



Institute of  
Scrap Recycling  
Industries, Inc.

[www.isri.org](http://www.isri.org)

**Statement of**

**JOSEPH C. PICKARD**  
**Chief Economist/Director of Commodities**  
**Institute of Scrap Recycling Industries, Inc.**  
**Washington, D.C.**

**Before the**

**United States International Trade Commission**  
**Investigation No. TA-131-039**

The Institute of Scrap Recycling Industries (ISRI) is pleased to be able to submit comments to the U.S. International Trade Commission (ITC) in support of its investigation into the economic effects of providing duty-free treatment for the trade in environmental goods. As the “Voice of the Recycling Industry,” ISRI promotes public awareness of the vital role recycling plays in the U.S. economy, the environment, and global trade. ISRI members are actively involved in the global marketplace for environmental goods including recycled commodities and recycling equipment. As such, ISRI applauds the ITC’s examination of the economic impacts of barriers to the free trade of environmental goods and is committed to assisting the Commission in its timely and much-needed investigation.

**I. ISRI Introduction**

The Institute of Scrap Recycling Industries (ISRI) is the world’s largest trade association of for-profit recyclers, with well over 1,600 member companies operating at over 3,000 locations in the United States and globally who process, broker and consume scrap commodities, including metals, paper, plastics, glass, rubber, textiles and electronics. ISRI also represents a wide range of companies that provide equipment and services to the global recycling industry. The U.S.-based scrap recycling industry is a sophisticated, capital-intensive industry that in recent years has annually transformed approximately 135 million metric tons of prime and obsolete scrap from consumers, businesses, and manufacturers into useful raw materials, conserving significant amounts of energy and natural resources and minimizing environmental emissions associated with the production of the world’s goods and services. Significantly, the scrap recycling industry is a pivotal player in environmental protection, resource conservation and sustainability.

Recycling also reduces energy consumption and the emission of greenhouse gases that contribute to global climate change. For example, recycling one car saves the energy equivalent of more than 500 gallons of gasoline and reduces greenhouse gas emissions by over 8,800 pounds of carbon dioxide (CO<sub>2</sub> equivalent).<sup>1</sup> The use of recycled commodities can provide enormous benefits over the use of their virgin counterparts and some commodities such as ferrous and nonferrous metals can practically be recycled an infinite number of times. As society becomes increasingly aware of the economic, environmental and energy savings associated with using recycling materials, the critical role of the reservoir of raw materials in use becomes increasingly apparent.<sup>2</sup> As a result, recycled commodities and the equipment used to process recyclables are key environmental goods and should be recognized as such.

## II. Economic Impacts of Scrap Recycling

Scrap recycling companies range in size from small family-run operations that in many cases have been doing business for generations to very large multinational corporations. In the United States, a large proportion of scrap recycling companies are small and medium enterprises and scrap recycling facilities located in every state of the nation.

**Figure 1. Map of Domestic Scrap Recycling Facilities**



Source: John Dunham and Associates, 2013.

<sup>1</sup> See Attachment A, The Scrap Recycling Industry, Environmental Stewards, ISRI (April 2013).

<sup>2</sup> Publications from governmental bodies, including the EPA, lauding the benefits of recycling include: the U.S. Geological Survey, Metal Stocks in Use in the United States, (July 2005), available at <http://pubs.usgs.gov/fs/2005/3090/2005-3090.pdf>; U.S. EPA, Recycling is Working in the United States, (January 2002), available at [http://www.epa.gov/osw/conserve/rrr/pubs/rei-fs/pdf/factsheet\\_net.pdf](http://www.epa.gov/osw/conserve/rrr/pubs/rei-fs/pdf/factsheet_net.pdf); U.S. EPA, Communicating the Benefits of Recycling, available at <http://www.epa.gov/osw/conserve/tools/localgov/benefits/>; and Executive Order 12873 - Federal Acquisition, Recycling, and Waste Prevention (Oct. 20, 1993) (requiring federal agencies to establish recycling programs and to buy recycled products whenever possible) available at <http://www.epa.gov/epp/pubs/eo12873.pdf>.

Like other manufacturers, scrap recyclers create jobs, contribute to the tax base, and improve the balance of trade. However, unlike most manufacturers, the work of scrap recyclers also inherently benefits the environment and helps prevent what would otherwise become solid waste problems. A 2013 study conducted by John Dunham & Associates puts the economic activities of the scrap recycling industry at \$87.4 billion, or 0.55 percent of the nation’s total economic activity.<sup>3</sup> The Dunham study found that nearly 138,000 “green jobs” are directly supported by the operations of the scrap recycling industry in the United States and an additional 325,000 jobs are indirectly supported by the scrap recycling industry through suppliers – such as the producers of recycling equipment, and the induced impact of the industry’s expenditures.

**Table 1. Economic Benefits and Jobs Supported by Scrap Recycling**

(\$ Million)	Direct	Supplier	Induced	Total
Jobs	137,970	131,917	193,053	462,940
Wages	\$9,586.20	\$7,948.42	\$9,265.54	\$26,800.16
Economic Impact	\$34,691.38	\$24,366.92	\$28,337.88	\$87,396.19

Source: John Dunham and Associates, 2013.

The economic benefits generated by the scrap recycling industry are widespread. Not only are scrap facilities located in every state throughout the country and in both urban and rural communities, but the firms that supply materials, goods and services to processors and brokers are also located in every part of the country. This means that the U.S. scrap recycling industry provides good paying jobs in every state of the Union.

### III. The U.S. Recycling Industry and Global Trade

The demand for scrap as feedstock by industrial consumers/manufacturers is global in nature. The scrap industry is the first link in the global supply chain for the growing demand of all manner of commodities ranging from iron and steel to paper; nonferrous metals such as aluminum, copper, and zinc; plastics; electronics; rubber; and more. The result is economic and environmental sustainability for our nation and our world through the supply of high quality, environmentally friendly and energy saving raw materials to the global marketplace. America’s recycled materials help reduce worldwide energy demand and greenhouse gases as well as the need to mine and harvest virgin materials.

Figures from the U.S. Census Bureau and the U.S. International Trade Commission show that in 2013, the United States exported 42.8 million metric tons of commodity grade scrap to 160 destinations worldwide for the manufacture of new products.<sup>4</sup> These activities generated \$24 billion in export sales and significantly helped the U.S. trade balance. In fact, in terms of volume, scrap materials are among the nation’s largest commodity exports, in line with other important commodity export products like grain and corn, cotton, timber and petroleum. The table below provides additional details on the volume and value of U.S. scrap exports by major commodity and destination last year, including 19 million tons of recovered paper and fiber exports:

<sup>3</sup> See Attachment B, Economic Impact Study, U.S.-Based Scrap Recycling Industry (2013), Executive Summary, John Dunham and Associates, Inc., 2013.

<sup>4</sup> ITC Trade DataWeb: <http://dataweb.usitc.gov>.

**Table 2. U.S. Scrap Exports by Commodity and Major Destination in 2013**

	<b>2013</b>
<b>Value of Scrap Commodities Exported:</b>	\$23.7 billion
<b>Metric Tons of Scrap Exported Including:</b>	42.8 million
Iron and Steel (ex-Stainless and Alloys)	17.3 million
Paper	19.0 million
Aluminum	1.9 million
Plastic	1.9 million
Nickel, Stainless and Alloy	1.2 million
Copper	1.2 million
Lead	35,000
Zinc	88,000
Rubber	83,000
<b>Number of Destinations Scrap was Exported To:</b>	160
China	\$8.8 billion
Canada	\$2.0 billion
Turkey	\$1.9 billion
Korea	\$1.6 billion
Taiwan	\$1.4 billion
Germany	\$1.2 billion
Mexico	\$840 million
United Kingdom	\$840 million
India	\$772 million

Sources: U.S. Census Bureau/U.S. International Trade Commission.

By volume, recovered paper and fiber exports are typically the largest or second largest category of U.S. scrap exports each year and ISRI fully supports the inclusion of recovered paper in the list of environmental goods attached to the U.S. Trade Representative's original request to the ITC dated April 2, 2014.<sup>5</sup> In addition, ISRI invites the USTR and ITC to consider adding approximately 80 additional trade codes pertaining to scrap commodities (including ferrous and nonferrous metals, plastic, glass, rubber, textiles and other scrap commodities) to the list of covered environmental goods that are attached to this submission.<sup>6</sup>

In addition to recycled commodities, the equipment used to transport, sort and process recyclables including but not limited to shredders, balers, shears, cranes, material handlers, conveyors, magnetic separators and spectro analyzers are highly prized environmental goods that the U.S. exports around the world. According to a study conducted by SAI Industrial LLC in 2012, U.S. exports of recycling equipment totaled \$435 million in 2011 as export sales accounted for 15 percent of total scrap equipment revenues.<sup>7</sup> By major destination, the SAI study found that Canada and Mexico combined accounted for nearly 47 percent of all U.S. export sales of scrap equipment, followed by Brazil (9 percent), Europe, China, Japan and Chile (all at 6 percent), Australia (4 percent) and South Korea (3 percent):

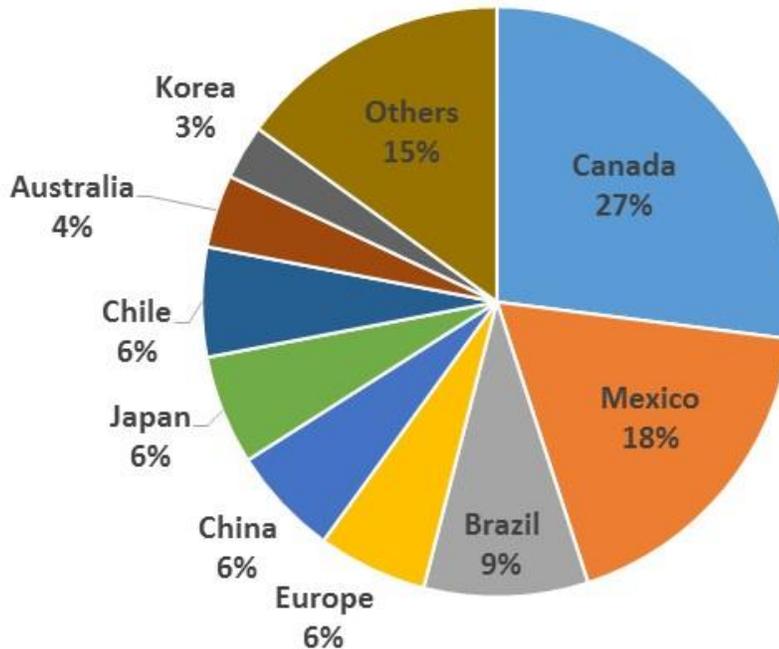
<sup>5</sup> In particular, HS6 codes 4707.10, 4707.20, 4707.30 and 4707.90.

<sup>6</sup> See Attachment C, Scrap Trade Codes.

<sup>7</sup> See Attachment D, Study of Equipment in the U.S. Scrap Recycling Industry, SAI Industrial LLC (2012).

**Figure 2: U.S. Scrap Equipment Export Sales by Country, 2011 (%)**

Source: SAI Industrial LLC



As with the inclusion of scrap commodities, ISRI fully supports the inclusion of product codes that cover scrap recycling equipment on the list of environmental goods attached to the USTR's original request to the ITC and would welcome the opportunity to provide additional input on the inclusion of trade codes covering the full range of recycling equipment.<sup>8</sup>

#### **IV. Barriers to the Trade in Recycled Commodities and Recycling Equipment**

Despite the scope of economic and environmental benefits associated with the use of recycled goods and the significant positive contributions made to our balance of trade through the export sales of scrap commodities and scrap recycling equipment, significant barriers to the free trade of those environmental goods continue to exist, including but not limited to tariff barriers. A preliminary examination of import duties applied by our trading partners on recovered paper and fiber shipments found that ad valorem duties faced by U.S. exporters in nine countries ranged from 1 to 15 percent, while the value of the U.S. recovered paper export sales to those countries exceeded \$300 million in 2013<sup>9</sup>:

<sup>8</sup> See Attachment E, Recycling Equipment Trade Codes.

<sup>9</sup> WTO Tariff Download Facility: <http://tariffanalysis.wto.org>

**Table 3. Selected Import Tariffs Faced By U.S. Exporters of Recovered Paper and Fiber**

Importer	Heading	No. of lines	Ad Val. Duties Simple Average	
			MFN	Best
<b>India</b>	4707 - Recovered (waste and scrap) paper or paperboard	3	10.00	10.00
<b>Colombia</b>	4707 - Recovered (waste and scrap) paper or paperboard	4	5.00	5.00
<b>Chile</b>	4707 - Recovered (waste and scrap) paper or paperboard	5	6.00	6.00
<b>Philippines</b>	4707 - Recovered (waste and scrap) paper or paperboard	4	1.00	1.00
<b>Brazil</b>	4707 - Recovered (waste and scrap) paper or paperboard	2	2.00	2.00
<b>Uruguay</b>	4707 - Recovered (waste and scrap) paper or paperboard	1	2.00	2.00
<b>Morocco</b>	4707 - Recovered (waste and scrap) paper or paperboard	1	2.50	2.50
<b>Madagascar</b>	4707 - Recovered (waste and scrap) paper or paperboard	1	5.00	5.00
<b>Tonga</b>	4707 - Recovered (waste and scrap) paper or paperboard	1	15.00	15.00

Source: World Trade Organization.

Tariff and trade data provided by the World Trade Organization also show that tariff duties were applied to nearly \$700 million worth of U.S. ferrous scrap exports (HS 7404) annually with ad valorem rates ranging from 0.78 to 6 percent, while U.S. exporters also face a range of import tariffs on the trade of nonferrous metal scrap, including copper and aluminum scrap, and plastic scrap exports as well. In contrast, harmonized tariff data provided by the ITC show that there are no (zero) general duties imposed by the United States on the import of recovered paper and fiber, ferrous and nonferrous scrap, or plastic scrap.<sup>10</sup>

**Table 4. Selected Import Tariffs Faced By U.S. Exporters of Ferrous Scrap**

Importer	Heading	No. of lines	Ad Val. Duties Simple Average	
			MFN	Best
<b>India</b>	7204 – Ferrous waste and scrap	7	5.00	5.00
<b>Japan</b>	7204 – Ferrous waste and scrap	6	0.78	0.78
<b>Philippines</b>	7204 – Ferrous waste and scrap	3	3.00	3.00
<b>Chile</b>	7204 – Ferrous waste and scrap	3	6.00	6.00
<b>Belize</b>	7204 – Ferrous waste and scrap	2	5.00	5.00
<b>Mozambique</b>	7204 – Ferrous waste and scrap	1	2.50	2.50
<b>Jamaica</b>	7204 – Ferrous waste and scrap	1	5.00	5.00

<sup>10</sup> Harmonized Tariff Schedule of the United States (2014).

Similarly, there is a significant discrepancy between the tariff barriers faced by U.S. exporters of recycling equipment and the treatment of equipment imports into the United States. As one example, tariff data provided by the WTO show that for HS code 8479.89, which is used by U.S. companies to report exports of shredders, shredder equipment and other machinery and is included on the USTR's list of environmental goods, U.S. exporters faced ad valorem duties ranging from 1 to 15 percent in more than 25 countries, including:

**Table 5. Selected Import Tariffs Faced By U.S. Exporters of Machinery Including Shredders and Shredder Equipment**

Importer	Heading	No. of lines (ad val.)	Ad Val. Duties Simple Average	
			MFN	Best
<b>Korea</b>	847989 – Other machines and mechanical appliances, not specified	10	8.00	8.00
<b>Brazil</b>	847989 – Other machines and mechanical appliances, not specified	7	15.14	15.14
<b>India</b>	847989 – Other machines and mechanical appliances, not specified	8	7.50	7.50
<b>Colombia</b>	847989 – Other machines and mechanical appliances, not specified	7	5.00	5.00
<b>Israel</b>	847989 – Other machines and mechanical appliances, not specified	17	5.79	5.79
<b>South Africa</b>	847989 – Other machines and mechanical appliances, not specified	2	5.00	5.00
<b>Chile</b>	847989 – Other machines and mechanical appliances, not specified	3	6.00	6.00
<b>Taiwan</b>	847989 – Other machines and mechanical appliances, not specified	2	2.64	2.64
<b>New Zealand</b>	847989 – Other machines and mechanical appliances, not specified	1	5.00	5.00
<b>Indonesia</b>	847989 – Other machines and mechanical appliances, not specified	1	6.67	6.67
<b>Uruguay</b>	847989 – Other machines and mechanical appliances, not specified	8	4.50	4.50
<b>Philippines</b>	847989 – Other machines and mechanical appliances, not specified	1	1.00	1.00

Source: World Trade Organization.

As is the case regarding the import of scrap commodities, the harmonized tariff data provided by the ITC show that the United States does not apply tariff duties on the importation of most types of recycling equipment. The net effect is that U.S. producers of recycling equipment are incentivized to produce a greater share of their equipment overseas in order to avoid the tariff barriers faced when selling their equipment into protected overseas markets. The costs include not only the loss of export sales for the United States, but also the loss of domestic jobs, income and tax revenue. While U.S. scrap recyclers and producers of recycling equipment are as innovative, productive and competitive as anywhere in the world, the uneven playing field currently faced by the industry generates a wide range of economic costs which should be taken into consideration as

part of the trade negotiation framework. Eliminating tariffs overseas would clearly provide a significant boost to U.S. exporters of recycled goods and recycling equipment but would also have broad-based positive implications for the U.S. economy, tax base and balance of trade.

## **V. Conclusions**

The scrap recycling industry boosts economic growth, creates jobs and sustains the earth's natural resources, conserves impressive amounts of energy in the manufacturing process and reduces greenhouse gas emissions from those facilities. The export of environmental goods such as scrap commodities and recycling equipment are not only good for the health of the planet, but also have positive impacts on our balance of trade. The United States has already leveled the playing field for the importation of recycled commodities including recovered paper and fiber, metals and plastic scrap, as well recycling equipment such as shredders, balers, shears, cranes, material handlers, conveyors, magnetic separators and spectro analyzers. At the same time, U.S. exporters face significant trade barriers including import tariffs that restrict the free flow of these goods.

ISRI fully supports the ITC's inquiry into the economic benefits of eliminating tariffs on environmental goods and would welcome the inclusion of the full range of scrap and recycling equipment in this and future examinations. ISRI looks forward to future opportunities to work with the Commission to provide additional information and supplemental material as needed in order to continue advancing these and other solutions on issues important to recycling and free trade. Thank you very much for the opportunity to address the Commission during this investigation.

\*\*\*\*\*

### **Joe Pickard, Chief Economist-Director of Commodities, ISRI**

Mr. Pickard conducts research and analysis on commodity and scrap market developments and the key economic role that recycling plays both in the U.S. and abroad. Mr. Pickard provides information and insights on the primary and recycled iron and steel, nonferrous metal, paper and plastics markets. Mr. Pickard previously served as the economist for The International Copper Study Group in Lisbon, Portugal and as a research analyst at Slayton & Associates, a consulting firm in Alexandria, Virginia. He holds a Masters degree in Economics from Virginia Tech and a Bachelors degree in Political Science from Loyola University Maryland.