The Scrap Metal Recycling Industry in the United States

Joseph Pickard
Chief Economist and Director of Commodities
Institute of Scrap Recycling Industries

Virginia Recycling Association
2011 Annual Conference
Virginia Beach, Virginia – May 11, 2011
The Institute of Scrap Recycling Industries, Inc. (ISRI) is the “Voice of the Recycling Industry.” ISRI represents nearly 1,600 companies in 21 chapters nationwide that process, broker, and consume scrap commodities, including metals, paper, plastics, glass, rubber, electronics, and textiles. With headquarters in Washington, D.C., the Institute provides education, advocacy, and compliance training, and promotes public awareness of the vital role recycling plays in the U.S. economy, global trade, the environment and sustainable development.

- In 2010 alone, more than **130 million metric tons** of scrap materials, valued at more than **$77 billion**, were manufactured into specification grade commodities by the scrap recycling industry in the United States.

- The industry helps strengthen the US economy, creates **thousands of new jobs**, **protects the environment** and **saves energy**, and contributed nearly **$30 billion in export sales** last year.

- The scrap recycling industry is the first link in the manufacturing supply and is a sophisticated, capital-intensive industry that employs approximately **110,000 workers** in the U.S.
Scrap Metal Market Dynamics: More Than Ample Supply

Obsolete Ferrous Scrap Supply

A recent study commissioned by ISRI reports that the U.S. obsolete scrap inventory as of December 31, 2009 stood at 1.18 billion tons.

Estimated Regional Distribution of Inventory of U.S. Obsolete Ferrous Scrap, 2009

- North Central, 31.4%
- South Central, 18.2%
- Pacific, 10.3%
- Mountain, 6.5%
- New England, 8.6%
- Middle Atlantic, 8.7%
- Southeast, 16.3%

ENIRONMENTAL STEWARDS,
JOB CREATORS, ECONOMIC LEADERS
www.isri.org
Scrap Market Dynamics: Scrap Prices & Mfg. Closely Related

The ISRI Scrap Index and The U.S. IP Manufacturing Index 2007 - 2011

ISRI Scrap Index

U.S. IP Manufacturing

ISRI Scrap Index

U.S. IP Manufacturing Index
Scrap Metal Market Dynamics: Prices Provide the Incentive

United States: Purchased Ferrous Scrap* and Avg. No. 1 HMS Prices, 2006-2010
(Source: US Geological Survey)

*Consumer shipments + exports - imports
Recent Non-Ferrous Price Performance

Percentage Change in Average Monthly LME 3-Mo. Aluminum, Copper and Nickel Prices (%)
May 2010-Apr 2011
**Scrap Market Trends: Scrap Goes Where It's Needed**

<table>
<thead>
<tr>
<th>Scrap Metal</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron &amp; Steel</td>
<td>70 million (30%)</td>
<td>74 million (26%)</td>
</tr>
<tr>
<td>Aluminum</td>
<td>4.7 million (36%)</td>
<td>4.6 million (41%)</td>
</tr>
<tr>
<td>Copper</td>
<td>1.7 million (50%)</td>
<td>1.9 million (53%)</td>
</tr>
<tr>
<td>Lead</td>
<td>1.3 million (11%)</td>
<td>1.2 million (4%)</td>
</tr>
<tr>
<td>Zinc</td>
<td>150,000 (31%)</td>
<td>160,000 (49%)</td>
</tr>
</tbody>
</table>
Recent Scrap Metal Trends: Exports by Metal and Port

The scrap recycling industry in the U.S. exported nearly $30 billion worth of scrap commodities to over 150 countries in 2010, including nonferrous and ferrous scrap valued at over $16 billion.

Top 10 U.S. Scrap Metal Export Districts in 2010 (by value)

<table>
<thead>
<tr>
<th>Export District</th>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles, CA</td>
<td>4,730</td>
</tr>
<tr>
<td>New York, NY</td>
<td>2,300</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>1,240</td>
</tr>
<tr>
<td>Seattle, WA</td>
<td>807</td>
</tr>
<tr>
<td>Savannah, GA</td>
<td>636</td>
</tr>
<tr>
<td>Columbia-Snake, OR</td>
<td>555</td>
</tr>
<tr>
<td>New Orleans, LA</td>
<td>549</td>
</tr>
<tr>
<td>Norfolk, VA</td>
<td>525</td>
</tr>
<tr>
<td>Laredo, TX</td>
<td>473</td>
</tr>
<tr>
<td>Houston-Galveston, TX</td>
<td>471</td>
</tr>
</tbody>
</table>
Key Drivers and Outlook

Key Drivers:

- Manufacturing in the United States
- Recovery of the Construction Industry
- Transportation and Energy Costs
- Pricing
- Demand from China and developing economies
- Global Economic Growth

Recent and Forecast Real GDP Growth: China, the US and the World, 2008-2015
(Source: International Monetary Fund)
Thank you!

For more information please visit: www.isri.org

E-mail: josephpickard@isri.org