

May 31, 2017

Mr. Brad Botwin  
Director, Industrial Studies  
Office of Technology Evaluation  
Bureau of Industry and Security  
U.S. Department of Commerce  
1401 Constitution Avenue, NW  
Washington, DC 20230  
Via Email: [Steel232@bis.doc.gov](mailto:Steel232@bis.doc.gov)

**Re: Response to Section 232 National Security Investigation of Imports of Steel**

Dear Mr. Botwin:

The Institute of Scrap Recycling Industries, Inc. (ISRI)<sup>1</sup> is pleased to submit these comments on behalf of the US-based scrap recycling industry, in response to the Department of Commerce's Notice for Public Comments on Section 232 National Security Investigation of Imports of Steel. Processing more than 130 million tons of scrap materials each year, including 65 million tons of ferrous scrap used in the production of new steel, the recycling industry appreciates the opportunity to provide these comments today in support of efforts to ensure a strong and vibrant domestic steel industry.

**ISRI and the U.S.-Based Scrap Recycling Industry**

As the Voice of the Recycling Industry, ISRI represents more than 1,300 processors, brokers and consumers of scrap materials, including ferrous and non-ferrous metals, paper, plastic, tire and rubber, glass, textiles and electronics. While our membership includes companies from 35 different countries, North America – and especially the United States – makes up the vast majority of our membership. The scrap recycling industry's total economic impact in the United States is nearly \$117 billion, generating \$13.2 billion in federal, state and local tax revenue while supporting more than 530,000 jobs while.

In 2016, the recycling industry processed more than 130 million metric tons of recyclables, including 65 million metric tons of iron and steel scrap (also known as ferrous scrap) valued at more than \$14 billion. As such, the U.S. scrap recycling industry is an environmental steward and an economic driver, and is vital to both the health of domestic and global manufacturing.

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<sup>1</sup> ISRI is the "Voice of the Recycling Industry," promoting safe, economically sustainable and environmentally responsible recycling through networking, advocacy, and education.

In fact, the scrap recycling industry is often referred to as the first link in the global manufacturing supply chain, making the industry dependent upon both a healthy domestic manufacturing base and access to global markets.

### Background on Ferrous Scrap Recycling

Iron and steel scrap, also referred to as ferrous scrap, comes from end of life products (old or obsolete scrap) as well as scrap generated from the manufacturing process (new, prime or prompt scrap). Obsolete ferrous scrap is recovered from automobiles, steel structures, household appliances, railroad tracks, ships, farm equipment and other sources. The largest single source of obsolete ferrous scrap in the United States is used vehicles, and R.L. Polk & Co. estimates that nearly 11.8 million vehicles were scrapped in the U.S. in 2012. Prompt scrap, which is generated from industrial and manufacturing sources, accounts for approximately half of the ferrous scrap supply.

Today, ferrous scrap is the most recycled material in the United States and the world. Iron and steel scrap is a vital, environmentally-friendly raw material for the production of new steel and cast iron products. The U.S. steel industry has been structured to use scrap as its most important raw material input, accounting for more than 60 percent of the steel produced in this country. It is certainly no accident that more than 80 percent of the ferrous scrap processed in the United States is consumed by steel mills in the United States. Therefore, the health of the U.S. ferrous scrap and U.S. steel industries are closely and inextricably interconnected – and have been for over a century.



While a small proportion of unprepared obsolete ferrous scrap can be directly used by consumers, the vast majority of purchased iron and steel scrap is sorted and processed by the scrap recycling industry before it can be consumed by the steel industry. Scrapyards use a variety of processes including sorting, shearing, shredding, torching and baling to sort and prepare ferrous scrap to commodity-grade specifications.

The process of shredding, which was developed in the late 1950s, allows for whole cars, appliances and other end-of-life products to be quickly shredded into fist-size pieces of metal, greatly increasing scrap processors' ability to handle large items and to separate nonferrous material. In 2013, more than 350 shredders were in operation in North America, up from just 120 shredders in the early 1970s.

In addition to shredded, ferrous scrap can be grouped by prime scrap (including busheling, bundles and clips), cut grades such as heavy melting steel, and foundry and miscellaneous grades such as machinery cast. To assist the buying and selling of ferrous materials, ISRI has developed standard specifications for scrap commodities including more than 100 ferrous scrap specifications. ISRI's "specs" are regularly updated and published in the ISRI Scrap Specifications Circular [www.isri.org/specs](http://www.isri.org/specs).

Both obsolete and prompt scrap are processed by the scrap recycling industry into commodity grade material that is used to produce more than 60 percent of total raw steel produced in the United States, predominantly at electric arc furnaces. Domestic and foreign steel mills,<sup>2</sup> foundries, and other industrial consumers rely on ferrous scrap as a vital, environmentally-friendly and cost-efficient raw material for the production of new steel and cast iron products. Depending on the life-cycle of those finished products, the ferrous scrap once again becomes available for recycling.

### **Manufacturing Benefits from Using Scrap Materials**

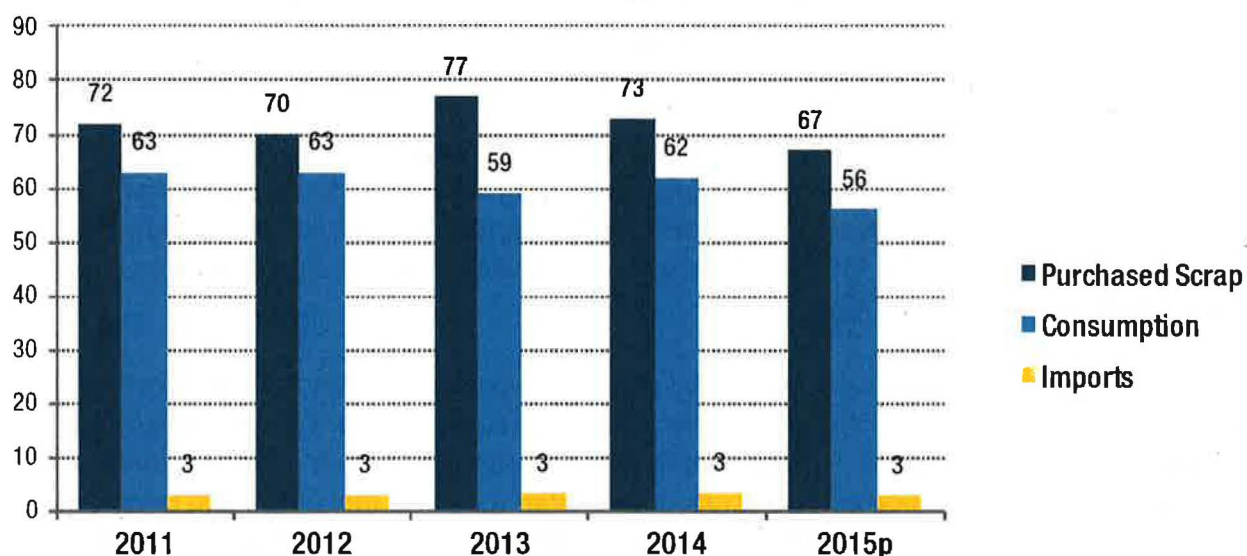
Manufacturers prize scrap as a raw material input due in part to the cost and energy savings associated with using scrap. For example, domestic steelmakers rely on iron and steel scrap to make roughly two out of every three pounds of steel produced in the United States. Metal scrap can practically be melted and re-melted an infinite number of times to make products and parts for everything from cell phones to automobiles, bridges, and buildings. Manufacturers also rely on scrap commodities to produce a wide array of nonmetallic goods including new paper and cardboard products, plastic containers, playground surfaces, and much more.

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<sup>2</sup> Thanks to our large industrial base and existing supply of obsolete scrap, the U.S. is the world's leading ferrous scrap exporting country. The need for market-based movement of scrap commodities across borders is a critical pillar to the recycling industry's success, as well as to the success of the steel and manufacturing economies. The only way to maintain price and supply stability in the global marketplace for scrap commodities is to allow those materials to trade freely.



## U.S. Ferrous Scrap Purchases, Consumption, and Imports\* 2011 - 2015 (million mt)



Analogous to primary commodities, scrap prices are also subject to many of the same market forces and conditions. As a result, scrap materials experience similar price volatility. Akin to other commodities, the market for scrap materials is increasingly global. Scrap has become a key feedstock utilized in manufacturing new products worldwide and supplies a significant amount of global raw material needs. As a globally-traded commodity, scrap becomes less dependent on local supplies and markets every day.

In fact, scrap material moves to where demand directs it regardless of its original location. But there is a critical difference between how primary commodity and scrap commodity prices are determined. Unlike primary commodities that can have large inventory swings, the scrap trade is also a volume business. Scrap recyclers do not buy scrap inherently expecting to hold it until prices increase. They buy scrap to meet their customers' monthly requirements.

Prices are based on a marketplace made up of consumers who use these recycled materials to manufacture steel. Scrap processors purchase scrap from thousands of sources each day to keep up with expected consumer demand. After acquiring and then processing scrap into specification grade material, scrap processors deliver the material based on current market conditions dictated by the customer. Customers have orders to fill and thus buy scrap. Consequently scrap processors are viewed as the price taker, not the price setter, hence the phrase, "Scrap is bought, not sold."

### Environmental Benefits from Using Ferrous Scrap

In addition to generating significant economic benefits, the scrap recycling industry is a pivotal player in environmental protection, resource conservation, and sustainable development. The industry recycled more than 130 million metric tons of materials in 2015, transforming

outdated or obsolete scrap into useful raw materials needed to produce a range of new products. In so doing, scrap recycling:

- Reduces the need to mine for new ore, cut down more trees, and otherwise deplete our natural resources;
- Produces significant energy savings as compared to using virgin materials, thereby reducing greenhouse gas emissions; and
- Reduces the amount of material being sent to landfills saving the land for better uses.

While market forces provide the incentives to recycle and consume scrap material, scrap recycling offers real sustainable solutions for balancing economic growth and environmental stewardship. Not only does recycling conserve our limited natural resources, it also reduces greenhouse gas emissions by significantly saving the amount of energy needed to manufacture the products that we buy, build, and use every day. The energy saved by recycling may then be used for other purposes, such as heating our homes and powering our automobiles.

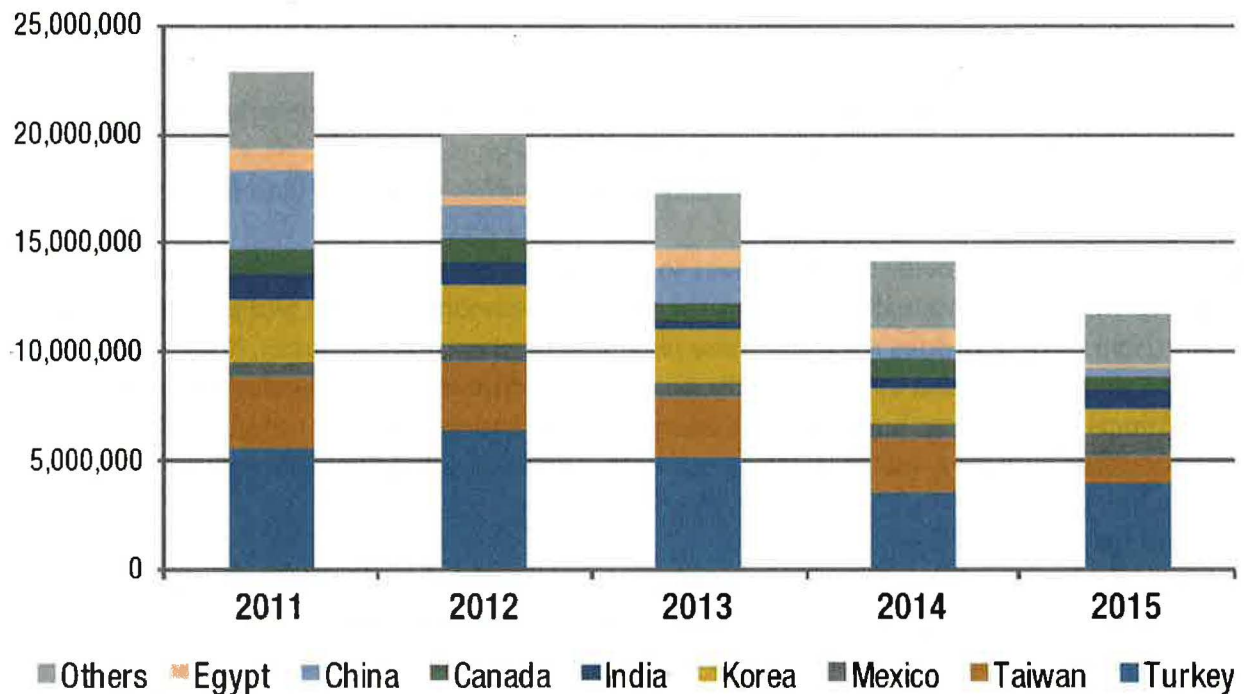
### **Demand for Scrap**

Rising global demand for scrap is not only good for the environment, it also provides a useful outlet for our excess scrap supply. U.S. export sales of scrap helps satisfy a global demand for scrap, thereby stabilizing global markets and prices. Scrap exports also significantly benefit the U.S. trade balance. According to figures from the U.S. Census Bureau and the U.S. International Trade Commission, the United States exported more than 37 million metric tons of scrap commodities valued at \$17.5 billion in 2015. Recovered paper and ferrous scrap exports typically represent the bulk of U.S. scrap exports by volume, accounting for more than 31 million metric tons combined last year, while nonferrous and precious metal scrap have some of the highest per-unit scrap values. Major export destinations for U.S. scrap last year included China (\$6 billion), Canada (\$2 billion), South Korea (\$1 billion), Turkey (\$930 million), Mexico (\$920 million) and India (\$900 million). Since 2000, net exports of U.S. scrap have made a positive contribution to our balance of trade amounting to more than \$210 billion.

As a result of our nation's large industrial base and existing supply of obsolete scrap, the United States is the world's leading ferrous scrap exporting country. Key export markets for ferrous scrap in recent years have included Turkey, Taiwan, Mexico, South Korea, India, China, and Canada. In 2015, the United States exported 11.7 million metric tons of ferrous scrap (excluding stainless and alloy steel scrap) valued at \$3.1 billion to nearly 75 countries worldwide. Slower global economic growth, diminished Chinese demand for ferrous scrap imports and falling commodity prices have all impacted U.S. ferrous scrap export volumes since 2011.

## U.S Ferrous Scrap Exports by Major Destination, 2011 - 2015

metric tons



### Comments on the 232 Investigation

The recycling industry understands the challenges facing the primary steel industry and, as such, supports efforts to strengthen the steel industry and identify through the Section 232 investigation unfair trade practices, including dumping, illegal subsidies, and other practices that threaten national security. As demonstrated above, a healthy steel industry means a healthy circular economy, an unfettered supply chain, job creation, and overall stable economic activity for both the U.S. steel industry and for the U.S. scrap recycling industry. Accordingly, the recycling industry appreciates and supports the Trump Administration's efforts in conducting this important 232 investigation and review process.

The scrap recycling industry is a strong proponent of free and fair trade. The important use of U.S. enforcement law is critical to the sustainability of the U.S. steel industry and we applaud the successful enforcement actions taken by the U.S. government to protect against unfair trading practices. For recyclers, it is critical that the economic viability of the U.S. mills is strong and remains as stable as possible. The U.S. steel industry is not only our largest customer for scrap, but also generates significant volumes of ferrous scrap through their manufacturing process. Stable and highly functioning markets for U.S. steel and ferrous scrap should result in an unbreakable supply chain of specification grade commodities that flow seamlessly back into the steel supply stream, and thus, new American-made steel is readily available.

### **Trade Restrictions on Scrap Commodities Harm Consumers**

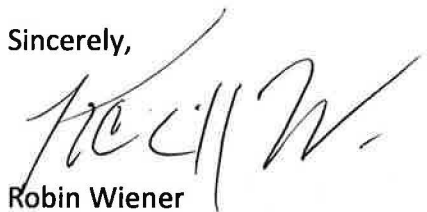
The global ferrous scrap market is one of the purest examples of supply and demand economics. Scrap is a globally-traded commodity that is less dependent on local supplies or local markets every day. The movement of material responds directly to market forces regardless of location. And the long-term cyclical nature of the scrap economy makes it clear that the market is adept at correcting irregularities in price or supply quite naturally. Any attempt to artificially alter that cycle will distort markets leading to shortages and price spikes.

For this reason, ISRI cautions the Administration against looking towards any form of export controls on processed ferrous scrap as part of the solution to the challenges facing the U.S. Steel Industry. While we don't believe that export controls are on the agenda, we raise the issue as an opportunity to highlight the problems that have occurred in the past when ferrous scrap is artificially removed as an important raw material supply source from the global marketplace. Should the scrap supply become constrained, history tells us that the global market price for ferrous scrap would increase significantly. Manufacturers would likely see price increases for finished products as a result. For example, when restrictions were imposed on the amount of ferrous scrap exported from the United States in early 1973 and extended to 1974, prices for ferrous scrap continued to rise at an accelerating rate since customers were agreeing to prices "substantially above the domestic market level" because the rising global demand for steel and the restricted supply of U.S. scrap caused foreign buyers to vigorously compete for the remaining available supply. Consequently, "[d]omestic scrap consumers, on the other hand, were watching the export price level nervously, as it seemed to pull the domestic price inexorably upward."<sup>3</sup>

### **Conclusion**

Once again, we express our appreciation to the Administration for reviewing this very important issue affecting the manufacturing supply chain, and we hope ISRI's input provides a clear picture of what is at stake for downstream industries and will be given careful consideration as you decide the next course of action in support of the U.S. primary steel sector. If there is any additional information or clarification to this information we can provide, please feel free to reach out to me directly at [rw Wiener@isri.org](mailto:rw Wiener@isri.org).

Sincerely,



Robin Wiener  
President

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<sup>3</sup> R. Shriner, Control Reversal in Economics: U.S. Scrap Export Restrictions, The Business Economist, Id. at p.15 (1977).

