

The US Scrap Metal Industry: Challenges, Opportunities and Outlook
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Title Page

Thank you. I am honored to be here today at the 11th China International Metal Recycling Conference. And I want to thank the leadership of both the China Iron & Steel Association and the China Association of Metalscrap Utilization for the kind invitation to join you, and to participate in this important conference, along with our colleagues from within China and around the world.

I also would like to quickly recognize Adina Renee Adler, ISRI's Sr Director of International Trade who joins me here today. Both Adina & I look forward to the discussions with everyone throughout the Conference.

Slide 1:

This afternoon, I will start with a brief introduction of ISRI and then provide a snapshot of what the recycling industry in the United States looks like today. I will then spend some time discussing both the challenges and opportunities that ISRI sees for the US recycling industry and conclude with ISRI's outlook for the industry going forward.

Slide 2:

So let me begin with a very brief introduction to ISRI. We are the Washington DC based trade association representing more than 1,300 processors, brokers and consumers of scrap commodities at more than 4000 facilities in North America and around the world. While 80% of our members are located in the US, Canada or Mexico, we are also very proud to have members in 34 countries around the world, including many here in China.

While today our focus is on ferrous and nonferrous metals, ISRI's members are responsible for the recycling of the full range of traditional scrap commodities – including ferrous and nonferrous of course, but also paper, plastics, textiles, rubber and electronics.

Slide 3:

ISRI's mission is to promote safe, economically sustainable & environmentally responsible recycling through networking, advocacy & education.

ISRI's highest priority is advancing workplace safety and environmental compliance within the industry, which we do through outreach provided at member facilities, the development and distribution of resource and compliance guides, education and training programs and through RIOS – or the Recycling Industry Operating Standard - a 3rd party certification program. RIOS is an all inclusive certification standard that integrates the key quality, environmental, and health and safety elements found in other standards such as ISO 9001, ISO 14001 and OSHAS 18001. Here in China, AQSIQ itself has recognized the importance of RIOS, requiring ISO 9001, RIOS or comparable standard for any company seeking a license to export scrap into China.

ISRI is also responsible for the Scrap Specifications Circular, which has been used globally for more than 80 years as a means of promoting consistency & quality in the trade of scrap around the world. The terminology and standards contained within these specs provide a common language for the global recycling community that allows everyone – regardless of their spoken language or geographical distance from their trading partner - to immediately understand the specific material being shipped, including allowable tolerances for contaminants or prohibitives.

ISRI also ..

- Works closely with manufacturers in the automotive, appliance, electronics & other industry sectors to promote Design for Recycling™,
- We provide market trends and intelligence on a regular basis to our members, and

- We work to raise awareness of the environmental and economic benefits of recycling through a variety of efforts, including a youth outreach program designed to educate students from ages 5 through 17 about recycling.

Equally important to all this work, is the work we do – along with BIR – to promote the free and fair trade of scrap globally, ensuring the market based movement of scrap across borders & around the world so that manufacturers have access to the high quality raw materials they need for their production processes. The efforts of all of us at creating understanding that scrap commodities are recognized as just that – commodities – and not as waste are critical to ensuring that scrap remains the 1st link in the global manufacturing supply chain.

Slide 4:

I would like to now share with you a snapshot of the US recycling industry.

Slide 5:

In the US, recycling is a \$117 billion industry, processing more than 130 million tons tons of scrap commodities annually

As you can see from the slide, that tonnage includes

- 67 million tons of iron & steel scrap
- 47.2 million tons of recovered fiber
- 5 million tons of Al scrap
- 1.8 million tons of Copper
- 1.2 million tons of lead

as well as significant quantities of scrap zinc, plastics, electronics and tires

There is significant additional data and analysis on our website at www.isri.org for anyone who would like more detail. I also have with me several copies of our annual yearbook translated

into Chinese that I am happy to share with anyone who would like one. If you are interested, please come and see me during the next break and I am happy to provide you a copy.

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Recycling is a global business, with the movement of scrap driven by the demands and needs of industrial consumers worldwide. Each year more than 800 million metric tons of scrap are consumed by steel mills, foundries, wire and brass mills, and others – into new consumer and industrial products. And of that amount, nearly 200 million metric tons is traded globally, moving across borders to wherever it is needed most.

Within the global scrap marketplace, the US and China are key players. The U.S. is the largest supplier of scrap in the world, and China is the largest consumer of scrap.

Every year, between 30 & 40% of the scrap that is processed within the U.S. into specification grade product is sold into the export market. Last year, the US sold more than 37 million metric tons of high quality scrap – worth \$17.9 billion - to more than 150 countries around the world. During that same period, China imported 43 million metric tons of scrap from recyclers worldwide.

It is therefore natural, that our 2 countries are interconnected. China is the U.S. recycling industry's largest customer, accounting for more than 30% of all U.S. scrap exports. Last year alone, China imported more than \$5.6 billion of scrap commodities from recyclers in the US.

That included

- 890,000 tons of Ferrous scrap, worth \$661 million
- 685,000 metric tons of Cu, worth over \$1.7 billion, and
- 820,000 metric tons of Aluminum, worth \$1.2 billion

Given these numbers, it should be clear why the actions of the Chinese Government over the last year to place restrictions on the import of scrap have sent such large tremors throughout the US recycling industry, and the entire supply chain.

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Despite these large numbers - and has already been acknowledged by many of the speakers this morning - quality must be at the forefront of our discussions. Ensuring the high quality of scrap is critical to the strength and success of recycling and the global scrap trade. And I believe that all of us in this room would agree that it is when we do not pay enough attention to quality that the supply chain breaks down. This is the reason why in the US we have put so much energy and effort into the principles of responsible recycling, which requires a continued focus on both environmental compliance and safety, as well as close adherence to ISRI's scrap specifications.

The ISRI Specifications Circular contains several hundred individual specs ... covering ferrous scrap, nonferrous scrap, scrap plastics, recovered fiber, electronic scrap, tire scrap and glass cullet. They are used by recyclers in the U.S., China and in other countries around the world to facilitate the buying and selling of scrap, as well as by government officials for customs clearance purposes. In fact, the Government of India references the ISRI specifications within their own rules to help govern the import of scrap into the country and differentiate those scrap commodities that are of sufficient quality, and thus acceptable for entry into India and those that don't meet the quality requirements and are thus unacceptable.

We work closely with the recycling community within India, as well as the Government of India, to make sure the ISRI specifications are kept up to date and reflect the needs of all parties. We would welcome a similar relationship here in China with both the recycling community and the Government.

Slide 10:

I would like to turn now to the discussion of some of the challenges and opportunities facing the US Industry, as well as the outlook going forward.

Slide 11:

There are a number of factors that influence the health of the recycling industry in the US.

Those factors include:

- The rate of personal consumption & spending in the US, which affects both scrap generation and consumption
- Industrial production and manufacturing output – within the US but also globally
- Volatility in commodity prices,
- Transportation and energy costs – both which can have a significant affect on operational costs and thus the economics of recycling
- Policy developments, including protectionist trade policies
- And, of course, global economic growth

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So what are the some of the challenges we see in the current market in the US?

- Certainly there has been a rise of trade protectionism in many regions of the world, including in the US which is causing much concern for the US recycling industry
- We have also been experiencing serious transportation bottlenecks in the US due to new regulations governing trucking and a shortage of qualified drivers throughout the country
- And finally, the volatility of commodity prices caused by a combination of heightened trade tensions and China's imposition of several layers of import restrictions - which my colleague David Chiao has done such a good job outlining – have all contributed to market uncertainty within most of the US recycling industry.

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I would like to discuss in some detail the import policies put in place by the Chinese government over the last year and share with you the specific challenges and questions they raise for recycling –

1. First – there is a basic confusion over the commodities covered. Since the terms used by the Chinese Government are not consistent with the terminology used globally by the recycling industry there is much uncertainty as to which commodities are covered. And I want to be very clear on this point – the U.S. recycling industry respects the laws put in place by the Chinese government and desires to comply with them – and ISRI is committed to providing our members the guidance required to help with that compliance, but doing so requires a clear understanding of what the requirements are.
 - For example, last week the Chinese Government announced that “compressed piece of scrap automobile” is to be banned for import as of the end of this year.
 - Is that shredded steel? Or is that flattened cars? Is it Zorba? Or something else? We do not know and the differences between these possibilities are huge. “Metal and electrical appliance scraps” are also on the newly issued list. Does this only apply to whole appliances or does the Chinese Government mean to cover shredded scrap produced from the processing of such appliances? We don’t know.
 - ISRI has identified more than 20 grades of scrap that are nearly a complete match to the items listed for inclusion in the newly released list of materials to be banned by the end of this year. But – we also have a list of approximately 30 scrap grades that could potentially be affected but we simply don’t know because the HS Codes provided do not match ones used by other countries, including the US, and the grades have some – but not complete - similarity to what is named by the Chinese Government.
 - Then there is the question of exactly what is a carried waste? For example, in a shipment of insulated copper wire with some dirt in the base of the container, is

the dirt the carried waste ... or is it the insulation around the wire? Or is it both?

And how does one accurately and consistently measure carried waste?

2. Given that no one seems to know the answers to these questions, how can one be certain that inspectors and customs officials will apply the new standards consistently from port to port.

We have asked for answers to these questions - and many others - from MEP, AQSIQ, MOFCOM and other government officials but have yet to receive official answers that would allow us – with confidence - to advise our members – your suppliers – in the US and around the world. Our members need these answers so they can comply with the new rules and not risk rejection and having to pay the costs of returning a load to its point of origin. Some of our members have already decided to not take the risk and have left the Chinese market, shifting their supplies to customers in other parts of the global market. We seek your assistance and support as we seek clarity from the Chinese Government.

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Despite all these challenges, there are a number of positive signs and new opportunities presenting themselves to the US recycling industry.

As you can see from the chart on this slide, the major developed economies have entered a period of **synchronized economic growth**, which tends to be positive for commodity and scrap demand.

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In recent years, we have seen a much stronger correlation between global economic growth, primary commodity prices and scrap prices. And as the last slide illustrated, it appears that we are entering a period of growth in the global economy, which has the potential to provide growth for the recycling industry as well.

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There have also been a number of policy developments within the United States that will create opportunities for recyclers. First, the Tax Reform package that was passed by the US Congress and signed by the President at the end of 2017 contains many changes to US tax policy that have already begun to help US businesses, including a decrease in corporate tax rates. As a result of ISRI's efforts, the tax reform bill included an increased depreciation allowance for Recycling Equipment, which provides a significant incentive for investments in new equipment and technology. We have already seen evidence of the impact this has had on the industry while at ISRI's annual convention last week, where many of our exhibitors reported record equipment sales.

Finally, there has been a movement within the US over the last year to reform the federal regulatory framework so as to better balance economic and environmental concerns. In addition, we benefit within the U.S. from a growing understanding on both the federal and state levels that scrap is a valuable resource – and not a waste material.

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Focusing on the outlook for the industry going forward, we are seeing the outlook for ferrous and nonferrous metals diverging somewhat.

Looking first at ferrous scrap, the outlook is significantly more upbeat due to a number of factors, including

- improved overseas demand,
- rising domestic steel production within the US,
- improving business sentiment in the country, and
- elevated price levels across the ferrous supply chain.

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According to the World Steel Association, world crude steel production reached 1.7 billion tons last year, an increase of 5.3% from the previous year. Crude steel production increased in most regions around the world, with production in North America up 4.8%, reaching 116.0 million tons.

So, it is fair to say that, atleast in North America, the health of the steel and scrap industries remain closely interconnected.

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U.S. ferrous scrap exports climbed 23% by volume in 2017, reaching 13.8 million metric tons worth more than \$4.1 billion. This is their best annual performance since 2014. These gains were due to improved demand from a number of countries, including Turkey, Vietnam, China, Pakistan, Bangladesh, and Mexico.

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Unfortunately we only have data for the first two months of 2018 to compare year over year growth, but we can already see that shipments to China from the US have increased significantly. We have also seen exports of US ferrous scrap to a number of other countries increase significantly, including to Turkey, India, Kuwait, Malaysia, Indonesia, Egypt and Japan.

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We are seeing a lot more uncertainty in the nonferrous markets, mostly due to the recent changes in Chinese policy regarding imports of scrap. And certainly last week's announcement that electric motors and insulated wires will be prohibited for import by year-end has been a negative force for the nonferrous markets.

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You can see from this slide that in just the first two months of this year – before the carried waste standard even came into effect – we saw a nearly 27% decline in US exports of copper scrap to China. I would expect that decline to increase further as the year progresses.

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Shifting to the export markets for Aluminum scrap, the decline has been less significant – only 6%. However, given China's imposition of a 25% tariff on US Aluminum scrap exports in retaliation for the tariffs imposed by the US on steel and aluminum as part of the US Government's 232 investigation, ISRI expects US exports of aluminum scrap to China to drop significantly. Last year, the US supplied 50% of China's total imports of aluminum scrap. A 25% tariff would mean a nearly \$300 million price burden in a trade relationship that represents nearly 25% of the entire world's trade in aluminum. One can easily see that tariffs have the potential to hurt all of us.

Before I conclude I want to address the outlook for stainless steel scrap. In 2017, the U.S. exported more than \$116 million in stainless steel scrap to China. Last week, the Chinese Government added stainless steel scrap to the list of commodities banned for import by the end of 2019. Not only will this hurt the stainless steel market, it raises questions as to the underlying rationale for the ban as I am unaware of any environmental concerns that have arisen with regard to this material. ISRI respects the goal of a "Beautiful China" and supports efforts by the Chinese government to protect its environment through the crackdown on illegal imports and the prevention of true waste imports, but we are very concerned about any steps taken that restrict free and fair access to the market for reasons other than environmental protection and creation of a "Blue Sky."

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In summary, it is clear that policy concerns have taken center stage for the U.S. scrap industry and its role in the global scrap market. It appears that the same is likely true for the Chinese

scrap industry. Thus, it is more important than ever that we all work together to ensure the continued growth of responsible recycling and attention to environmental protection and quality within our two countries, and elsewhere around the globe. I am personally grateful for the relationships that have developed between our two countries - and our corresponding associations - over the years, and am committed to making them even stronger going forward.

Thank you