



Fadi Shahrour
Sharmetal Trading CO. SARL (LBN)
Chairman Membership
Committee

Membership COMMITTEE



Although 2016 was a difficult year financially for the recycling industry, BIR maintained a healthy and growing number of members, thus underlining the fact that belonging to BIR is regarded as a valuable asset and adds value to member companies' image while opening doors for the international selling and marketing of their products with final end-users of raw materials.

"OUR RECENTLY-DEVELOPED, COMPREHENSIVE INFORMATION SERVICE KNOWN AS THE EBRIEF PROVIDES REGULAR UPDATES ON OUR IMPORTANT LEGISLATIVE/TECHNICAL WORK, CONVENTION PROGRAMMES AND COMMUNICATION INITIATIVES."

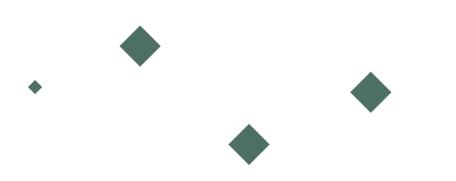
In 1948, a handful of leading private recycling companies from the Benelux countries met in Amsterdam and called for the creation of an international organisation to overcome trade barriers and to facilitate cross-border business. principally to supply steel mills, foundries and paper mills following the Second World War when primary and secondary raw materials were extremely scarce. In 2016, some 68 years after that first meeting, BIR was back in Amsterdam for one of its biannual Conventions, but this time with over 800 members covering 70 countries and including 36 national federations

BIR is continuously maintaining the quality of its membership, ensuring the good standing of each member company, respecting the code of conduct set by the association, and following certain quality assurance criteria for the recruitment of new members.

BIR's membership services include access to our biannual Conventions that are held in different cities around the world to give our members a golden opportunity to meet regularly at diverse geographical points in order to network, communicate and trade among themselves in a safe and stable environment. Our recently-developed, comprehensive information service known

as the eBrief provides regular updates on our important legislative/technical work, Convention programmes and communication initiatives. In addition, the arbitration service provided by BIR is a wonderfully useful tool for settling disputes among its members in a fair and quick process.

We are proud to say that our members represent the vast majority of recyclers in ferrous/non-ferrous metals, stainless steel, paper, textiles, plastics and tyres. With this big group, BIR is recognised as the world's recycling federation, defending the interests of this industry in all corners of the world.







Alexandra Weibel-Natan Manco (FRA) Chairwoman Young Traders Committee

After seven years of active participation in the Young Traders Committee, this is my first as Chairwoman. Our committee has been founded in order to encourage more young traders (of 35 years of age or under) from BIR member companies all over the world to attend Conventions. And it works. The number of young traders attending both our Conventions and our networking events has been growing constantly – even in the "bad" years.

"IT IS IMPORTANT TO KEEP IN MIND THAT TODAY'S YOUNG TRADERS ARE MOST LIKELY TO BECOME THE NEXT GENERATION OF LEADERS OF THE RECYCLING INDUSTRY."

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Every year, more young traders show an interest in becoming actively involved in the Young Traders Committee.

Representatives of the Young Traders
Group are sitting on all of BIR's senior boards and committees, giving them the opportunity to understand better how this worldwide federation works and giving them the opportunity to share their ideas. It is important to keep in mind that today's young traders are most likely to become the next generation of leaders of the recycling industry.

In 2016, we again published two Young Traders Gazettes with the aim of promoting BIR and of convincing members to send their young traders to our Conventions. This is a huge opportunity for individuals but also for companies to be represented. The content of the Gazette is created and updated by committee members with the help of the secretariat in Brussels. For each Convention, we organise a networking event and we really encourage all registered young traders to attend.

2017 might be a challenging year for everyone in our industry but there should not be any impact on our committee. Our young traders keep showing the motivation that will help our industry to grow from year to year.



Speakers

AT BIR EVENTS IN 2016

Berlin, 30 May – 1 June 2016

Ferrous Division

 Jason Schenker, Founder & President,
 Prestige Economics (United States of America)

Shredder Committee

- George Adams, President, SA Recycling (United States of America)
- Scott Newell, CEO, Newell Recycling Equipment (United Sates of America)
- Manuel Burnand, General Manager, FEDEREC (France)

Stainless Steel & Special Alloys Committee

- Salvatore Pinizotto, Director, Market Research and Statistics, International Nickel Study Group
- Jason Schenker, Founder & President,
 Prestige Economics (United States of America)

LME Workshop

- Marko Kusigerski, The London Metal Exchange (United Kingdom)
- Robert Fig, The London Metal Exchange (United Kingdom)

International Trade Council

- Christian Bluth, Project Manager, Global Economic Dynamics Team, Bertelsmann Stiftung (Germany)
- Dale Didion, Akua Secure Logistics (United States of America)

Tyres & Rubber Committee

- Wilma Dierkes, Associate Professor Elastomer Technology and Engineering, University of Twente I Faculty of Engineering Technology (The Netherlands)
- Jan van den Brand, Executive Director, Rumal Kargro (The Netherlands)
- Jean Pierre Taverne, Coordinator
 Environment & ELT Technical Support,
 ETRMA-European Tyre & Rubber
 Manufacturers' Association

Textiles Division

Jalia Nabukalu Packwood, Business
 Development Officer, The Sustainability
 Lab, Bangor University (United Kingdom)

Paper Division

- Bill Moore, *President*, Moore & Associates (United Sates of America)
- Stefan Geibel, Managing Director, Veolia Umweltservice Wertstoffmanagement GmbH (Germany)

John Paul Mackens, Business
 Development Manager (Europe),
 Secondary Raw Materials, Kühne + Nagel
 (AG&Co) KG (Germany)

Latin America Committee (LAC) Workshop

- Alejandro Jaramillo, Glorem SC (Mexico)
- Enrique Acosta, BMB Metals (United States of America)
- Monica Landa, Reinoxmetal (Spain)
- Alejandro Guerra, Nemak (Mexico)

Keynote Session

 Klaus Töpfer, Former German Government Minister and Executive Director of the United Nations Environmental Programme (Germany)

Non-Ferrous Metals Division

- Robert Fig, The London Metal Exchange (United Kingdom)
- Eugen Weinberg, Managing Director

 Head of Commodity Research,

 Commerzbank AG Zentrales

 Geschäftsfeld Corporates & Markets

 Research (United Kingdom)

E-Scrap Committee

• Thomas Opsomer, Repair Policy Engineer, iFixit Europe

 Andrew Noel Brown, UK Head of Business Development (ITAD), Sims Recycling Solutions - Europe (United Kingdom)

Plastics Committee

- Stephan Schwarz, Divisional Director, Alba Group (Germany)
- Thorsten Diephaus, Ocean Freight FCL Export Manager, Panalpina Welttransport GmbH (Germany)

International Environment Council

- Rainer Hans, Managing Director, Infotech GmbH (Germany)
- Ralf Schmitz, VDM Verband Deutscher Metallhändler e.V. (Germany)
- Daniela Entzian, BDSV –
 Bundesvereinigung
 Deutscher Stahlrecycling-und
 Entsorgungsunternehmen e.V. (Germany)
- Sebastian Will, BVSE Bundesverband Sekundärrohstoffe und Entsorgung e.V. (Germany)

Amsterdam, 24 – 25 October 2016

Plastics Committee

 Arie de Jong, Managing Director, ARN (The Netherlands)

- Marc Pruijn, Program Leader-Circular Economy, Ministry of Infrastructure and Environment (The Netherlands)
- Herman van Roost, Refining & Petrochemicals-Polymers-Business Development Manager Recycling, TOTAL (Belgium)

E-Scrap Committee

- Pascal Leroy, Secretary General, WEEE Forum (Belgium)
- Tracy Shaw, President & CEO, Canadian Association of Recycling Industries (CARI)

Non-Ferrous Metals Division

- Christian Schirmeister, Senior Client Liaison Officer, Amalgamated Metal Corporation PLC (United Kingdom)
- Mark Lewon, CEO, Utah Metals Work (United Sates of America)
- Holger Ellmann, Director, Argentum Metal Management (United Kingdom)
- Manfred Beck, Editor, Recycling Technology (The Netherlands)

Textiles Division

 Jalia Nabukalu Packwood, Sustainability Officer-International Relations, The Sustainability Lab, Bangor University (United Kingdom)

Ferrous Division

• Curtis Zhu, Principal Analyst-Iron Ore and Steel Markets, Wood Mackenzie (United Kingdom)

Paper Division

- Wade Schuetzeberg, Executive Director, America Chung Nam B.V. MLM Ltd. (The Netherlands)
- Heiman Bollegraaf, Independent Investor & Advisor, Recipient of the BIR Papyrus Award (The Netherlands)

Stainless Steel & Special Alloys Committee

• Stephane Chorlet, Sales & Marketing Vice President, Valdi-Group Eramet (France)

Tyres & Rubber Committee

- Annemiek Tubbing, Environmental Lawyer, specialised in Waste Regulation (The Netherlands)
- Ruud Spuijbroek, Secretary General, Bipaver (The Netherlands)

International Environment Council

- Tjitske Ypma, Policy Advisor, Circular Economy, Dutch Ministry of Infrastructure
 & Environment (The Netherlands)
- Samantha Sutcliffe, Senior Advisor Green Bonds, SEB Bank (Sweden)

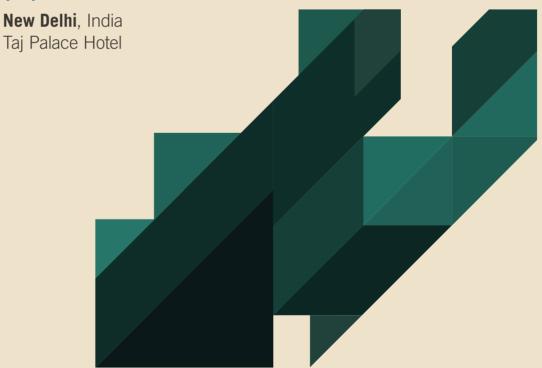
CALENDAR OF

future BIR Conventions

2017 (21) 22-24 May

Hong Kong, China Hong Kong Convention & Exhibition Centre

(13) 14-16 October







BIR - REPRESENTING THE FUTURE LEADING RAW MATERIAL SUPPLIERS

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