Ruination or Rejuvenation?

BIR HELD ITS SPRING CONVENTION IN ROME, WHERE THE SCATTERED REMNANTS OF THE CITY'S ANCIENT GLORY HINTED AT EUROPE'S PREVIOUS HIGHS AND LOWS.

BY KENT KISER AND JOE PICKARD

When the Bureau of International Recycling (Brussels) opened its spring convention in Rome in late May, the fate of the eurozone hung in the balance, with Greece threatening to implode, Spain facing 50-percent unemployment in its 25-and-younger population, and fears of bank runs rippling under the surface. This shaky state of affairs made Rome and its ruins—evidence of its former role as the center of a vast ancient empire—an appropriate, if haunting, backdrop. The question on many delegates' minds was whether the European monetary union, now in its 13th year, would crumble like the Roman Forum, setting the stage for a new European order, or whether, like the Pantheon, it would remain standing for centuries. No one could provide a definitive answer, of course. Europe's future is mired in uncertainty. This "seriously threatening" state of affairs, as one paper recycler put it, dominated the BIR convention and its reports on international scrap markets.

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"MUDDLING THROUGH" THE CRISIS

The eurozone—the 17 European Union countries that share a single currency—faces both banking crises and sovereign debt crises, explained **John Authers** of the *Financial Times* (London), the conference's keynote speaker. "Europe let its banks get far too big, which

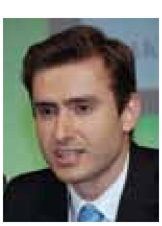
DREAMSTIME/WONG CHEE YEN

means they cannot be allowed to fail, but they're also too big to rescue." Many eurozone banks have significant exposure to countries in crisis, which could mean large write-downs, he said.

Spain is the "pivotal country" and the "single-most-important risk" in the eurozone, Authers said. "It is too big to be allowed to leave the euro in any meaningful form and too big for the available funds to be able to rescue it. It is the line in the sand. It cannot be allowed to crash." In addition to its banking and sovereign debt crises, Spain has a domestic housing bubble that has not yet burst, he noted.

Greece's exit from the eurozone is an "imminent possibility" after the country's June elections, Authers said, but the real question is whether it can leave without taking other countries with it. Its solo exit would cause a "mild recession" in Europe, but a complete euro breakup would bring about the "worst recession since World War II," with GDP declines of more than 10 percent. Thus, he concluded, "muddling through has to be the single most likely alternative."

At the Nonferrous Division meeting, **Marco Valli** of UniCredit (Milan) warned the eurozone crisis has entered a new phase. Cyclical indicators have taken a turn for the worse, he said, citing increased fiscal consolidation, high oil prices, and volatile financial markets as three factors dampening economic growth. Closer coordination is needed between the European Central Bank and its member countries, but the massive outflow of deposits from Greece and ongoing public- and private-sector deleveraging across Europe pose unprecedented challenges, he said. To get out of the debt crisis, Valli advocated a growth pact that focuses on structural reforms—including liberalizing labor markets in the medium term and trimming long-term spending on pensions—and giving Spain and Italy more flexibility to slow fiscal consolidation. If the eurozone cannot solve its problems, the impact of the continuing crisis will hit the developed world the hardest, Valli noted, whereas developing economies in Latin America and Asia will feel it the least.


Marco Valli

Spain is the "pivotal country" and the "single-most-important risk" in the eurozone, John Authers said. "It is the line in the sand. It cannot be allowed to crash."

Authers also described how the world outside of Europe has fared since the 2008 recession and economic crisis. Though China led the world out of that crisis, the U.S. economy is leading the world now, he said. "It is healthier than anywhere else." Positive U.S. signs include a decline in jobless claims, signs of "normality" in the housing market, and a stronger banking sector, thanks to higher profits and better loan-to-deposit ratios, he said. Fears persist that the United States continues to "rely on cheap money" and has manufactured its recovery by deliberately weakening the dollar. "It may yet work, but it's a cause for concern," he added.

China, which has seen its import growth flatten out, is unlikely to implement another massive stimulus plan, Authers said. Instead, it is "trying to come up with a more balanced policy for growth, which makes eminent sense. Given China's importance, that is very significant news for the rest of the world."

FERROUS FOCUSES ON TRADE RESTRICTIONS

Ferrous Division Chairman **Christian Rubach** of TSR Recycling (Bottrop, Germany) was one of many participants in the BIR Rome event to note the "alarming" growth in export restrictions worldwide. Countries impose such restrictions to safeguard domestic resources, control illegal exports, and generate revenue, explained guest speaker **Barbara Fliess** of the Organization for Economic Cooperation and Development (Paris), which is tracking these measures' impact on the flow of raw materials, including ferrous scrap. She confirmed that export taxes, quotas, prohibitions, and similar measures are on the rise, with 30 countries now regulating iron and steel scrap exports. BIR and national industry associations can play a key role in combatting such protectionist measures, Rubach said.


Barbara Fliess

Market reports on ferrous scrap revealed weaker prices in many regions in the first half of 2012. In early May, prices for U.S. domestic ferrous scrap, especially prompt material, were down $10 to $20 a ton depending on grade and location, said **Blake Kelley** of Sims Metal Management Global Trade Corp. (New York). Ample scrap availability and excess processing capacity are some of the factors weighing on the U.S. market, he said. Thus, the industry expects lower prices in June.

China's domestic ferrous scrap prices are among "the highest in the world," while steel prices are among the lowest, squeezing steelmaker margins there, Kelley said. In the first 10 days of May, China produced steel at record speed—an annualized rate of 748 million mt, which is about 50 percent of global steel output, he noted. Elsewhere in the Pacific Rim, South Korea and Taiwan have been active scrap buyers, while disruptions in containerized shipments to Indonesia have resulted in sharply higher scrap prices, Kelley said. With rising energy costs, the unfolding situation in Europe, and slowing Chinese and Indian growth, in the near term he expects scrap buyers and sellers to


Blake Kelley

remain cautious and supply chains to remain tight.

India has faced "challenging" market conditions in recent months, said **Zain Nathani** of the Nathani Group of Cos. (Mumbai). The rupee has fallen 26 percent against the U.S. dollar since the BIR meeting in Singapore a year ago, putting pressure on Indian scrap importers, he said. Thus, Indian ferrous scrap imports are looking flat this year, though demand could improve if the dollar weakens. On the regulatory front, India's Directorate General of Foreign Trade is making Indian inspection agencies—which issue preshipment inspection certificates—re-apply for DGFT approval, Nathani noted. Discussions are underway about the potential effects on scrap market participants of new European raw-material-quality standards that take effect this September, he added.

Japanese ferrous scrap prices are unlikely to rise anytime soon, said **Hisatoshi Kojo** of Metz Corp. (Tokyo), citing the stronger yen, sluggish steel product demand, slowing export sales, and the ongoing European debt crisis as factors affecting the Japanese market. As a result, Tokyo Steel Manufacturing reportedly started lowering its ferrous scrap buying prices in early April, a trend that continued into May. Barring a sharp appreciation of the dollar against the yen or Greece's exit from the eurozone, scrap prices in Japan will be range-bound for the next several months, Kojo said.

Hisatoshi Kojo

Ferrous scrap prices in Russia also softened in the second quarter, reported **Andrey Moiseenko** of Ukrmet (Doneck, Ukraine). Though Russian steel mills were pushing for lower scrap prices, scrap exporters have benefited from the weak ruble. In May, a Russian court overturned the government's decision to limit Far East scrap

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FRAUD AND THEFT IN SCRAP EXPORTS

Exporting scrap always comes with risks, but the industry is experiencing unprecedented thefts of material from sealed containers, a topic BIR's International Trade Council addressed in a special workshop at the Rome convention.

When shipping containers internationally, "the theory is that as long as the seal is intact, the container has not been broken into," but **Pottengal Mukundan** of the International Maritime Bureau (London) called that idea "rubbish." In reality, he said, there are at least five ways to open a container without breaking the seal, including removing the door hinges or tampering with various door parts. He also reviewed other types of shipping fraud, some involving organized cargo-theft rings, that redirected, misrepresented, or misrouted containers by altering shipping documents. "Every shipping document can be forged … with ease," Mukundan said. No shipper is immune from a "determined fraudster," in part because today's systems are designed for use by "honest businessmen, with trust built into that system." Traders must be alert in dealing with every proposal and transaction, he said. "There is no substitute for robust due diligence."

Bashar Ehsan of Ala International Trading (Ajman, United Arab Emirates) described his company's experience with weight shortages in containers shipped through ports in southern China. The shortages ranged from 200 kg to 10 mt, with no consistent pattern based on port of origin or discharge, shipping line, or buyer. His company traced the problem to Hong Kong's River Trade Terminal, the interim destination of cargo that arrives at Hong Kong's port on its way to other destinations in China. While there, some containers are illicitly trucked to scrapyards in the adjacent New Territory, where thieves open them without breaking the seal and remove "any quantity [of material] they want," Ehsan said. The thieves then close the container and return it to the scale at the River Trade Terminal. The forwarding agent informs the buyer about the weight shortage, who then tells the shipper about the problem. The shipper erroneously assumes the weight slip is from the Hong Kong port, not the River Trade Terminal.

Pottengal Mukundan, Gert-Jan van der Have, Bashar Ehsan, and Marc Beerlandt headlined the workshop on fraud and theft from containers.

To address such problems, Ehsan advised against fixing the container seal on the hub bolts. Instead, secure the seal on the bottom of the container with a "cam keeper," he said. Shipping lines and the Hong Kong authorities should examine such weaknesses in the system to protect containers passing through Hong Kong, and transshipment agents should "be held responsible and investigated for each theft," Ehsan asserted.

Marc Beerlandt of Mediterranean Shipping Co. Belgium (Antwerp, Belgium) said cargo thefts are "a very organized job" that "requires inside information, knowledge of the system, and the help of ordinary people." Unfortunately, many international shipping terminals do not have protective measures such as fences and security cameras, making them ill-equipped to counter thefts, he said. To reduce shipping problems, he advised using trustworthy and qualified partners, limiting the number of partners involved in shipping transactions, and using shipping lines' security-focused systems, such as track-and-trace technology, e-booking options, and new container-security devices. Regardless of the safeguards, "100-percent security is not possible," he said.

The ITC workshop also examined identity and document fraud in international scrap transactions **Gert-Jan van der Have** of ARN Advisory (Amsterdam) gave a case study of one individual who swindled 12 companies in Southeast Asia out of an estimated $10 million "without leaving a trace behind." The perpetrator used a stolen, altered passport to create a bogus Austrian company and open a commercial bank account. The fictitious company rented an office, set up a corporate phone number, and created a website to establish its credibility by providing photos of its alleged scrapyards and presenting bogus interviews, press reports, and biographies that "were written in a fully professional way," van der Have said. Next, the company registered a false inspection company in the United Kingdom, giving it a name similar to a well-established inspection firm and appropriating that firm's brand identity. The false company even offered an online container tracking system so its victims could check on purported shipments. In all transactions, the fake company required cash prepayment or an irrevocable letter of credit to guarantee its receipt of payment.

Though van der Have placed some of the blame for this scam on the financial institutions and government authorities for their lack of due diligence and safeguards, recyclers must protect themselves by questioning what a company presents on its website and establishing face-to-face relationships with potential trading partners before conducting business, he said.

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exports from the Magdan port, opening the door to exports from other Russian ports if Moscow doesn't appeal the decision, Moiseenko said. In Ukraine, an extremely cold winter resulted in tight scrap supplies until March, he said. The Ukrainian scrap industry's current challenges include payment delays from steel mills and greater difficulty obtaining government export quotas, he said, but new and planned investment in electric-arc furnace production could increase domestic scrap demand by 4 million mt annually in the coming years.

Despite challenging market conditions in Europe in the first five months of this year, demand for the continent's scrap is poised to rise in the medium to long term, said **Tom Bird** of Van Dalen Recycling (Sheffield, England). Earlier this year, limited container availability following the Chinese New Year celebrations kept a lid on European ferrous scrap prices despite tight supply conditions, he said. Market conditions softened in May, as Spanish demand faded and the weaker rupee affected the Indian container market. On the plus side, Bird pointed to the weakening euro, which makes EU scrap more competitive, and generally strong demand for European scrap, especially in Turkey.

Bird also participated in a discussion of global ferrous scrap market trends with **Ronobir Roy** of ArcelorMittal (Luxembourg), **Maurizio Calcinoni** of Arvedi (Cremona, Italy), **William Schmiedel** of Sims Metal Management (New York), and **Ruggero Alocci** of Alocci Rappresentanze Industriali (Genoa, Italy) that **Tim Hard** of The Steel Index (London) moderated. Schmiedel predicted that increased EAF production in Ukraine will draw material away from Turkey and Egypt, but Turkey will still be able to secure adequate supplies. He also said the market for ferrous scrap price risk management tools is too shallow, but he expects further developments in five to seven years. Even though global scrap processing capacity is growing, don't confuse that with scrap availability, Bird said. He expressed his optimism about the recycling industry's long-term future, despite ongoing market volatility.

OVERCAPACITY WEIGHS DOWN STAINLESS

Stainless steel marks its 100th anniversary this year, noted those at the BIR Stainless & Special Alloys Committee meeting. Guest speaker **Pascal Payet-Gaspard** of the International Stainless Steel Forum (Brussels) reviewed the metal's past three decades, pointing out that stainless steel consumption grew at a 4.6 percent annual rate from 1980 to 2010. The industry has relied on Asia, particularly China, for most of its growth since 2000, with 13 of the top 20 stainless producers now in Asia, he said. Industry challenges include "a significant overcapacity" in production; a shift to ferritic and 200-series grades, which are low in nickel and high in manganese; and a decade of high or volatile prices for some stainless steel raw materials, namely nickel, carbon steel, and chromium. Such factors are reducing stainless consumption and squeezing the industry's margins, Payet-Gaspard said.


Pascal Payet-Gaspard

Stainless producers have responded to these challenges by cutting costs and improving productivity, closing inefficient operations, turning to cheaper raw materials such as nickel pig iron, integrating backward to gain more control of their supply chains, producing value-added products with higher margins, and—in some cases—spinning off their stainless businesses. The industry is "catching up" with its overcapacity issue and has a promising future, Payet-Gaspard said, with "a lot of new markets coming up" in infrastructure and green energy applications as well as emerging markets.

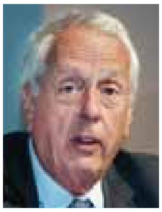
"Perhaps nothing is more relevant for our future marketplace and, indeed, the entire stainless picture" than the new stainless mill Outokumpu is building in Calvert, Ala., Barry Hunter said.

Examining the more recent nickel and stainless market dynamics, committee chairman **Michael Wright** of ELG Haniel Metals (Sheffield, England) said nickel has been "extremely, extremely volatile." Investment funds have been less interested in nickel due to its oversupply situation and China's production of nickel pig iron, he said. That NPI production and nickel's price picture could change significantly, however, if Indonesia follows through on its threats to ban exports of nickel ore, he added.


Michael Wright

Though the stainless scrap market was strong from January to May, its position in the third quarter is "unclear due to the traditional vacation period and a general fall in demand," Wright said. A decrease in raw material availability is likely to match that lower demand, however, because lower industrial production and the low nickel price don't draw out much scrap. This "double-whammy effect" is "making life pretty difficult in stainless steel trading," he said. "We hope some break will come, but we don't see that happening in the third quarter."

In the country-specific reports, **Barry Hunter** of Hunter Alloys (Boonton, N.J.) said U.S. stainless production in the first quarter was about 500,000 mt, a 9-percent increase from the fourth quarter of 2011. With meager U.S. housing starts, the persistently high unemployment rate, and ongoing global economic uncertainty, "beyond June, there does not appear to be a clear picture for stainless, especially heading into the normal summer slow months," he said.


Barry Hunter

Stainless scrap consumers returned to the market in the first quarter to replenish their inventories, Hunter said, but the flow of scrap into processing yards remains slow due to reduced manufacturing, and many processors appear to be holding material, awaiting better market conditions. On the export side, U.S. shipments of stainless scrap declined 12 percent in the first quarter of 2012 compared with the fourth quarter of 2011, with about 88 percent of the material destined for Asia.

"Perhaps nothing is more relevant for our future marketplace and, indeed, the entire stainless picture" than the new stainless mill Outokumpu is building in Calvert, Ala., Hunter said, which will have a production capacity exceeding 1 million mt. The mill is slated to make test runs in December or early January, with an estimated 2012 production of 350,000 mt. Last year, the U.S. stainless market had a surplus of 370,000 mt, he pointed out, while Europe had about 1.5 million mt of oversupply. Consolidation among European stainless producers might help that continent solve its overcapacity problem, he said, but Outokumpu's new production will create both "major overcapacity" in the U.S. market and "a major shortfall in stainless steel scrap, compounding an already extremely aggressive and competitive market."

Wright read reports from European committee members starting with Germany, which still is enjoying high industrial production, with stainless scrap available in sufficient quantities, according to **Frank Waeckerle** of Cronimet Ferroleg (Karlsruhe, Germany). High scrap demand from neighboring countries is squeezing German scrap supplies and margins, however. Outokumpu's acquisition of ThyssenKrupp Nirosta (Krefeld, Germany) and its shift of that company's stainless production from Germany to Italy and Finland have reduced TKN's market power in Germany, he said.

That move by Outokumpu could make the AST mill in Terni, Italy, "the most important stainless steel scrap purchaser in Europe," wrote **Sandro Giuliani** of Giuliani Metalli (Milan), and it could make stainless scrap exports from the country rarer. Right now, Italian production of stainless flat products continues to be good, but production of long products is facing one of the most difficult periods in the past 10 years, he reported. Scrap availability has fallen due to less manufacturing activity, the relocation of Italian manufacturing to other countries, and low nickel prices, which have prompted scrap dealers to hold material and wait for prices to go up. Recyclers in France and Belgium are doing the same, reported **Boris Pirat** of Ferinox (St. Romain en Gal, France), which is reducing the availability of scrap and turnings. Stainless demand in those countries returned to a higher level at the start of 2012, but demand is expected to remain limited for the rest of the year due to global economic conditions, weak LME nickel prices, and mills' plans to reduce their production in Europe.

When Russia finally ratifies the agreement this year that makes it a member of the World Trade Organization, the result will be "new market rules for Russian industry, and for the recycling industry in particular," reported **Ildar Neverov** of Scrap Market (Moscow). He expects duties on scrap exports to gradually decrease year by year, which could lead to more exports of stainless scrap. Even with current export limitations, "stainless scrap prices in Russia are at times even better than international values due to the local strong consumption of stainless steel products and special alloys."

In Asia, scrap availability and margins remain tight, with scrap generation lower due to reduced industrial activity, **Mark Sellier** of OneSteel Recycling (Hong Kong) reported. China

ITALIAN RECYCLER EARNS PAPER RECYCLING HONOR

The Paper Division selected **Lamacart** (Villafranca di Verona, Italy) to receive the latest Papyrus Prize, which recognizes companies and individuals for their work in advancing the global paper recycling industry. This third-generation recycling company, founded in 1934, recovers an estimated 1 million mt of paper a year and plans to double in size in five years, said company head Thomas Nicolis. At right, Paper Division President Ranjit Baxi and BIR President Björn Grufman of M.V. Metallvärden (Stockholm) give the Papyrus Prize to Nicolis (center).

expects its stainless production to increase about 8 percent this year, which would give it about a 50-percent share of world stainless output. Indonesia's proposed ban on iron ore exports could "wake a sleeping giant in terms of demand for scrap," Sellier said. China does not import much stainless scrap currently, he pointed out, relying instead on nickel pig iron and stainless from its purchases of shredded mixed metals. In sum, "it's a very, very finely balanced market in the region at the moment."

In India, orders at stainless producers remained "very weak" in the first quarter, with mills running at about 70-percent capacity, according to a report from **Anand Gupta** of Ambica Steels (New Delhi) read by **Ian Hetherington** of the British Metals Recycling Association (Huntingdon, England). The weak demand for finished stainless—as well as the rupee's continuing devaluation against the U.S. dollar—have diminished India's interest in importing stainless scrap, and scrap availability has remained low in all regions. Scrap stocks at Indian mills, particularly 300-series material, are at low to average levels, with mills buying on a "hand-to-mouth basis."

In the Middle East, demand in Jordan for 200- and 300-series stainless steel has remained low despite low nickel prices, said **Ahmad Sharif** of Sharif Metals (Amman, Jordan). The Jordanian government has imposed a "heavy-handed" fee of $70 a mt on exports of stainless steel scrap, which is "obviously having an impact" on exports and leading the metal to be traded locally at low levels, he said. On the bright side, Saudi Arabia, the United Arab Emirates, and Iran all have significant building and/or infrastructure projects that could stimulate demand for stainless and other nickel alloys, Sharif said.

NONFERROUS BRIGHT SPOTS IN THE CLOUDS

Though market and economic conditions have changed little since the fall 2011 BIR meeting in Munich, the outlook for the nonferrous metals industry remains positive, said **Peter Dahmen** of metal trading firm Schoof & Haslacher (Munich) at the Nonferrous Division meeting. Dahmen expects aluminum and copper consumption in Europe's auto industry to rise sharply in the coming years due, in part, to growth in demand for electric cars and fuel-cell applications. He warned of increasing protectionist measures, however, which countries are implementing in the name of environmental concerns and to secure their raw material supplies. To counter these threats and shed further light on the importance of the nonferrous industry, BIR has hired CRU Group (London) to conduct a study on global nonferrous scrap use and trade, Dahmen said. It will present its initial results for copper and aluminum scrap at the fall BIR meeting in Barcelona.

Peter Dahmen

Despite the prevailing global economic uncertainty, North America is showing some positive trends, including healthy domestic demand for aluminum, a rebound in U.S. housing starts, and good Asian demand for North American Zorba and Twitch, reported **Anton van Genuchten** of Reukema Blocq and Maneschijn (Harderwijk, Netherlands). The European debt crisis has hurt other regions, including the Middle East, where scrap processors are holding material in anticipation of better prices, he said. In Europe, demand for German cars is good, but uncertainty is affecting the entire eurozone, with French and Italian car makers hit especially hard. Russia's nonferrous picture could change when the country enters the WTO, he added, because its export duties on copper, currently 50 percent, could drop 10 percentage points a year. Though Asian markets continue to face several challenges, secondary nonferrous prices in China were relatively stable recently. And India is still on target for GDP growth of 6.7 percent this year despite the depreciating rupee and a difficult business environment, he said.

Loretta Forelli

Protectionism is not the solution to Europe's problems and is likely to provoke countermeasures, cautioned guest speaker **Loretta Forelli** of Forelli Pietro (Capriano del Colle, Italy). Today's chronic uncertainty can be resolved only through free global trade and innovative ideas, she said. In Italy, where corporate tax levels have reached "pathological" levels, Forelli suggested that fiscal austerity measures should not be so severe as to penalize domestic demand and destroy the last will of companies to grow and invest. Despite rising competition from South America as a supplier of scrap, European firms need to improve their competitiveness in terms of size as well as efficiency, she added.

Shinegori Hayashi of Daiki Aluminium Industry Co. (Osaka, Japan) provided an outlook for Asia's secondary aluminum alloy industry. In 2011, Japan produced only 74 percent of the secondary aluminum alloy it produced


Shinegori Hayashi

in 2007, before the recession, he said. He attributed the reduction in part to a drop in Japanese auto production, but also to a stronger yen, which makes aluminum alloy ingot imports more attractive—57 percent of all die-cast alloys used in Japan are now imported, he said—and gives Japanese car manufacturers an incentive to shift production to lower-cost facilities in Southeast Asia. Japan's shrinking domestic car market, overcapacity at aluminum alloy manufacturers and carmakers, and the shift to overseas auto production are likely to stifle growth in Japan's aluminum alloy market and perhaps result in further downsizing, Hayashi said.

China is now the world's largest producer of secondary aluminum alloy—and of cars and motorcycles—but its rising labor costs, personnel shortages, and government plans to eliminate small production facilities with poor environmental controls are adding to its competitive pressures, Hayashi said. In South Korea, its weaker currency and strong exports have yielded solid growth in its car industry. Though recent flooding in Thailand has affected secondary aluminum alloy production there, Hayashi expects the industry to continue on its growth path to make the country the "Detroit of the East." Malaysia's secondary aluminum alloy industry has recovered slowly from the recession and the liberalization of its domestic automobile market, whereas Indonesia's production of motorcycles and automobiles is increasing rapidly, which should boost demand for secondary aluminum alloys.

Copper production deficits and high energy costs will most likely keep a floor under copper and aluminum prices this year, said Marco Valli of UniCredit (Milan). With aluminum prices already near the marginal cost of production, UniCredit Research is forecasting average aluminum and copper prices of $2,275 a mt and $8,400 a mt, respectively, this year. In 2013, it expects the average price of copper to drop to $8,200 a mt as aluminum rises to $2,450 a mt, he said.

THE PROS AND CONS OF PRODUCER RESPONSIBILITY

ISRI President **Robin Wiener** gave an overview of extended producer responsibility programs in the United States at BIR's International Environment Council meeting. Though there is no federal EPR law, the trend is "pervasive in the states," she said, with 32 states now having some type of EPR law, often focused on items such as electronics, mercury-containing products, used carpet, unused paint, and medical sharps. Many states pursue EPR to reduce their costs of handling certain materials by shifting the burden to product manufacturers, she said. Some nongovernmental organizations and retailers also have pushed for EPR programs to address specific consumer products or expand their sustainability efforts.

EPR programs can pose risks for scrap recyclers, most notably the risk that they will overreach to include recyclables with established markets, Wiener said. There's also "a fear of flow control," which could deny recyclers access to collected materials, redistribute market share, require companies to reveal confidential business information, and allow producers to pick market winners and losers, she said.

ISRI supports EPR programs if they promote a competitive, market-based system that assures the free and fair trade of recyclable materials, Wiener said. The programs must recognize and include the existing recycling infrastructure and should not cover scrap materials that currently are processed into commodity-grade materials and sold into viable markets, she said. "EPR programs can be effective, but only if they include sunset provisions," Wiener stated. "When the market matures to where it's self-sustaining and a competitive market exists, then the EPR program must end." **Igor Bilimoff** of FEDEREC (Paris) also described the EPR efforts in France.

Also speaking at the meeting was **Ross Bartley**, BIR's environmental and technical director, who reviewed BIR's work with the International Atomic Energy Agency (Vienna) to develop a code of conduct regarding the transboundary shipment of scrap metal that inadvertently may contain radioactive material.

COLLECTION CONCERNS PREOCCUPY PAPER

The Paper Division meeting focused on Asian and European market conditions. Increasing sea freight costs and a shortage of space on vessels are "making exports to China very, very difficult" for European scrap paper shippers, said Paper Division President **Ranjit Baxi** of J&H Sales International (London). Sea freight costs increased $900 per container—or almost $40 a mt—between January and June, as shipping lines try to earn back some of the losses they have suffered in recent years. "We must tell the shipping lines not to increase their sea freight so aggressively," he said. Currency volatility—especially the devaluation of the euro against the U.S. dollar—is compounding export difficulties, and quality issues are a growing concern, Baxi said. As Asian countries collect more of their domestic paper, that's likely to affect their imports as well.

China imported 27.3 million mt of recovered paper in 2011, up 23 percent from 2010, Baxi said. In the first quarter of 2012, China imported 7.2 million mt of scrap paper, up 10 percent year on year, he said. North America continues to be China's top international supplier, shipping 4.7 million mt in the first four months of 2012 compared with Europe's 3.2 million mt and Japan's 1.1 million mt. "China is still growing, still buying, and the volume is increasing," Baxi said, expressing confidence that China "will remain a growth market for us for years to come."

India's paper and packaging demand is about 11.6 million mt, and its paper consumption will reach an estimated 28 million mt by 2025, said guest speaker **Jogarao Bhamidipati** of ITC (Secunderabad, India). Of the 750 mills in India's paper industry, about 508—68 percent—consume scrap paper, using an estimated 8 million mt a year. About half of that is imported, primarily from Europe and the United States, Bhamidipati said. India's scrap paper demand is expected to double by 2025, and a larger proportion—10 million mt—will come from imports. With Western countries reaching "saturation levels" in their recovered fiber volumes, India's "only long-term solution" to its meet its growing scrap paper demand is to improve its domestic recovery volumes, which are "hardly in the range of 25 percent," Bhamidipati said.

Jogarao Bhamidipati

The countries in the Gulf Cooperation Council—Saudi Arabia, the United Arab Emirates, Qatar, Oman, Bahrain, and Kuwait—recover about 40 percent of their scrap paper. With a world paper recycling rate of 56 percent in 2010, the region has room for improvement, said guest speaker **Atul Kaul** of Arab Paper Manufacturing Co. (Dammam, Saudi Arabia). The GCC countries produce about 1 million mt of paper and consume 2.9 million mt. The region's paper industry depends on recovered fiber, and its consumption of fiber continues to grow faster than its collections, Kaul said. In addition to importing more scrap paper, some GCC paper companies are considering acquisitions in Europe and/or North America to expand their access to high-quality fiber.

Atul Kaul

The Paper Division board members provided short summaries of the major European markets. Spain's scrap paper export prices have been dropping since February, said **Francisco Donoso** of Reciclajes Dolaf (Madrid). Domestic market prices increased in March as buyers replenished their "extremely" low stocks, but they decreased in May, slipping closer to export prices. Spanish paper producers have tried to block scrap paper exports, claiming the shipped fiber represents lost carbon dioxide emission savings, "even though we all know that [carbon dioxide] emissions are lower for recycling, wherever it is," Donoso said. France, after seeing "very good" prices and "very low" collections in the first quarter, faces a "big turn," with prices expected to decrease in June and scrap supplies low, making the situation "quite difficult," said **Jean-Luc Petithuguenin** of Paprec (Paris). In Germany, paper mill orders were "predominantly firm" in May, with almost all recovered grades ordered in good quantity, said **Reinhold Schmidt** of RKS Karla Schmidt (Haren, Germany). Collection rates remained low, and Far East demand for fiber was "not satisfying," with container availability low as well. The market situation in the Czech Republic is "very strange and very unclear," said **Jaroslav Dobeš Jr.** of Remat (Brno, Czech Republic). Recovered paper collection volumes are not improving, regardless of price increases, and there are no stocks in reserve.

Currency exchange rates, low container availability, high freight rates, and import restrictions have created a weak export market for scrap plastics.

The Swedish market was short of OCC, news, and pams in the first four months of 2012 due to low collection volumes and strong export activity, reported **Lars-Gunnar Almryd** of IL Recycling (Stockholm). Collections improved in May, though it's "still too early to say if it's a positive trend or not." The harsh winter in Finland drove down scrap paper availability, especially of news and pams from households, but volumes have returned to normal levels, said **Merja Helander** of Lassila & Takanoja (Helsinki).

In Turkey, last year the government imposed new rules requiring paper recyclers to get permission from the main Turkish mills and fulfill other "formalities" before exporting recovered fiber, said **Ekrem Demircioglu** of Tudam (Maltepe, Turkey). Turkey's fiber exports have subsequently declined, as have buying prices from Turkish mills.

Schmidt, Almryd, Bhamidipati, and Kaul joined **Brian Taylor** of Recycling Today Media Group (Richfield, Ohio) and **Marc-Antoine Belthé** of Veolia Environmental Services (St. Denis La Pleine, France) in a panel discussion moderated by **Manfred Beck** of *Recycling International* (Arnhem, Netherlands). The panel addressed fiber quality, international shipping rates, the effect of protectionist measures on scrap paper exports, paper mills purchasing recovered fiber directly from scrap generators, and the threat that extended producer responsibility laws could take scrap material away from existing recycling companies.

EXPORT CHALLENGES PLAGUE PLASTICS

Currency exchange rates, low container availability, high freight rates, and import restrictions have created a weak export market for scrap plastics, according to speakers at the BIR Plastics Committee meeting. In the United States market, virgin feedstock prices have declined significantly in recent months, causing the market for scrap polyethylene and polypropylene to suffer "an absolute, straightforward

TIRE RECYCLING GAINS TRACTION

The European Union has increased its end-of-life tire recovery rate from 75 percent in 2004 to 95 percent in 2010, reclaiming 256.3 million of almost 270 million units, said Tires Committee Chairman **Barend ten Bruggencate** of the Netherlands. North America and Japan also have achieved high scrap tire recovery rates, and even Russia is developing a tire recycling infrastructure, though its efforts are "decades behind Western Europe," he said.

Guest speaker **Kees van Oosterijk** of RecyBEM (The Hague, Netherlands) reviewed the advantages of establishing end-of-waste criteria for scrap tires in the EU and discussed research into devulcanization and pyrolysis, suggesting that they could be important future tire recycling technologies.

Kees van Oosterijk

Barend ten Bruggencate

crash," said Plastics Committee Chairman **Surendra Borad** of Gemini Corp. (Antwerp, Belgium). Rigid plastics are available in large quantities, in part due to strict limitations on shipments of the material into Chinese ports. Similarly, exports of scrap polyethylene terephthalate have come almost to a standstill. Fortunately, domestic demand for the material is "quite strong and robust." Freight rates in the U.S. market have increased, though not as much as in Europe, and containers are getting more difficult to obtain, he said.


Surendra Borad

In Europe, the Waste Electrical and Electronic Equipment directive stipulates that 65 percent of plastics from end-of-life electronics in the EU must be recycled by 2019, Borad said. Sabic Europe—a leading producer of virgin plastics—has stepped into the reprocessed plastics business "in a rather big way," which might indicate that petrochemical producers now see secondary plastics as complementary to—rather than competitive with—their virgin products.

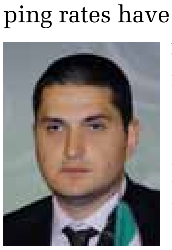
European scrap consumers have sufficient offers of secondary material and are benefiting from the difficult export situation, namely, high freight rates and tight container supplies, Borad said, reading a report from **Peter Daalder** of Daly Plastics (Zutphen, Netherlands). Many recyclers are finding it more difficult to sell their reprocessed granulate, mainly due to the expectation that virgin prices will start to decrease.

Demand for scrap plastics in France remained solid in May, though prices decreased slightly. Lower collection volumes earlier this year, coupled with growing interest in recycled material in the plastics industry, "could increase new tensions on the market," said **Grégory Cardot** of Veolia Environmental Services (Reims, France). Despite lower virgin PET prices, some French market participants are buying PET bottles from household collections at prices that are "disconnected" from the "strongly decreasing" market price, a situation that "is putting in jeopardy the future of PET recyclers in France," he added. Export shipments to Asia face a difficult situation, particularly in China, due to the devaluation of the euro against the U.S. dollar and higher import taxes or material bans at Chinese ports. "The prices are now under pressure, and the few drops in May could be amplified in June and July," Cardot said.

Grégory Cardot

With the rupee's steady depreciation, Indian consumers have lost their "import appetite," Borad said. Exporting is equally difficult due to shipping lines increasing their rates "in a very awkward and absurd way." Within India, demand for PET has increased "quite considerably," driving up prices. India's plastic recycling capacity is growing 12 to 15 percent a year, suggesting a "bright future" for its PET recycling sector, he said.

Delving further into the scrap industry's shipping problems was guest speaker **Stefano Fiore** of Logistic Group (Genoa, Italy), which specializes in importing and exporting plastics and metals. Overseas shipping rates have undergone a "general revolution" in recent months, with rates increasing an average of $350 per container, he said, though he did not expect the higher prices to affect the volumes exported "once a new balance has been found." More problematic is "the availability of guaranteed allocation" by the various shipping lines, the majority of which have cut services. "This has meant that cargo such as scrap, which has always been favored by special rates over general cargo, is not as appetizing as it used to be," Fiore said.



Stefano Fiore

Overseas shipping rates have undergone a "general revolution" in recent months, with rates increasing an average of $350 per container, Stefano Fiore said.

Scrap exporters from Italy are facing several changes in customs rules, he added. One change required Italian exporters to have an "authority" enclose a declaration in every shipment that the environmental laws in the importing country are comparable to Italian and EU laws. The law did not provide specific guidance—such as which authority could issue the declaration—and contradicted certain EU regulations. Though the Italian government withdrew this rule in late April, "many other problems remain," Fiore said. For example, since the end of 2011, Italian Customs has required Italian companies exporting to China to hold an AQSIQ license, which puts Italy "in a different position from all the other European countries, where only one of the parties involved in the shipment has to be an AQSIQ license holder," he said. As a result, many Italian companies were unable to export until they obtained an AQSIQ license, which is "neither simple or rapid."

Another change in customs rules requires any European AQSIQ license holder that wants to export from Italy to have a "stable representative" within Italy, registered under category 8 of the Waste Italian Registry, which covers "brokers of waste without detention," Fiore said. These rules put Italy at odds with the EU goal of creating a "single market where the various member countries can operate without restrictions," he asserted.

A second guest speaker, **Alessandro Danesi** of Stena Technoworld (Cavenago di Brianza, Italy), described Stena's process for recycling scrap electronics—including cathode-ray tube leaded glass for glass-to-glass applications—and white goods. The company uses a variety of processes to prepare specific resins from these WEEE materials for specific end-use markets, Danesi said. ■


Alessandro Danesi

Kent Kiser is publisher of Scrap. *Joe Pickard is chief economist and director of commodities for ISRI.*