

Mr Robert Stein presentation at ICSG Meeting, 15th April 2011.

Good morning and thank you for inviting me here to today. I have had the pleasure of presenting to ICSG in the past, and it is indeed a pleasure to return. I applaud ICSG as an organization that has always recognized the value that scrap plays in the copper market, and your statistics and focus studies are of tremendous benefit to those of us involved in industry.

In a moment, I will introduce BIR, but first I want to let you know that I am not an employee of the organization, but the elected President of its Non-Ferrous Division.

I have had the pleasure of being involved in the scrap industry, and more particularly the copper scrap industry for over 35 years. I am Senior Vice President, Non Ferrous Marketing, of Alter Metal Recycling/Alter Trading Company of the United States, where we operate 39 scrap metal processing yards, producing roughly 400,000 tons per year of non-ferrous metals scrap. We are a privately owned, family business that was founded in 1898, and are active as well in ferrous scrap.

I hope that in what will be seen as a shameless but welcome act of deference to my hosts today, I would like to begin by borrowing from a speech delivered by the International Copper Study Group's own Secretary-General to our BIR Spring Convention in Dubai two years ago. At that time, Don Smale said that an estimated 468.3 million tonnes of primary copper had been mined in the previous 63 years but that copper scrap was playing - and would continue to play - a critical role in balancing the global market. As more recent ICSG, figures teach us, world refined copper production increased 4% in 2010 with secondary production from scrap rising 19%, partly as a result of lower copper prices and the consequent tightness in the scrap market during early 2009.

As Don pointed out in the furnace of Dubai, ever wider circulation of copper scrap has proved to be the lifeblood of industries in emerging economies - a situation which is unlikely to change any time soon, if ever. It has provided an almost ready-made and cost-effective alternative to primary copper despite the fact that scrap prices have increased, as have prime metal values on the LME and on other leading exchanges around the world. What is very important to keep in context is the fact that scrap prices have risen much slower than the underlying values of their primary counterparts, and serves to markedly increase the importance of copper scrap in the manufacturing sector. To be sure, it is the fact that scrap is interchangeable with higher-cost prime metals that makes it so attractive as financially feasible feedstock at appropriate points of consumption around the world. Scrap's lower overall cost has to be measured not only in monetary terms but also in terms of its ecological advantages as well.

Copper scrap has provided this weighty market back-up to primary red metal at considerable benefit to the environment. At that meeting in Dubai, indeed, Don Smale also confirmed that the ICSG would look at further research into the environmental benefits of copper recycling. Clearly, BIR supports any such moves as independently verified statistics provide our industry with a solid platform with which to plead its case when recycling-related issues are under discussion in the corridors of power.

BIR too has endeavoured to bolster the reputation of copper recycling through research. Most notably, an in-depth study conducted on BIR's behalf by world-renowned Imperial College of London estimated that, when compared to primary production, adoption of the recycling route with seven leading metals (including copper) and recovered paper serves to reduce global carbon dioxide emissions by an absolute minimum of 500 million tonnes per annum - equivalent to approaching 2% of worldwide fossil fuel emissions. Copper's contribution to this total could be construed as a relatively low 5 million tonnes, but nevertheless the environmental imperative of recycling still holds.

As countless other studies have confirmed, the creation of secondary raw materials via the recycling avenue expends far less energy than production based on primary raw materials. In the case of copper, energy savings compared to this primary route are put at up to 85%.

The fact that both BIR and the International Copper Study Group have recognised the value of research as a means of boosting the image, credibility and standing of the copper recycling industry is a clear indication of scope for further co-operation between our two organisations. Over a number of years, BIR has enjoyed very good contacts with the International Copper Study Group and we have been invited to attend and speak on more than one occasion at its annual meetings. It seems entirely natural that a proposal should have come forward for our two organisations to pursue greater co-operation on statistics which, as I have said, can help to form a bedrock when outlining the value of copper recycling industry to the world of officialdom whose decisions can have such a huge impact on the sector.

Research aimed at greater statistical certainty is not the only field in which our two organisations overlap. Today, the ICSG has provided the international platform from which to ensure that copper scrap recycling is accorded the recognition it richly deserves. Next month, it will be the turn of BIR to put the red metal in the spotlight: in my second shameless act since coming to the podium, I would be failing in my duty as President of the BIR Non-Ferrous Metals Division if I did not inform you that, at BIR's flagship Spring Convention in Singapore on May 24, we will be holding a Copper Symposium. With contributions from a broad range of experts, the first part of what will be a full programme will be dedicated to an analysis of the major copper recycling facts and statistics drawn from recent decades, while the second part will move the debate on to a study of the long-term prospects for our sector. I am particularly delighted that Carlos Risopatron, Head of Environment and Economics at the International Copper Study Group, will be speaking at our event in Singapore.

The title of the Symposium - "Copper - The New Gold" - is an unmistakeable reference to how far copper prices have come in recent times. Having already exceeded US\$ 10,000 per tonne on the LME during the first quarter, some experts believe there is far more price progress in the tank. Indeed, one of the major UK banks recently predicted that copper would reach US\$ 13,000 per tonne in the final quarter of this year. While recent prices have fallen far short of that target, which has some market analysts taking a second look at their bold forecasts, copper is generally held in high regard by the financial community - a community that has been a significant participant in the expansion of copper prices in recent years. This

should not necessarily be construed as a negative - demand after all is demand, regardless of its source - but it does infer continued substitution for copper by other raw materials such as aluminum and plastics. On the positive side, scrap has the economic opportunity to prove itself once again as a relatively cheap source of copper, enough so that production patterns in some countries have changed to take advantage of its current value.

Research and events such as the one today and BIR's Symposium in May will become ever more relevant to the world at large, as I doubt anyone with first-hand knowledge of the copper scrap industry is expecting any reduction in this material's importance over the coming years. There may be the odd blip along the way - as evidenced by the economic downturn in the latter part of the last decade - but the thirst for scrap is likely to remain insatiable.

This is an entirely reasonable assumption if one takes into account the long-term supply picture for primary copper: indeed, back in 1972, a report to the Club of Rome independent think-tank insisted that the supply of virtually all metals would become exhausted before we even reached the new Millennium. In the event, these researchers were proved to be wrong - largely because they failed to take account the contribution of recycling.

However, a more recent assessment from the Environment Directorate of the OECD underlined that the threat has not disappeared and that the scarcity of virgin metals has the potential to become an issue paralleling that of climate change. With specific reference to copper, it was argued that supplies might become exhausted within the next six decades. Be assured, therefore, that copper recycling is not only here to stay but is set to assume an ever-higher profile in a world where economic growth and consumerism factors all point to the imposition of increasing demand on a dwindling resource.

The scrap collection chain has responded to the potential of diminishing primary sources of copper. Driven largely by high prices for mined metals, improved technologies, especially pertaining to the shredding of automobiles, used appliances and electronic scrap, are allowing scrap processors to recover significant quantities of copper that until recent years has found its way to waste disposal sites. These technologies, which incorporate significant technological breakthroughs, employ X-ray and eddy current mechanisms that allow the processing community to retrieve ever increasing quantities of copper from the traditional waste stream.

The developed nations of the world have become "throw away societies" which means that copper utility is short lived in historical terms, and much of the copper produced is used in products that have a short life span. The recycling world's response has been to develop technologies that capture much more of those copper units that would have otherwise been lost forever. The fear that these units would not be re-introduced to industry through the recycling sector is being remedied by the advanced systems that until recent years had not necessarily been commercially feasible. While capital expenditures for these processing machines is high, the paybacks have been accelerated as their efficiencies have improved, and of course in relation to the underlying high price of copper.

While these technologies are efficient, if not initially expensive, there is an ongoing responsibility on the part of manufacturers to design products that are conducive to recovery of copper units that are efficiently introduced into the recycling chain.

Every year, huge volumes of copper scrap find their way back into production processes worldwide as part of a cycle, which not only reduces carbon dioxide emissions but also conserves natural resources and trims energy consumption. If we rightly choose to regard the copper industry as a single entity, then its success in building environmentally-efficient recycling into its supply network reflects well on every part of that industry - consumers, scrap processors and traders alike.

As Don Smale intimated in Dubai, the copper industry has a fantastic recycling tale to tell to those governments and legislators - and yet some of them would choose to re-fashion our sector and put constraints on the flows of our hugely valuable secondary raw material. Taking Europe as our example, it is frankly astonishing that high-value copper scrap ever became enmeshed in the “waste” debate. Hopefully, the EU Commission’s lengthy work towards establishing “end of waste” criteria for a range of recyclables - including copper scrap - will shortly result in a legal certainty that will bring a clear distinction between waste or recyclables and our end products, namely recycled materials.

Of course, we are aware of the argument that secondary copper is leaving countries with a long history of scrap-fed industrial activity in order to satisfy the growing hunger of developing nations such as China and India. As a result, many of those countries - including the USA and major consuming nations of Europe - have become concerned about the scarcity of this resource to their own industries. These concerns have always proven ill-founded and are generally more pronounced in relatively lower copper markets when scrap is more difficult to purchase on the open market. We have to keep in mind that what brings copper scrap, or any commodity for that matter, to its most valuable end-use is price and not legislated, artificial obstacles to free trade. It is price and very little else that drives the availability of copper scrap around the world.

As we industry veterans are often wont to claim, there is nothing new under the sun. Around the time of the Second World War, for example, many countries maintained a ban on the export of “strategic” commodities. As today, many of these nations adopted the dreaded “S” word - “scarcity” - to excuse restrictions on the free trade in secondary materials which, in reality, were designed to protect or enhance their own domestic industries. Such restrictions enabled local mills effectively to dictate purchasing prices for secondary raw materials and hampered recycling, trading and processing companies from resuming international business. By its very characteristics, scrap copper should *always* be in short supply, if for no other reason than the very important overall economic advantages it provides the supply chain. This is the key to copper scrap’s future, just as it has been historically, and the less governments interfere with its transparent movements around the world, the more the free market can play its hand at establishing value.

My own organisation - the Bureau of International Recycling - emerged just prior to the mid-point of the twentieth century and worked tirelessly in its early years to dismantle the barriers to international trade. Although its greatest sphere of influence was initially Europe, the organisation also gradually opened up

trade to non-EU destinations. The worldwide reach and influence of our organisation is now reflected in its membership: BIR now boasts more than 750 commercial company members across 70 countries, as well as encompassing 40 national trade associations. Overall, this membership is responsible for processing more than 600 million tonnes of recyclable commodities each and every year, providing employment for 1.6 million people and achieving an annual turnover exceeding US\$ 200 billion.

Now in its 63rd year, BIR continues to fight the cause of free and fair trade in non-hazardous recyclables because we believe this to be essential to, as Don Smale suggested in Dubai, constantly balancing the global market with regard to copper units. At present, the focus of industrial production growth is in Asia, and this has naturally produced a shift in copper scrap flows from west to east which appears set to remain in place for the foreseeable future.

India already has a well-developed appetite for copper scrap, and with its domestic GDP growth estimated at 8.5% for the financial year just ended, this hunger is unlikely to subside. In recent years, India has become more involved with the import of higher grades of copper scrap as that nation's technologies, coupled with a very significant decrease in its rates of duty for copper scrap, have served to attract metal to that country. There is every reason to believe that if the wide difference in price between copper scrap and cathodes continues, then India will likely increase in its importance as an importer of copper scrap. But today, I am opting to focus on China because its rapid infrastructural growth has benefitted very significantly from its use of copper scrap.

China's overseas purchases of copper scrap amounted to around 4 million tonnes last year alone - an increase of 9.2% over the 2009 figure. But this does not tell the whole story: at the CMRA's Secondary Metals International Forum in Ningbo last November, it was intimated that the country's next Five Year Plan covering the period from 2011 to 2015 will raise secondary materials to the level of a strategic industry on a par with steel, oil, defence and other enterprises considered key to Chinese national security and social stability. The clear aim is for secondary non-ferrous metals to play an ever more key role in building the nation's sustainable economy.

The Chinese are targeting annual secondary non-ferrous metal production of 11.1 million tonnes per annum by 2015, with copper contributing 3.6 million tonnes.

CMRA's President, the influential and highly knowledgeable Wang Gongmin, spoke of the likelihood of an expansion of the forms of recyclable materials that his country would be prepared to import. He declared in his written speech to the conference: "We will add to the variety and expand the scale of imported scrap metals." He added that scrap home appliances, circuit board scraps and scrapped cars are all valuable renewable resources. He also acknowledged that recycling technology has matured to the extent that processing these items should not result in secondary pollution, and yet those products are all on the list of prohibited import goods. So he concluded: "It is suggested that relevant departments should make policies to approve the import of such products."

When such a statement comes from a high-ranking official of a consuming country the size of China, it attracts the undivided attention of the entire supplier world.

This shift in China's approach to recycling is already translating into action on the ground - for example, with the identification in China of "urban mining" demonstration bases - a clear reference to the process by which materials are extracted from scrap appliances and electronics.

Ensuring that copper scrap flows smoothly to developing economies as part of the aforementioned global market re-balancing act is just one part of the equation. This must be a two-way process. Some of those countries demonstrating the largest appetites for imported copper scrap - and China is again an obvious example - have also elected to impose restrictions on red metal exports. Through its International Trade Council and other initiatives, BIR will continue to argue such moves are fundamentally flawed. The International Trade Council's raison d'être is to monitor the international exchanges of scrap and recyclables to detect, and fight against, any trade barrier such as duties, quotas and outright bans. As part of this same watching brief, customs and trade consultancy Bryan Cave International Trade has been commissioned to monitor and report on policy and regulatory matters in countries that are key buyers of non-ferrous scrap, with the initial focus falling on China and India.

Constraints on free and fair trade in both primary and secondary raw materials can skew the entire value added chain and undermine the competitiveness of entire economies. In a truly global market, access needs to be truly global. In bilateral and multilateral negotiations, therefore, policies must ensure that export restrictions and duties are eliminated, and that the subsidisation of access to inputs - domestic or imported - is abolished. In addition, and by no means of less importance, is the fact that some nations have expressed import policies relative to duties, quality, and licensing protocols that are not universally enforced. In fact, they are often abused in the form of fraud that imparts a confusing and uncertain consideration among international shippers. BIR believes that international trade needs to not only be free but also fair.

As I have said before in the international arena, there is a need: to adopt at World Trade Organization level the legal basis for combating the causes for competitive trade distortions in respect of access to primary and secondary raw materials; to exert maximum political pressure on the countries that maintain market-distorting provisions; and to include provisions in future free trade agreements that will converge environmental, health and safety standards.

Not one of today's industrialized economies would have been able to achieve its status had it not been for the fact that copper scrap was freely available to it to provide feedstock for infrastructural growth. Korea, Japan, Taiwan, Europe and the Americas have all found huge benefit in the consumption of copper scrap. There is every reason to believe that the same will hold true of those states that now find themselves in a period of economic expansion.

BIR, as the World Federation of Recycling, has as its objective to ensure that material will flow from and to its markets in a free, fair and sustainable way.