



THE WORST IS OVER

LAST YEAR'S CLOUDY, PESSIMISTIC MARKET PICTURE HAS GIVEN WAY TO A CLEARER, OPTIMISTIC VIEW, WITH EVEN BETTER TIMES EXPECTED AHEAD, SAID SPEAKERS AT BIR'S SPRING CONVENTION IN MONTE-CARLO.

BY KENT KISER

Last fall, when the Bureau of International Recycling (BIR) (Brussels) met in Dublin, the world was still reeling from the Sept. 11 tragedy, which made it impossible to predict the future course of international scrap markets.

This May, when BIR held its spring convention in Monte-Carlo, the wounds from that tragedy had healed admirably and the global economic picture had come into focus, suggesting—like the meeting's Mediterranean setting—bright times ahead.

Indeed, the major industrial economies—encompassing the United States, Japan, and the European Union—are expected to post overall GDP growth of 1.8 percent this year compared with 1.2 percent last year, according to data from Nonferrous Division President Marc Natan of Malco S.A. (Le Pré Saint Gervais, France).

The emerging economies—including Latin America, Asia, Eastern Europe, and others—will show even stronger GDP growth of 4.4 percent this year compared with 3.8 percent last year, Natan noted.

What's more, GDP forecasts for 2003 expect this growth trend to continue. While the global market faces several potential risks—including a “double-dip” in the U.S. economy, a loss of strength of the U.S. dollar, and hikes in oil prices, Natan pointed out—overall the worst should be behind the scrap industry. To be sure, most of the market reports offered in Monte-Carlo reflected this optimistic view.

FERROUS BOUNCES BACK

Since the start of this year, the U.S. steel industry has seen its capacity utilization rate increase from about 73 percent to around 89 percent, noted newly elected Ferrous Division President Robert Philip of Schnitzer Steel Industries Inc. (Portland, Ore.). Ferrous scrap prices have risen “dramatically” along with this production, with No. 1 HMS increasing 37 percent from \$64 a ton in November 2001 to \$93 a ton in April 2002.

Though the U.S. economy's capital spending and construction segments have been sluggish—thus holding down domestic steel prices—a fuller economic recovery could begin by midsummer, peaking in the fall of 2003, Philip said.

The improving economic situation is reflected in the export market, where selling prices are starting to exceed domestic prices, he noted. The Bush administration's tariffs on imported steel could further bolster the U.S. steel and scrap markets in the coming months. Any sustained return of higher scrap prices, Philip continued, will have the added benefit of increasing the supply of scrap. One lingering drag on the market, though, is the currency-valuation imbalance, an issue that affects all goods as well as “the margins of U.S. scrap operations,” he said.

In the Asia/Pacific region, the economic fundamentals have improved considerably (except for Japan), with the GDPs of South Korea, Taiwan, and Malaysia expected to grow 6, 5, and 4.5 percent this year, respectively, and China's economic



Marc Natan



Robert Philip



Jeremy Sutcliffe



growth expected to exceed those levels, said Jeremy Sutcliffe of Simsmetal Ltd. (North Sydney, Australia).

This economic strength and the U.S. tariffs on imported steel have boosted prices for finished steel and scrap in the region, he said, noting that "increasing protectionism" has also been a noticeable trend among Asia/Pacific countries.

While China's scrap imports in the first quarter were largely unchanged at 1.9 million mt, its second-quarter imports were expected to rise to keep up with its crude steel and finished steel output, which increased 20 and 22 percent, respectively, in the first quarter, Sutcliffe reported.

South Korea and Taiwan continue to have hearty appetites for ferrous scrap, with the former importing about 1.8 million mt in the first quarter, he said. Asia/Pacific consumers in general will likely increase their purchases of scrap cargoes in light of Russia's ban on ferrous scrap exports from its ports serving the Far Eastern market. South Korea and Taiwan reportedly imported up to 100,000 mt a month of ferrous scrap from those ports, Sutcliffe observed.

Southeast Asian consumers have also increased their ferrous scrap imports, with Thailand, Indonesia, and Malaysia leading the way, he said. Aided by dwindling supplies of pig iron, prices for ferrous scrap have surged, reaching \$130 a mt for No. 1 HMS into Southeast Asia.

Though Japan's exports of finished steel increased almost 29 percent in the first quarter, the country continues to face serious economic problems that have dragged down its steel industry. In 2001, for instance, crude steel production declined more than 3 percent to 102.8 million mt, while scrap supply declined about 9 percent to 44.3 million mt and scrap consumption slid about 7 percent to 40.7 million mt, said Sadao Taya of Shinsei Co. Ltd. (Osaka, Japan).

Japan's scrap exports more than doubled in 2001, growing from 2.9 million mt in 2000 to 6.2 million mt last year, with China taking about 3 million mt and South Korea about 2 million mt of that total, Taya said. Ferrous scrap prices, which bottomed out last fall, have since almost doubled as well thanks to the "big demand" from China and South Korea.

Japan's finished steel prices have also recovered thanks to severe production cutbacks rather than increased domestic demand. Still, the Japanese steel market continues to be hampered by excessive production capacity and debt. "These things must be cleared away, otherwise there will be no real recovery," Taya said.

In contrast to the United States and Japan, the

continental European market saw only small fluctuations in scrap prices last year, with mills keeping prices low in the third quarter despite tightening supplies, said Björn Voigt of Thyssen Sonnenberg Recycling GmbH & Co. (Duisburg, Germany). Growing demand in the export market—especially from Turkey and the Far East—finally prompted German mills to increase their scrap buying prices beginning this March. Scrap demand has continued on a high level since then, and some European steelmakers have announced price hikes in response to growing demand for their products, Voigt said. The near-term outlook in Europe calls for ongoing high demand for scrap with limited availability.

In the United Kingdom, steel production has declined about a third since the mid-1990s from 18.5 million mt to 13.5 million mt in 2001—the lowest level since 1947—and forecasts call for a further reduction this year to about 12.3 million mt, said Colin Iles of European Metal Recycling Ltd. (Warrington, England). Over the same period, the United Kingdom has increased its imports of steel to the point where, in 2001, imports accounted for more than 50 percent of the steel consumed in the country.

U.K. scrap arisings, meanwhile, have remained relatively constant around 8.8 million mt. In light of declining domestic demand, U.K. recyclers have had to increase their scrap exports from a previous-decade average of 3.5 million mt a year to 4.8 million mt—a 37-percent increase, Iles noted.

In recent months, U.K. scrap exports and prices have risen, with Southeast Asia, China, Turkey, and Spain being consistent buyers. Though the uptick in scrap prices has been more than welcome, "we can say that the recent past and immediate future give rise to what I'm sure will be temporary optimism," Iles said.

COPPER IN THE NONFERROUS SPOTLIGHT

In a departure from its normal meeting, the Nonferrous Division held its first-ever "Spotlight on Copper," which featured three speakers—from China, the United States, and Europe—on changes in the copper scrap and secondary-smelting markets.

■ China's imports of copper scrap have grown steadily from about 21,000 mt in 1990 to a record 3.3 million mt in 2001—an average annual growth rate of 160 percent, said Simon Mao of Shanghai Dachang Copper Industry Co. Ltd. (Shanghai, China). More than 90 percent of China's copper-scrap imports come from the United States, Hong Kong, Japan, and Western Europe, he noted.

The three main Chinese groups that import



Sadao Taya



Björn Voigt



Colin Iles



Simon Mao

copper scrap are scrap processors, brass producers, and copper smelters such as Shanghai Dachang, which mainly import the Birch/Cliff grades, Mao reported.

China imports so much copper scrap for three main reasons:

- Its domestic copper supplies can't satisfy its demand. In 2001, for instance, China consumed 2.2 million mt of refined copper, but its domestic supply of copper concentrates and scrap copper totaled only 600,000 mt, Mao noted.

- Its copper consumption is growing rapidly, increasing at an average annual rate of 9.33 percent for the past 10 years and expected to continue rising steadily for the next decade; and

- Chinese firms can make a profit by processing imported mixed nonferrous scrap, insulated cable, and electronic scrap due to the country's low labor costs and low investment in environmental protection, Mao observed.

China's demand for copper scrap will continue to increase in the next five years, driven in part by government infrastructure projects such as electric networks, he said. Growth in other markets such as automobiles, electrolytic generators, motors, air-conditioners, cellular phones, and computers will also boost China's demand for copper and copper scrap.

Environmental protection is becoming a bigger issue in China, however, which could affect its imports of copper scrap, Mao noted. The country's

National Bureau of Environmental Protection, in fact, has already established some special industrial zones for "eco-industry" so that scrap operations can be centralized for easier regulation. Also, import licenses are becoming harder to get for mixed copper scrap and electronic scrap.

In addition, China will face greater international competition for copper scrap supplies, which will continue to be tight since the global economic recovery hasn't been as strong as expected, Mao stated.

- From 1995 to 2001, the United States lost more than 275,000 short tons of annual domestic No. 2 copper scrap consumption to the point where "there's no longer a No. 2 copper smelter in the United States," said Glen Gross of Wimco Metals Inc. (Pittsburgh).

With virtually no domestic market, U.S. processors have had to sell their No. 1 and No. 2 unalloyed copper scrap on the international market. From 1998 to 2001, for instance, U.S. copper scrap exports increased 130 percent from 114,000 tons to 262,000 tons, with the major outlet being China followed by South Korea and Germany, Gross reported.

Though you'd think that this U.S. copper scrap would flood the international market, lower prices have reduced overall world supply, meaning that No. 2 copper scrap is "as short as ever," Gross explained, adding that "as long as this supply shortage continues, U.S. material will be a wel-



Glen Gross

GENERAL ASSEMBLY FEATURES AWARDS, HONORS, AND MORE

The general assembly at BIR's Monte-Carlo convention was one action-packed affair that included the following events of note:

- Awarding of the association's prestigious Gold Medal to the late Ken Iverson, former chairman and CEO of Nucor Corp. (Charlotte, N.C.), for his "outstanding promotion of recycling" through the development of scrap-intensive minimill steelmaking technology.
- Presentation of Gold Pen awards to Albert Patin and Jean-Claude Platier of Paris-based *Recyclage Récupération* magazine for their contributions to the promotion of recycling in trade journalism.
- Fond posthumous tributes to Ian Cooper and Jan Levin. Cooper was an influential recycling journalist who served much of his career as editor and publisher of U.K.-based *Materials Reclamation Weekly*. Later, he was a consultant to the recycling industry as well as BIR's PR adviser. Levin, formerly with Uniscrap A/S in Denmark, served as BIR president from 1973-1977, interim president in 1982-1983, and chairman of the convention and communications committee.
- Introduction of BIR's redesigned Web site (www.bir.org), which offers a new look and upgraded features for members and nonmembers, including a secure, searchable online directory of BIR members.
- Launch of the association's new International Environment Council, which replaces its former Environment Committee. While the previous committee was made up of representatives from the different BIR commodity divisions, the new council will be composed of environmental experts appointed by BIR's national member associations. Álvaro Rodríguez Martínez of Lajo y Rodríguez S.A. (Madrid) was elected chairman of the new council, succeeding Patrick Neenan of AMG Resources Ltd. (Birmingham, England), who led the Environment Committee for 10 years.



Álvaro Rodríguez
Martínez



Patrick Neenan



come addition to the world market.”

Copper prices won't always be at lower levels, however, and “when copper prices do rise, the supply worldwide will substantially increase,” Gross said, offering an example to support his point: In 2002, the United States is expected to ship in excess of 250,000 tons of No. 2 copper scrap. If copper prices rise, say, from \$1,600 to \$2,200 a mt, that could lead to a 50-percent increase in the generation of U.S. No. 2 copper scrap. This additional material would have to find a home on the international market, with potentially serious oversupply consequences.

“In the 1990s, it was Eastern European scrap that flooded international scrap markets, and in the 2000s it could be American scrap,” Gross concluded.

■ Examining the copper-scrap market from a European perspective, Peter Müller of Montanwerke Brixlegg AG (Brixlegg, Austria) pointed out several important trends:

First, copper smelters are lowering their quality standards for copper scrap from the previous 99-percent-purity standard to Birch/Cliff quality, he noted.

Second, unfair customs regulations in some countries—such as import duties on refined and semifinished products—create unfair competition in the international market, giving the country's domestic producers a price advantage on top of their advantages related to labor costs, energy costs, and environmental standards, Müller said, asserting that “unfair competition is threatening the position and future of European refineries.”

Third, this unfair playing field is enabling Far Eastern consumers to dramatically increase their exports of copper scrap from the European Union and the United States, thus decreasing the scrap available to European smelters.

Fourth, the export taxes, tariffs, or bans on scrap exports from C.I.S. countries are further limiting the copper scrap available to Western European smelters. In 1999, for instance, European refiners imported 195,164 mt of copper scrap from Russia compared with only 13,939 mt in 2001, Müller reported. Similarly, European smelters imported 78,489 mt from the Ukraine in 1999 but only 4,277 mt in 2001. The overall result has been about 300,000 mt of lost copper-scrap supplies for European consumers.

These dynamics and others have driven a handful of smelters out of business, Müller said. Since 1998, there has been about 522,000 mt of shuttered copper smelting capacity, encompassing operations in the United States, the United Kingdom, France, and Italy. Currently, there's only

about 800,000 mt of smelting capacity left in Europe, while Southeast Asia continues to increase its smelting industry, Müller said.

SCRAPTIGHTNESS DOGS STAINLESS MARKET

In 2001, global stainless production declined about 4 percent to 18 million mt while consumption of external austenitic stainless scrap slipped 6.8 percent to about 4.7 million mt, reported Stainless Steel & Special Alloys Committee Chairman Michael Wright of ELG Haniel Metals Ltd. (Sheffield, England).

Supplies of stainless scrap were tight last year for the following reasons, he explained:

- “major” cutbacks of 55 to 60 percent in scrap exports from Eastern European countries;

- a 24-percent decrease in scrap availability in the main European Union stainless-consuming countries;

- the “dramatic” decrease of stainless production in the fourth quarter of 2000, which had a significant impact on scrap availability in the first half of 2001; and

- lower nickel prices, which reduced the supply of scrap.

Stainless scrap prices, meanwhile, followed the roller-coaster effect of nickel throughout last year, Wright reported.

Fortunately, the market has rebounded in 2002, with U.S. stainless producers predicting growth of about 8 percent and European mills forecasting a 5-percent increase. Globally, crude stainless production is expected to accelerate in the second half, perhaps ending the year up about 6 percent to 19 million mt, Wright said.

The availability of stainless scrap won't keep pace with this production, so mills will have to further reduce the percentage of stainless scrap in their charges from 47.3 percent to an estimated 43.7 percent (including revert scrap), said Wright.

While rising nickel prices could draw out more stainless scrap, any rise in stainless scrap supplies could “dramatically” drive down both nickel and scrap prices in the second half, he stated.

Though U.S. stainless production has been running slightly ahead of last year, “it's widely felt that the third and fourth quarters could result in a fairly significant production falloff, bringing 2002 figures in line with last year—or even less,” said BIR President Barry Hunter.

U.S. scrap supplies remain tight due to lower manufacturing activity, which continues to force processors to pay more to acquire material, creating “little or no profit margin,” he noted. More scrap could become available in the second half, however, as domestic production eases.



Peter Müller



Michael Wright



Barry Hunter

BRAVE NEW STAINLESS SCRAP WORLD

If Christer Wallstén of AvestaPolarit (Stockholm, Sweden) is correct, there are big changes in store for stainless scrap processors in the future.

■ Scrap recyclers, he said, are moving away from their traditional trader mode of business toward a producer-type mode in which value-in-use, just-in-time delivery, supply-chain optimization, and stable, well-defined scrap products are becoming areas of key importance in commercial discussions with major customers. "Scrap dealers will soon be replaced, or rather converted, into industrial processors," Wallstén said.

Consumers such as AvestaPolarit will also need to change their view of the scrap industry, pressing processors to convert into something more like primary-material suppliers. What that means, Wallstén explained, is that "we will expect to negotiate long-term standard contracts with specified delivery linked to pricing, *force majeure* clauses, and so on like we have for primary material."

■ While scrap will continue to provide a competitive alternative to primary nickel, "one should always remember that stainless steel scrap is a far more complex product than primary materials," Wallstén noted, pointing out that scrap requires more complicated handling/sampling requirements and poses potential problems related to impurities and radioactive sources.

■ Scrap availability will continue to be a problem to the point that, by 2006, the market could be short about 1.5 million mt a year, Wallstén said. Any prediction about scrap supplies, however, depends heavily on Russia's decisions regarding its scrap exports, he clarified.

■ Stainless scrap processors will continue to see their margins "shrink even more," Wallstén said, adding humorously that "some of you may even be forced to drive a Volvo in the future."



Christer Wallstén

In the export market, U.S. processors shipped 82,412 mt in the first quarter to offshore consumers as well as 8,000 mt to Canada, Hunter reported. About 90 percent of the offshore shipments went to Asia, with South Korea buying around 37 percent followed by Taiwan at 33 percent.

Currently, the U.S. stainless market is entering a "new era of uncharted waters" due to the new melt shop of North American Stainless in Kentucky. Once the firm reaches its capacity, "the historic skyline of U.S. stainless production will be changed dramatically—along with the historic flows of U.S. scrap to worldwide consuming markets," Hunter said.

To illustrate the potential market influence of North American Stainless, Hunter noted that the mill's capacity of 800,000 tons is about 75 percent of the total U.S. production of austenitic flat-rolled stainless of 1.08 million tons. Also, the mill used to roll about 400,000 tons a year of slab purchased from both Spanish and U.S. producers. As the mill ramps up its own production, "these types of purchases will obviously be discontinued in time, further impacting the business structure," he explained. Also, the mill's ability to receive scrap via truck, rail, and barge could "eventually impact the amount of scrap available or the time required to accumulate material for bulk shippers to the Asian market," Hunter said.

In Europe, scrap processors are having to

"chase each and every ton available," which is leading to stiff competition and dwindling profit margins, Michael Wright explained. European stainless production, meanwhile, is expected to rise in 2002 compared with 2001. In the United Kingdom, for instance, AvestaPolarit's production could grow almost 9 percent this year to about 530,000 mt. Germany's stainless production could rise more than 6 percent this year to an estimated 1.7 million mt, driven by inventory-building from service centers, Wright noted.

'NEW WORLD ORDER' IN RECOVERED PAPER

A new world order is developing in the global demand for recovered fiber, with the Asia/Pacific region emerging as the growth market of the future, said Edward Walker of Edward Walker Consulting (Godalming, England).

To explain this new world order, Walker first provided an overview of global paper recycling trends. From 1970 to this year, he noted, world consumption of recovered fiber has risen from 30 million mt to more than 160 million mt. In the 1970s, consumption of recovered fiber increased at an average rate of 5 percent a year. In the 1980s, the growth rate was 5.5 percent a year. In the 1990s, it increased yet again to 5.8 percent a year. In the first half of this decade, however, this growth rate will slow to about 4.1 percent a year, with world demand for recovered fiber reaching an estimated 185 million mt by 2005, Walker said.



Edward Walker



After 2005, the annual growth rate of recovered-fiber usage will continue to decline for two main reasons:

First, demand for paper and paperboard is now leveling out or declining in some important parts of the world, particularly North America, Japan, and Western Europe, which together account for 65 percent of all demand for recovered fiber, Walker noted.

Second, some countries are fast approaching certain limits to the amount of recovered fiber that can be incorporated in paper and paperboard without a significant loss in product quality, he said. Additional factors contributing to the slowing recovered-fiber utilization rate include major increases in woodfree papermaking capacity based on virgin fiber and other virgin-fiber-based investments.

Other notable trends in the recovered-fiber market, Walker said, include the low level of investment in recycling capacity in North America. Of the 21 million mt a year of planned global investment in new recycling capacity in the 2000 to 2005 period, only a little over 2 million mt a year is in North America. Investments in North America will focus principally on updating existing lines rather than constructing new capacity. "In light of this, it isn't surprising that the surplus of recovered fiber in North America will continue to increase," Walker said.

In contrast, Europe and Asia/Pacific countries continue to invest in additional recycling capacity. China alone has announced new projects that will add 6.7 million mt of recycling capacity in the 2000 to 2005 period. "Clearly the baton of growth is well and truly being passed to Asia and a new world order is emerging in the recycling business," Walker stated.

Offering an overview of the U.S. market, Gerry

West of Severnside Waste Paper Ltd. (Cardiff, Wales) noted that in late May the market was facing some potentially major obstacles, including the dockworkers' conflict on the West Coast (which had yet to be resolved) and China's threats to raise tariffs on imports of U.S. scrap paper by 24 percent in retaliation for U.S. tariffs on imported steel. Such a move "could be devastating to prices in the long term," he stated.

No. 8 overissue news was gaining momentum thanks to lower generation and an active OCC market, with prices for No. 7 reaching \$80 in New York and No. 8 fetching \$95 in Los Angeles, West reported. Strong demand and prices were expected to carry over into June.

The export market for No. 11 OCC continued to make impressive price gains, West said. Buying prices were as high as \$120 a ton in New York and around \$130 a ton on the West Coast. Domestic consumers found themselves scrambling for material to meet their needs over the long Memorial Day weekend. Many, in fact, were offering premiums of \$10 or more a ton over their standard pricing, which was around \$75 a ton in the Northeast, \$65 in the Midwest, and \$115 on the West Coast, according to West.

In Chicago, meanwhile, export activity was stronger thanks to special freight deals, with prices reaching \$100 or more a ton, he said.

The European market, meanwhile, had changed "enormously" from last fall to this May, said Maarten Kleiweg de Zwaan of BPB Recycling Nederland (The Hague). In the previous six months, collections in Europe declined due to fewer published pages and lower overall economic activity.

Far Eastern mills, however—which purchased 3.5 million mt of European scrap paper in 2001—have continued to buy heavily from Europe. This



Gerry West

INDIA—THE NEXT PAPER POWER?

India's paper industry is on "the threshold of a giant leap" and will be "one of the major players in the paper business in the near future" with substantial demand for recovered fiber, asserted Jogarao Bhamidipati of ITC Ltd., Bhadrachalam Paperboards Division (Secunderabad, India).

Buoyed by a population exceeding 1 billion and a rising literacy rate, India's paper consumption is expected to grow rapidly, with per capita usage rising from a "very, very low" 5 kg to 20–25 kg in the next five or six years—still low compared with the world average of 50 kg, Bhamidipati stated.

Currently, India's paper and paperboard production and demand each total about 5.2 million mt. Its production is expected to grow an average of 6.3 percent a year, reaching almost 6 million mt by 2005, Bhamidipati said. In the same period, its demand is forecast to increase faster at 6.5 percent a year to 6.3 million mt.

Several factors have limited the growth of India's paper industry, including high import duties on key raw materials, high operating costs, low availability of wood resources, higher pulp and scrap paper prices, and limited availability of quality raw materials, Bhamidipati said, asserting, "We have a major problem with raw material in India." Wood and bamboo pulp are the main raw materials used by Indian paper mills, but the industry is hampered by the country's acute shortage of wood available for papermaking. Hence, new Indian paper mills have had to rely on alternative raw materials such as bagasse, rice and wheat straw, jute, mesa, and recovered fiber.

"Recycling of paper has been identified as one of the survival tools against dwindling forest resources in India," said Bhamidipati. India is also emphasizing recycling since it saves water and energy compared with virgin wood pulp.

In recent years, India has indeed steadily increased its use of recovered fiber and will rely more heavily on it in the future, Bhamidipati said. In 1995, for instance, recovered fiber accounted for about 24 percent of India's total paper and paperboard production, while in 1999 it accounted for around 42 percent.

When it comes to recovered fiber, India relies heavily on imports. In 2000–2001, it had a shortfall of secondary fiber of 1.7 million mt and could face a shortage of 3.64 million mt by 2010–2011, according to Bhamidipati.



Jogarao Bhamidipati

demand kept European scrap paper supplies at lower-than-normal levels and helped drive up prices, especially for mixed paper and OCC, said Kleiweg de Zwaan. Even higher freight rates and a weaker dollar compared with the euro haven't dampened Far Eastern demand.

Given this strong export demand, European mills found their scrap stocks falling rapidly in April. Though mills increased their buying prices 15 to 20 euros a ton at the beginning of May, the flow of exports continued. Thus, "European mills continue to have very little stock and are forced in some cases to pay premiums of up to 50 percent

above their published prices to obtain supplies," said Kleiweg de Zwaan.

European mills will have to continue raising their prices if U.S. prices continue to rise, China's proposed tariff on U.S. recovered fiber prompts Far East mills to continue buying European fiber, and European mills don't take downtime, he said.



Kent Kiser is editor and associate publisher of Scrap.



Maarten Kleiweg de Zwaan