



# WORLD STEEL RECYCLING IN FIGURES 2007 – 2011

*Steel Scrap – a Raw Material for Steelmaking*



Bureau of  
International Recycling  
Ferrous Division



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# FOREWORD

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**The third edition of our BIR Ferrous Report “World Steel Recycling in Figures” shows that the steel recycling industry was positively affected in 2011 by the new record in annual world crude steel production.**

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It is a great pleasure for me to announce the publication of the third edition of our report “World Steel Recycling in Figures”.

This important compilation of statistics on the global ferrous scrap markets has enjoyed a very positive reception since it appeared for the first time in 2010.

Covering the five-year period between 2007 and 2011, the third edition contains a total of 31 graphs and tables - five more than its predecessor.

In addition to the main scrap usage information for the EU, China, the USA, Japan, Russia and Turkey, we have updated our calculation models for the entire use of steel scrap as a raw material for steelmaking and for global scrap use in iron and steel foundries.

According to our calculations, global scrap use in steelmaking has been between 440 and 570m tonnes per annum in recent years, while its annual use in iron and steel foundries has amounted to between 56 and 76m tonnes. Global steel scrap consumption achieved a new record of 570m tonnes in 2011.





We have also provided more information about world trade in steel scrap and have completed our third edition with an overview of 2011 export prices for the USA and the EU. The huge world trade in steel scrap underlines the need for a free raw materials market; our industry lives from worldwide free trade, enabling us to correct the global imbalance between net scrap exporters and net scrap importers.

For an ever more accurate appraisal of the market, we want to continue to improve the steel scrap statistics at our disposal, including our quarterly update of the world statistics.

I would like to extend special thanks to Rolf Willeke, the BIR Ferrous Division's Statistics Advisor, who compiled, prepared and evaluated all the figures in our report.

We hope that our report "World Steel Recycling in Figures 2007-2011" will be useful to you in your daily business operations.

Brussels, May 2012

***Christian Rubach***

President of the BIR Ferrous Division

# EXECUTIVE SUMMARY

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**Final figures for 2011 show a new record in world crude steel output and also in global steel scrap use as a raw material for steelmaking.**

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World crude steel production reached 1.513bn tonnes in 2011; this represented an increase of 6.9% over 2010 and a new annual output record. All the major steel-producing countries apart from Japan and Spain showed production growth in 2011. This was particularly robust in Turkey, the Republic of Korea and Italy, according to worldsteel.

Looking at the main scrap-using countries, statistics from worldsteel confirm that China's crude steel production reached 683.9m tonnes in 2011 for an increase of 9.1% over 2010; the country's share of world crude steel production increased to 45.2% in 2011. Japan produced 107.6m tonnes of crude steel in 2011, a decrease of 1.8% from 2010; meanwhile, the EU recorded an increase of 2.7% in producing 177.2m tonnes, and the USA produced 86.4m tonnes of crude steel, or 7.3% more than in 2010. Also in 2011, crude steel production reached 68.9m tonnes in Russia and 34.1m tonnes in Turkey for year-on-year increases of, respectively, 2.9% and 17.8%.

## **570m tonnes - a new record in global steel scrap use as a raw material for steelmaking**

The 2011 update of our ferrous statistics shows increased steel scrap consumption for crude steel production in China, the EU-27 and Turkey. But it is worthy of note that the increases in steel scrap usage in the EU-27 (+4.5% to 100.8m tonnes) and in Turkey (+21.9% to 30.8m tonnes) were greater than their respective upturns in crude steel production of 2.7% and 17.8%. The biggest steel scrap user in the EU-27 was Italy on 20.519m tonnes (+10.5% over 2010). It is also worth noting that scrap contributed 90.3% of the material used in Turkish steel production in 2011 compared to a world average for 2011 of 37.7%.

As the world's biggest steel producer, China is attracting particular attention regarding its scrap usage. China's steel industry as a whole should be attempting to increase scrap consumption per tonne of steel produced during the country's Five-Year Plan running from 2011 to 2015. In 2011, China's scrap consumption climbed around 3.3% to 91m tonnes whereas the country's crude steel production grew at an even faster rate of 9.1%.

It is interesting to note that the USA recorded a crude steel production increase of 7.3% to 86.4m tonnes in 2011 whereas steel scrap usage declined by 6.7% to 56m tonnes, indicating strong steel production based

on a resurgence in automotive demand as well as for OCTG. Electric arc furnaces (EAFs) producing these products operated at higher rates than those producing rebar. From the US market, it is understood that the commitment made to iron alternatives by EAFs producing sheet products is irreversible.

Furthermore, our figures reveal that steel scrap usage in Russia last year (-2.2% to 21.0m tonnes) failed to keep pace with the country's growth in crude steel production (+2.9% to 68.9m tonnes). For Japan, the small decline in steel scrap usage (-3% to 37.2m tonnes) was slightly more pronounced than the drop in its crude steel production (-1.8% to 107.6m tonnes).

We are still dependent on estimates for many areas of the world. So we have calculated - in collaboration with experts from the German Steel Federation (WV Stahl) - a steel scrap usage in world steel production of around 570m tonnes for 2011. This represents an increase of 7.6% over 2010 and a new annual consumption record, supported by the larger growth in global EAF steel production of around 7.5% to 442m tonnes.

### **The important role of scrap purchases to the raw materials supply of steelworks and foundries**

According to our calculations, the gain in steelworks' own arisings, or circulating scrap, was smaller than that in production last year, rising 5.3% to 200m tonnes as a result of mills' efforts to improve yields through the wider use of continuous casting and of near-net-shape casting. At the same time, global pig iron production increased around 6.3% to 1.099bn tonnes - slightly smaller than the 6.9% jump in crude steel production. Our calculations reveal that scrap purchases by steelworks worldwide increased by 8.8% to a new record of 370m tonnes in 2011, of which 32.4% was attributable to the supply of new steel scrap (process scrap) and 67.6% to old steel scrap (capital scrap).

For the second time, we are able to present a calculation model for global scrap use in iron and steel foundries. We have produced this in collaboration with experts from the German Foundry Association (BDG), which is also responsible for the Secretariat General of the European Foundry Association (CAEF). Our calculations cover the period from 2007 to 2010; it was not possible to incorporate 2011 figures because world casting production is determined only by US magazine "Modern Casting" with a time lag of one year. It should also be pointed out that our calculation model takes into account the high pig iron usage for casting production in the iron and steel foundries of China and India. For 2010, we have calculated global scrap usage of 64.4m tonnes for a world iron, steel and malleable casting production of 76.9m tonnes. In the same year, foundries' annual scrap purchases amounted to 39.8m tonnes.



Our calculations show that, in 2011, scrap purchases by steelworks accounted for 64.9% of their total steel scrap usage. For iron and steel foundries, scrap purchases claimed a 61.8% share of their total scrap use. These figures highlight the important role of high-quality recycled scrap to the supply needs of the iron and steel industry worldwide.

### **The huge world trade in steel scrap underlines the need for a free raw materials market**

In 2011, global trade in steel scrap was particularly influenced by the USA as the world's leading exporter and by Turkey as its top importer.

The 11.8% increase in Turkey's overseas purchases to 21.460m tonnes enabled the country to reinforce its position as the world's leading importer. At the same time, it is worth noting the 6.6% increase in the Republic of Korea's outside purchases to 8.628m tonnes, the 15.7% upturn in Chinese scrap imports to 6.767m tonnes and the 0.7% decline in Taiwan's overseas orders to 5.328m tonnes.

Meanwhile, data obtained from Malaysia reveal that the country's scrap imports declined by 10.6% to 2.050m tonnes last year, while the totals for Thailand and Indonesia climbed 46.4% to 1.877m tonnes and 31.4% to 2.157m tonnes, respectively. For India, official scrap import figures cover only the first seven months of 2011, during which period the country bought 2.929m tonnes of steel scrap (+10.7%).

As for the main steel scrap exporters, there were increases in US and Russian overseas deliveries but a decline in shipments from the EU-27, Japan and Canada.

After recording a drop in 2010, America's exports jumped 18.6% to 24.373m tonnes in 2011: the biggest buyers were Turkey (+29.2% to 5.624m tonnes), China (+31.5% to 4.226m tonnes), Taiwan (+25.6% to 3.540m tonnes) and the Republic of Korea (+4.8% to 2.964m tonnes). The USA maintained its position as the world's leading exporter of steel scrap, with support from exchange rate movements in 2011.

Turkey was also the biggest buyer of EU steel scrap, but these deliveries recorded a decline of 7.1% last year to 9.936m tonnes. The EU's total exports to third countries - which have grown significantly in the last five years -





fell 1.4% to 18.770m tonnes in 2011, possibly because Euro/US dollar exchange rate movements did not favour the Euro-zone's export position. Over the January-December 2011 period, there was a drop in EU steel scrap shipments to Egypt (-18.4% to 1.374m tonnes), but an upturn in shipments to India (+5.1% to 2.237m tonnes) and to China (+39.8% to 832,000 tonnes). Last but not least, it is interesting to note an increase in the EU-27's internal steel scrap exports last year of around 2% to 30.914m tonnes.

Japan's scrap export volumes declined by 15.9% to 5.442m tonnes in 2011 - probably as a result of the earthquake and tsunami in March, and also the fact that the Yen/US dollar exchange rate did not help Japanese exporters. Shipments from Japan to the Republic of Korea fell 15.7% to 2.864m tonnes and those to China slid 9.9% to 2.445m tonnes.

In contrast, steel scrap exports from Russia soared 69.1% to 4.042m tonnes in 2011; Turkey was the most significant outlet in taking 1.874m tonnes - equivalent to an increase of 75.1%. There were also increases in overseas shipments from Australia (+6.7% to 1.745m tonnes) and from South Africa (+17.3% to 1.436m tonnes).

It is interesting to note that all the world's leading steel scrap exporters are major net steel scrap exporters: in 2011, the export surplus was 20.4m tonnes for the USA and 15.1m tonnes for the EU-27.

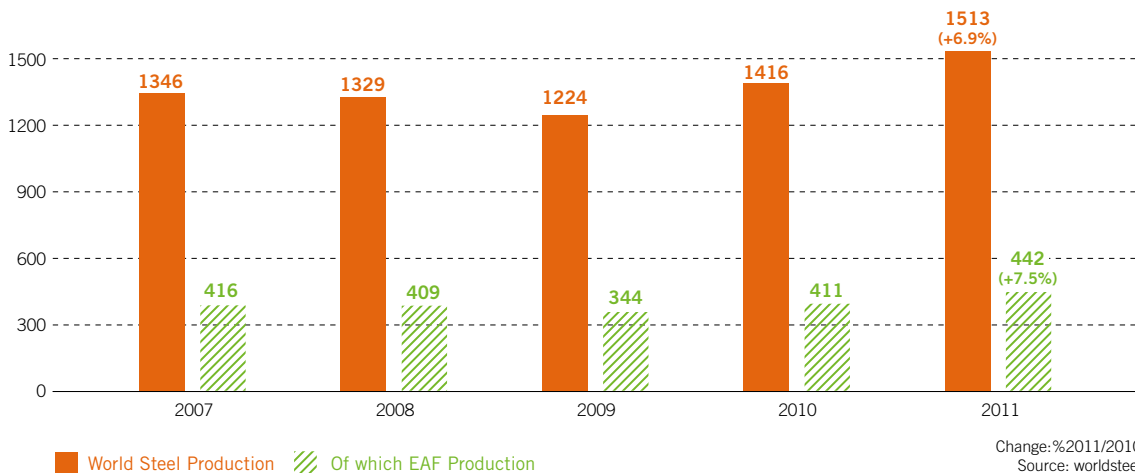
Meanwhile, figures for 2011 show that steel scrap prices (as illustrated in the export prices of the USA and the EU) remained volatile, thus emphasising that steel scrap as a raw material is an international commodity subject to world market prices.

Finally, market developments in 2011 highlighted not only the importance of scrap as a global raw material for steelworks and foundries, but also the ecological benefits of steel and iron casting recycling.

### ***Rolf Willeke***

Statistics Advisor of the BIR Ferrous Division

## WORLD CRUDE STEEL PRODUCTION (MILLION TONNES)



## THE LARGEST 12 STEEL PRODUCING COUNTRIES (MILLION TONNES)

	2007	2008	2009	2010	2011	% 2011/ 2010
China	489.3	500.3	573.6	626.7	683.9	+9.1
Japan	120.2	118.7	87.5	109.6	107.6	-1.8
United States	98.1	91.4	58.2	80.5	86.4	+7.3
India	53.5	57.8	63.5	68.3	71.3	+4.3
Russia	72.4	68.5	60.0	66.9	68.9	+2.9
Korea Rep.	51.5	53.6	48.6	58.9	68.5	+16.2
Germany	48.6	45.8	32.7	43.8	44.3	+1.0
Ukraine	42.8	37.3	29.9	33.5	35.3	+5.6
Brazil	33.8	33.7	26.5	32.9	35.2	+6.8
Turkey	25.8	26.8	25.3	29.1	34.1	+17.8
Italy	31.6	30.6	19.8	25.8	28.7	+11.3
Taiwan	20.9	19.9	15.9	19.8	22.7	+14.7

Source: worldsteel

## TOTAL METALLICS FOR STEELMAKING IN THE WORLD (MILLION TONNES)

	2007	2008	2009	2010	2011	% 2011/ 2010
Crude Steel Production	1346	1329	1224	1416	1513	+6.9
of which Oxygen (BOF)	901	890	863	987	1052	+6.6
Electric (EAF)	416	409	344	411	442	+7.5
<b>(Share EAF of Crude Steel) in %</b>	<b>30.9</b>	<b>30.8</b>	<b>28.1</b>	<b>29.0</b>	<b>29.2</b>	
Pig Iron	961	949	933	1034	1099	+6.3
<b>(Ratio Pig Iron / Crude Steel) in %</b>	<b>71.4</b>	<b>71.4</b>	<b>76.2</b>	<b>73.0</b>	<b>72.6</b>	
Steel Scrap	540	530	440	530	570	+7.6
<b>(Ratio Steel Scrap / Crude Steel) in %</b>	<b>40.1</b>	<b>39.9</b>	<b>36.0</b>	<b>37.4</b>	<b>37.7</b>	
DRI	67	68	64	70	72	+2.7
<b>(Ratio DRI / Crude Steel) in %</b>	<b>5.0</b>	<b>5.1</b>	<b>5.2</b>	<b>4.9</b>	<b>4.8</b>	
Total Metallics	1568	1547	1437	1634	1741	+6.6
<b>(Ratio Total Metallics / Crude Steel) in %</b>	<b>116.5</b>	<b>116.4</b>	<b>117.4</b>	<b>115.4</b>	<b>115.1</b>	

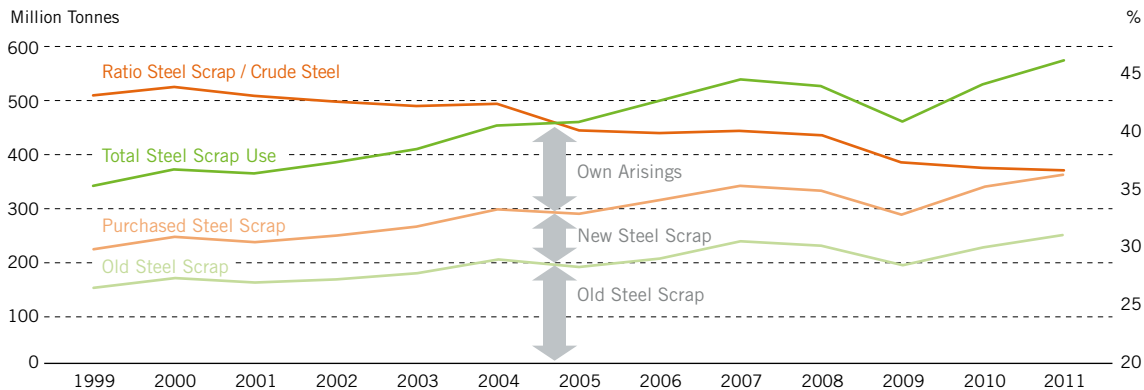
Source: worldsteel, Midrex and own calculations by WV Stahl/BIR

## STEEL SCRAP FOR STEELMAKING IN THE WORLD (MILLION TONNES)

	2007	2008	2009	2010	2011	% 2011/ 2010
Crude Steel Production	1346	1329	1224	1416	1513	+6.9
Total Steel Scrap Use	540	530	440	530	570	+7.6
<b>(Ratio Steel Scrap / Crude Steel) in %</b>	<b>40.1</b>	<b>39.9</b>	<b>36.0</b>	<b>37.4</b>	<b>37.7</b>	
of which:						
Own Arisings (Circulating Scrap)	197	195	175	190	200	+5.3
<b>(Share Own Arisings of Scrap Use) in %</b>	<b>36.5</b>	<b>36.8</b>	<b>39.8</b>	<b>35.9</b>	<b>35.1</b>	
Purchases by Steelworks	343	335	265	340	370	+8.8
<b>(Share Purchases of Scrap Use) in %</b>	<b>63.5</b>	<b>63.2</b>	<b>60.2</b>	<b>64.2</b>	<b>64.9</b>	
of which:						
New Steel Scrap (Process Scrap)	107	105	90	110	120	+9.1
<b>(Share New Steel Scrap of Total Purchases) in %</b>	<b>31.2</b>	<b>31.3</b>	<b>34.0</b>	<b>32.4</b>	<b>32.4</b>	
Old Steel Scrap (Capital Scrap)	236	230	175	230	250	+8.7
<b>(Share Old Steel Scrap of Total Purchases) in %</b>	<b>68.8</b>	<b>68.7</b>	<b>66.0</b>	<b>67.8</b>	<b>67.6</b>	

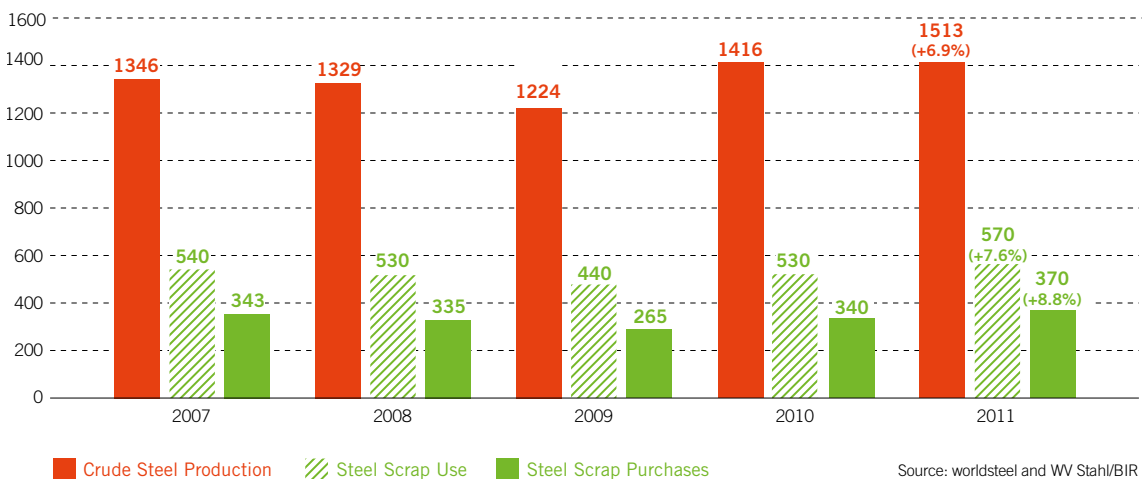
Source: worldsteel and own calculations by WV Stahl/BIR

## STEEL SCRAP FOR STEELMAKING WORLDWIDE



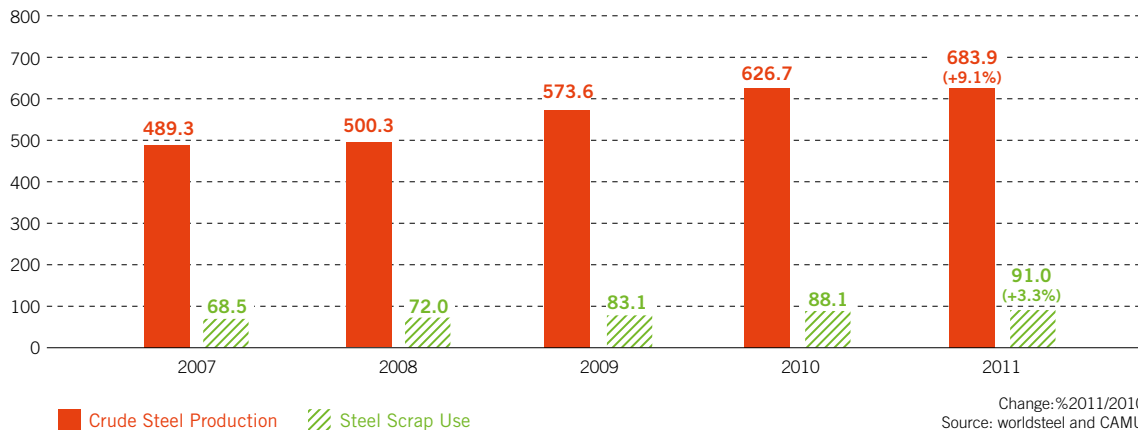
Source: WV Stahl/BIR

## STEEL SCRAP USE AND PURCHASES FOR STEELMAKING IN THE WORLD (MILLION TONNES)

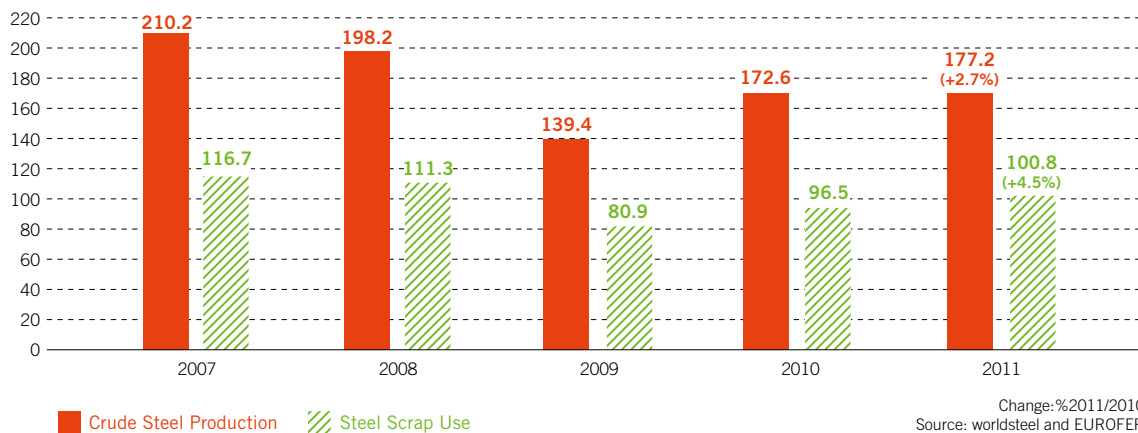


Source: worldsteel and WV Stahl/BIR

## STEEL SCRAP FOR STEELMAKING IN CHINA (MILLION TONNES)



## STEEL SCRAP FOR STEELMAKING IN THE EU-27 (MILLION TONNES)

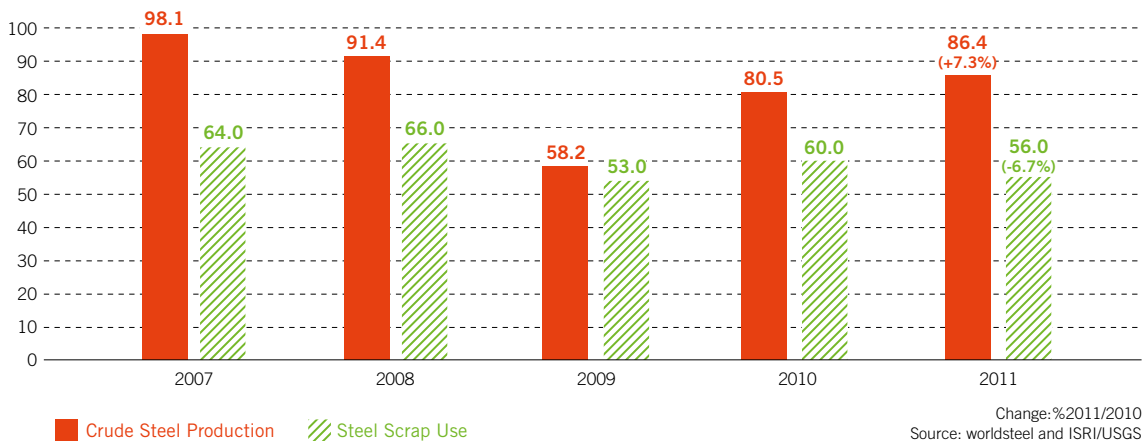


## STEEL SCRAP FOR STEELMAKING IN EU-27 COUNTRIES (MILLION TONNES)

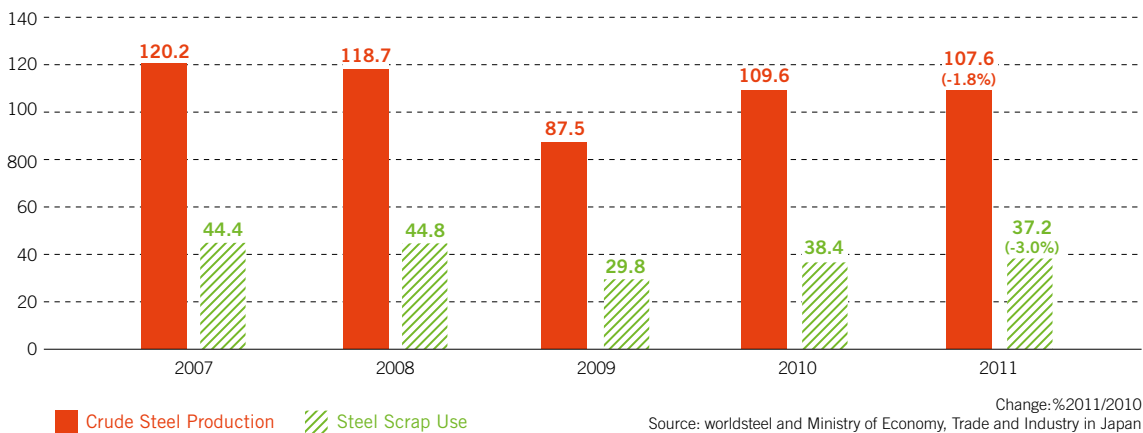
	Crude Steel Production			Steel Scrap Consumption		
	2010	2011	%Change	2010	2011	%Change
Austria	7.206	7.474	+ 3.7	2.386	2.351	+6.1
Belgium	7.973	8.026	+ 0.7	3.560	3.182	-2.4
Bulgaria	0.747	0.835	+11.8	0.832	0.910	+9.3
Czech Republic	5.180	5.583	+ 7.8	2.130	2.288	+7.4
Finland	4.029	3.989	- 1.0	1.668	1.668	+/-0,0
France	15.414	15.781	+ 2.4	8.111	8.768	+8.1
Germany	43.830	44.284	+ 1.0	18.811	19.794	+5.2
Greece	1.821	1.946	+ 6.9	2.131	2.263	+6.2
Hungary	1.678	1.746	+ 4.1	0.450	0.526	+11.7
Italy	25.750	28.715	+11.5	20.362	22.519	+10.5
Latvia	0.655	0.870	+32.9	0.471	0.399	-15.3
Luxembourg	2.548	2.521	-1.1	2.854	2.824	-1.1
Netherlands	6.651	6.937	+ 4.3	1.769	1.765	-0.2
Poland	7.993	8.779	+ 9.8	5.440	5.972	+9.8
Portugal	1.351	1.170	-13.4	1.520	1.520	+/-0,0
Romania	3.721	3.830	+2.9	2.179	2.330	+7.0
Slovakia	4.583	4.235	-7.4	1.470	1.423	-3.2
Slovenia	0.606	0.648	+6.8	0.668	0.734	+9.6
Spain	16.343	15.504	- 5.1	14.036	13.119	-6.5
Sweden	4.844	4.867	+0.5	2.207	2.349	+6.4
United Kingdom	9.717	9.478	-2.5	3.714	3.890	+4.7
<b>EU-27</b>	<b>172.640</b>	<b>177.218</b>	<b>+2.7</b>	<b>96.469</b>	<b>100.770</b>	<b>+4.5</b>

Source: Steel Production: worldsteel; Scrap Consumption: EUROFER

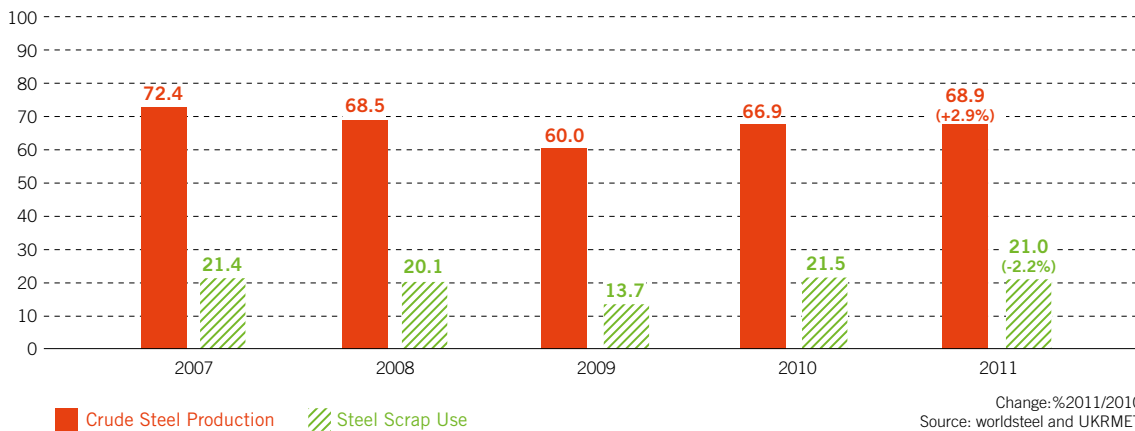
## STEEL SCRAP FOR STEELMAKING IN THE USA (MILLION TONNES)



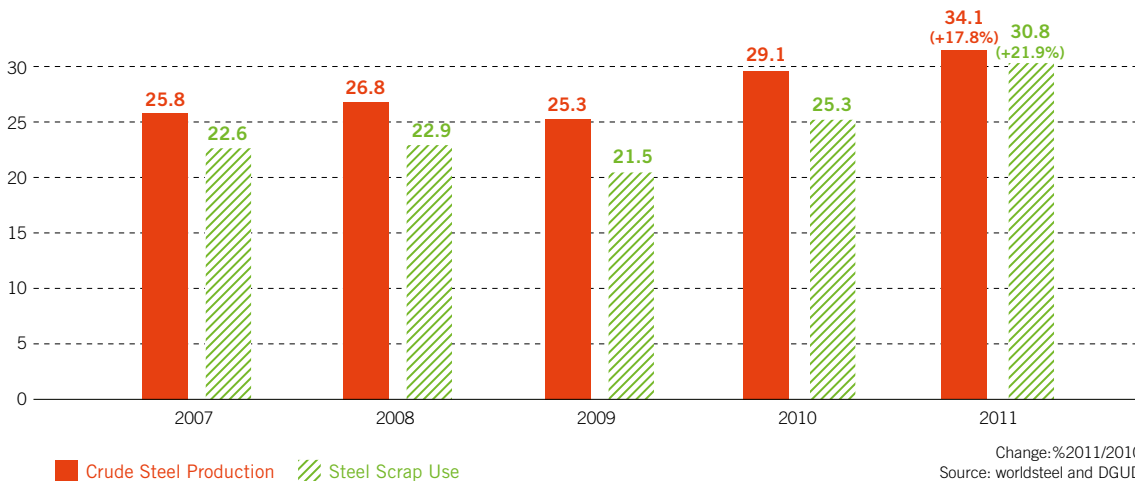
## STEEL SCRAP FOR STEELMAKING IN JAPAN (MILLION TONNES)



## STEEL SCRAP FOR STEELMAKING IN RUSSIA (MILLION TONNES)



## STEEL SCRAP FOR STEELMAKING IN TURKEY (MILLION TONNES)





## SCRAP USE IN IRON AND STEEL FOUNDRIES IN THE WORLD (MILLION TONNES)

	2007	2008	2009	2010	% 2010/ 2009
Iron Steel and Malleable Casting Production	79.1	78.8	67.6	76.9	+13.8
Total Scrap Use	75.8	73.6	56.9	64.4	+7.5
<b>(Ratio Scrap Use / Casting Production) in %</b>	<b>95.8</b>	<b>93.4</b>	<b>84.2</b>	<b>83.8</b>	
of which:					
Own Arisings (Circulating Scrap)*	28.9	28.1	21.7	24.6	+13.4
<b>(Share Own Arisings of Scrap Use) in %</b>	<b>38.1</b>	<b>38.1</b>	<b>38.1</b>	<b>38.2</b>	
Scrap Purchases	46.8	45.5	35.2	39.8	+13.1
<b>(Share Purchases of Scrap Use) in %</b>	<b>61.8</b>	<b>61.8</b>	<b>61.8</b>	<b>61.8</b>	

Source: Modern Casting and own calculations by BDG/BIR

\* Own Arisings (Circulating Scrap) is the term for lumpy metal remains evolving during the casting process. Elements belonging to this process such as sprues, runners, ingates and feeders are essential to produce a raw casting, but they do not belong to the actual casting and are therefore eliminated during the finishing process of it. Rejects and scrap developing in the foundry are added to the Circulating Scrap as well.

## MAIN STEEL SCRAP IMPORTERS (MILLION TONNES)

	2007	2008	2009	2010	2011	% 2011/ 2010
Turkey	17.141	17.415	15.665	19.192	21.460	+11.8
Korea Rep.	6.887	7.319	7.800	8.091	8.628	+6.6
China	3.395	3.590	13.692	5.848	6.767	+15.7
India	3.014	4.579	5.336	4.643	2.929*	+10.7
Taiwan	5.418	5.539	3.912	5.364	5.328	-0.7
USA	3.692	3.571	2.986	3.775	4.003	+6.0
EU-27	5.142	4.809	3.270	3.646	3.676	+0.8
Malaysia	3.688	2.293	1.683	2.292	2.050	-10.6
Indonesia	1.260	1.899	1.484	1.642	2.157	+31.4
Canada	1.435	1.674	1.408	2.226	1.911	-14.2
Thailand	1.805	3.142	1.323	1.282	1.877	+46.4

Source: Official Trade Statistics/WV Stahl, DCUD

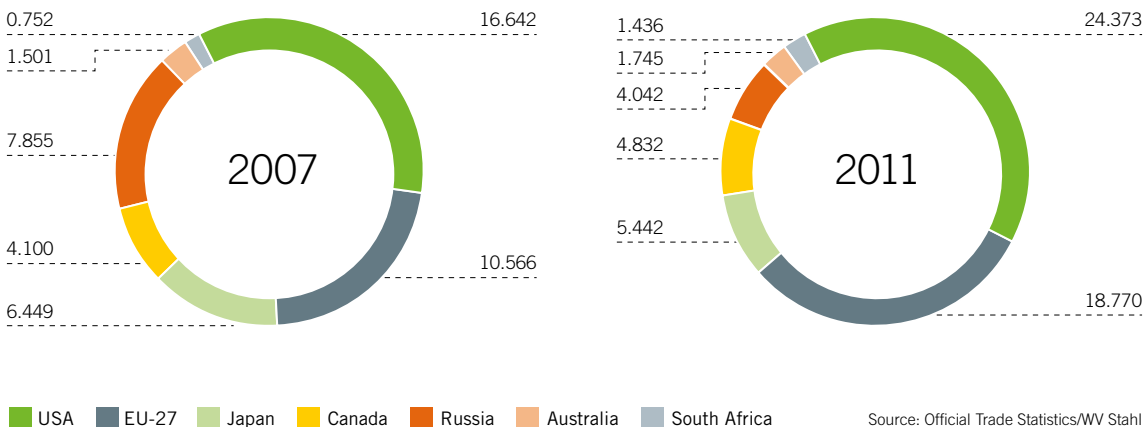
\* Period Jan-July 2011

## MAIN STEEL SCRAP EXPORTERS (MILLION TONNES)

	2007	2008	2009	2010	2011	% 2010/ 2009
USA	16.642	21.712	22.439	20.556	24.373	+18.6
EU-27	10.566	12.799	15.779	19.033	18.770	-1.4
Japan	6.449	5.344	9.398	6.472	5.442	-15.9
Canada	4.100	4.084	4.792	5.154	4.832	-6.2
Russia	7.855	5.128	1.202	2.390	4.042	+69.1
Australia	1.501	1.708	1.925	1.636	1.745	+6.7
South Africa	0.752	1.271	1.144	1.224	1.436	+17.3

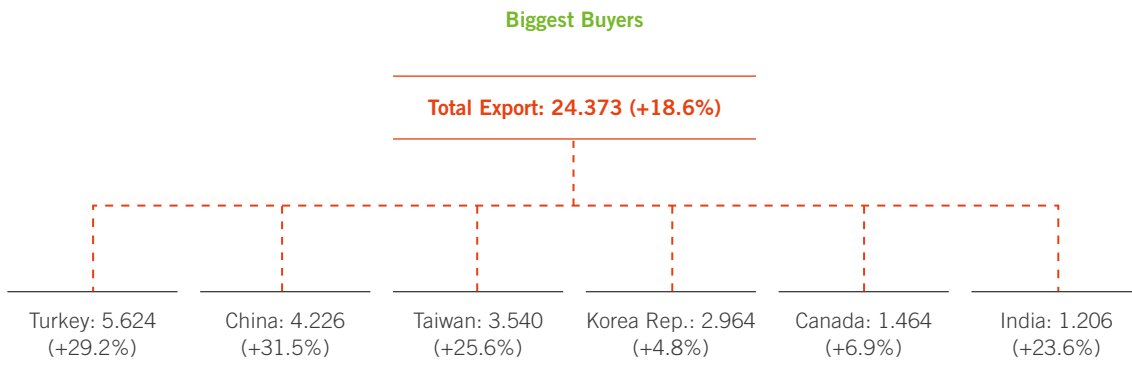
Source: Official Trade Statistics/WV Stahl

## MAIN STEEL SCRAP EXPORTERS – DEVELOPMENT 2007 VS. 2011 (MILLION TONNES)



Source: Official Trade Statistics/WV Stahl

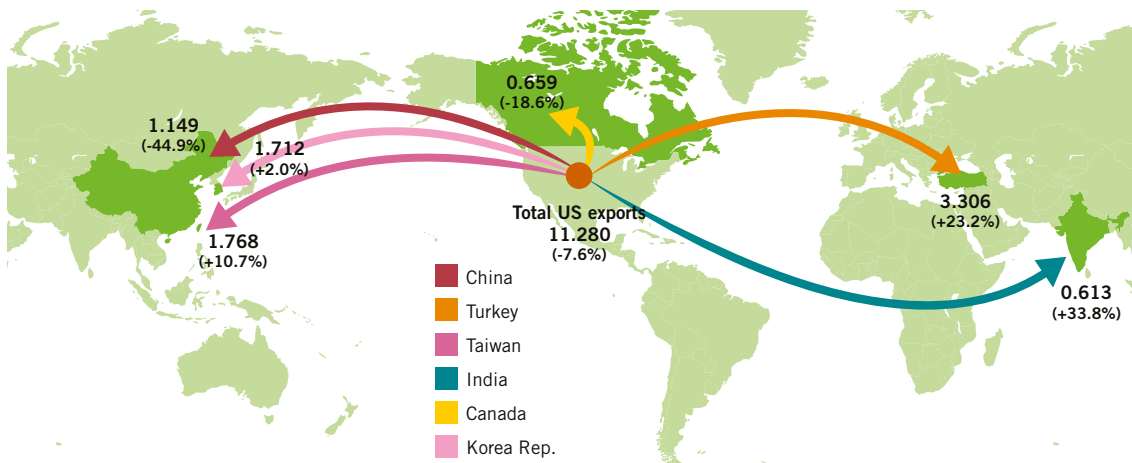
## US STEEL SCRAP EXPORT 2011 (MILLION TONNES)



Change:% 2011/2010

Source: Official Trade Statistics/WV Stahl

## MAIN FLOWS OF US STEEL SCRAP EXPORT JANUARY-JUNE 2012 (MILLION TONNES)



Change:% 2011/2010

Source: Official Trade Statistics/WV Stahl

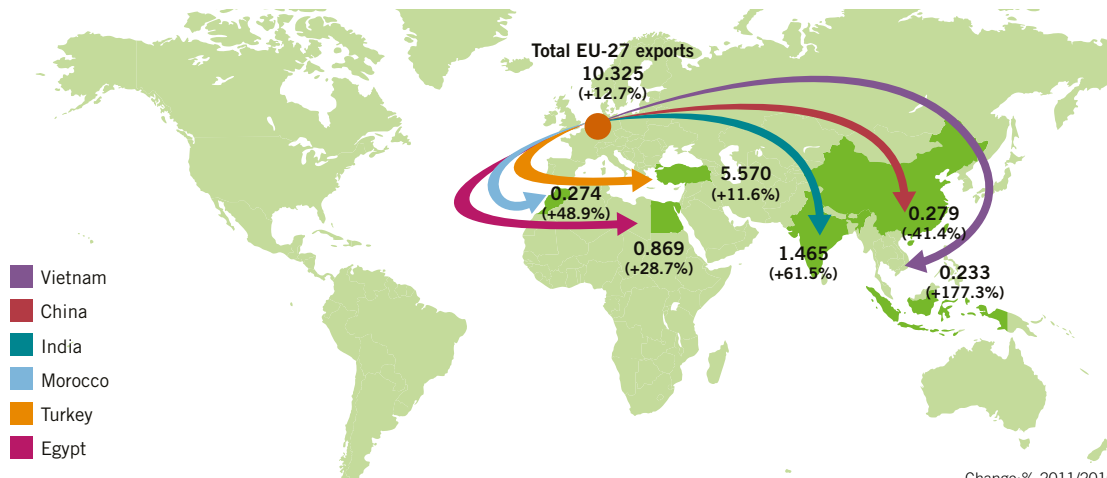
## EU-27 STEEL SCRAP EXPORT 2011 (MILLION TONNES)



Change:% 2011/2010

Source: Official Trade Statistics/WV Stahl

## MAIN FLOWS OF EU-27 STEEL SCRAP EXPORT JANUARY-JUNE 2012 (MILLION TONNES)



Change:% 2011/2010

Source: Official Trade Statistics/WV Stahl

## EU-27 EXTERNAL STEEL SCRAP EXPORTS BY COUNTRY (MILLION TONNES)

### Steel Scrap Exports by Main EU-27 Exporters to Third Countries

Exporters	2010	2011	%Change	Biggest Buyers	2010	2011	%Change
United Kingdom	5.208	5.376	+3.2	Turkey	1.609	2.087	+29.7
				India	1.287	1.090	-15.3
				Indonesia	0.082	0.315	+284.1
				Egypt	0.761	0.281	-63.1
				China	0.125	0.276	+120.8
Netherlands	3.040	2.543	-16.3	Turkey	1.824	1.281	-29.8
				Egypt	0.409	0.359	-12.2
				India	0.194	0.226	+16.5
				China	0.159	0.180	+13.2
				Korea Rep.	0.099	0.161	+62.6
Belgium	2.355	2.250	-4.5	Turkey	1.667	1.240	-25.6
				Egypt	0.463	0.680	+46.9
Romania	2.243	2.055	-8.4	Turkey	2.204	2.046	-7.2
Germany	1.741	1.651	-5.2	Turkey	0.793	0.692	-12.7
				Switzerland	0.327	0.321	-1.8
				India	0.181	0.251	+38.7
				Malaysia	0.037	0.061	+64.9
France	0.692	0.765	+10.5	Turkey	0.328	0.321	-2.1
				Morocco	0.086	0.167	+94.2
				Switzerland	0.094	0.100	+6.4
Sweden	0.674	0.758	+12.5	Turkey	0.251	0.293	+16.7
				India	0.095	0.141	+48.4
Bulgaria	0.755	0.709	-6.0	Turkey	0.565	0.495	-12.3
				Macedonia	0.166	0.200	+20.5
<b>EU-27 Extra Trade</b>	<b>19.033</b>	<b>18.770</b>	<b>-1.4</b>				

Source: Official Trade Statistics/WV Stahl

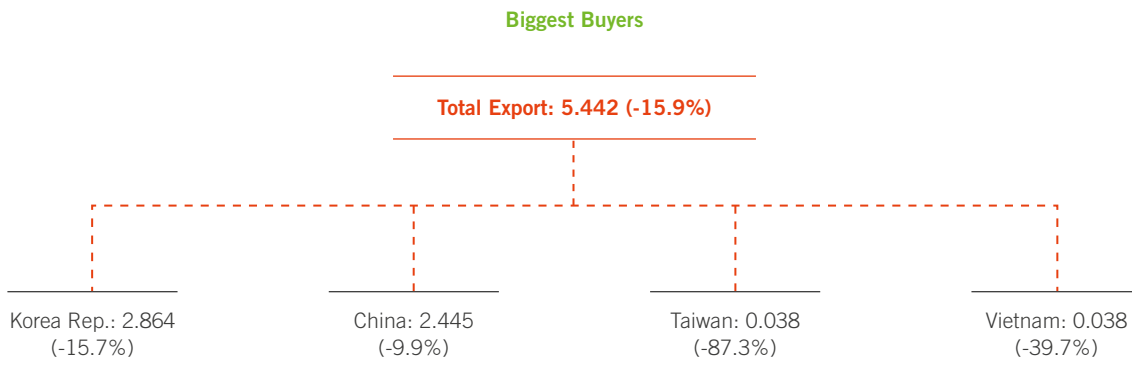
## EU-27 INTERNAL STEEL SCRAP EXPORTS BY COUNTRY (MILLION TONNES)

### Main Steel Scrap Exports between EU-27 Countries

Exporters	2010	2011	%Change	Biggest Buyers	2010	2011	%Change
Germany	7.917	8.064	+1.9	Netherlands	2.025	2.054	+1.4
				Italy	1.105	1.530	+38.5
				Luxembourg	1.364	1.457	+6.8
				France	1.190	1.217	+2.3
				Belgium	1.184	0.933	-21.2
France	5.974	5.469	-8.5	Spain	1.767	1.655	-6.3
				Belgium	1.700	1.610	-5.3
				Italy	0.758	0.763	+0.7
				Luxembourg	0.816	0.684	-16.2
United Kingdom	2.311	2.411	+4.3	Spain	1.226	1.144	-6.7
				Portugal	0.317	0.427	+34.7
				France	0.353	0.360	+2.0
Netherlands	2.555	2.396	-6.2	Belgium	0.849	0.809	-4.7
				Germany	0.709	0.792	+11.7
Czech Republic	1.821	1.946	+6.9	Germany	0.895	0.974	+8.8
				Italy	0.265	0.366	+38.1
Poland	1.270	1.608	+26.6	Germany	0.833	1.131	+35.8
				Czech Republic	0.248	0.283	+14.1
Belgium	1,372	1.287	-6.2	France	0.490	0.520	+6.1
				Netherlands	0.326	0.290	-11.0
				Czech Republic	0.248	0.283	+14.1
				Luxembourg	0.338	0.262	-22.5
				Germany	0.106	0.122	+15.1
Austria	0.916	0.892	-2.6	Italy	0.410	0.451	+10.0
				Germany	0.380	0.337	-11.3
<b>EU-27 Intra Trade</b>	<b>30.313</b>	<b>30.914</b>	<b>+2.0</b>				

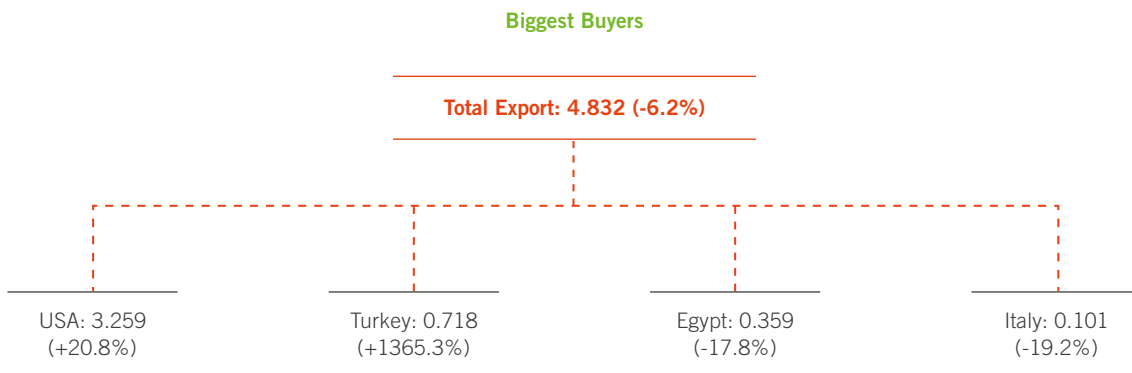
Source: Official Trade Statistics/WV Stahl

## JAPAN STEEL SCRAP EXPORT 2011 (MILLION TONNES)



Change:% 2011/2010  
Source: Official Trade Statistics/WV Stahl

## CANADA STEEL SCRAP EXPORT 2011 (MILLION TONNES)

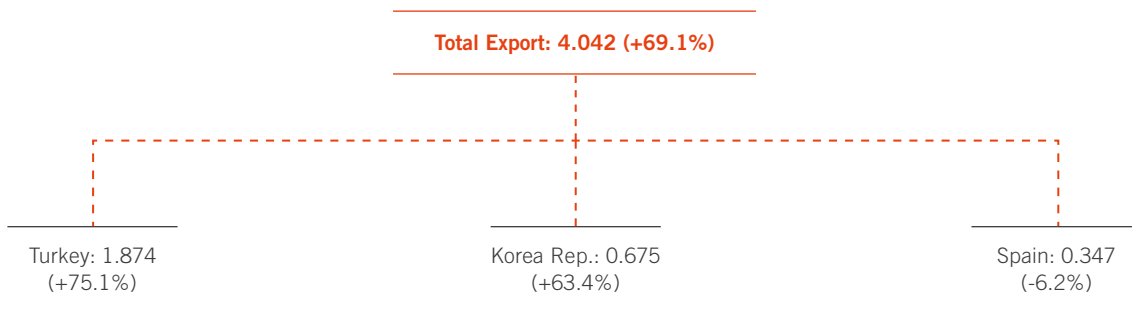


Change:% 2011/2010  
Source: Official Trade Statistics/WV Stahl

## RUSSIA STEEL SCRAP EXPORT 2011 (MILLION TONNES)

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### Biggest Buyers



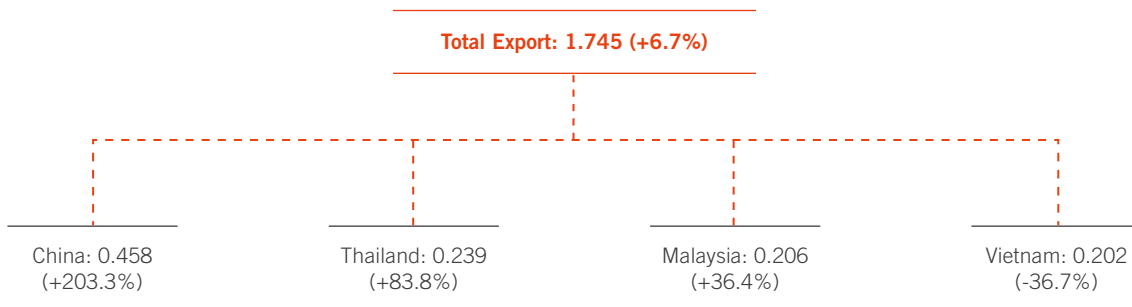
Change: % 2011/2010

Source: Official Trade Statistics/WV Stahl

## AUSTRALIA STEEL SCRAP EXPORT 2011 (MILLION TONNES)

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### Biggest Buyers

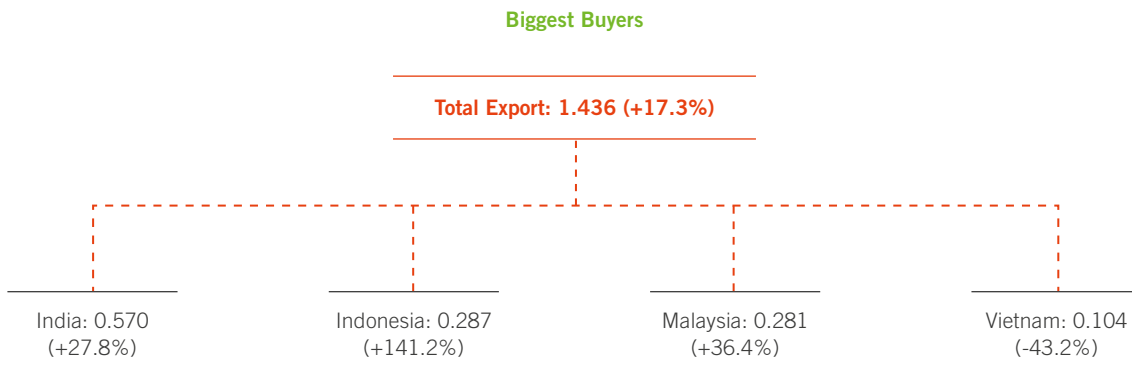


Change: % 2011/2010

Source: Official Trade Statistics/WV Stahl

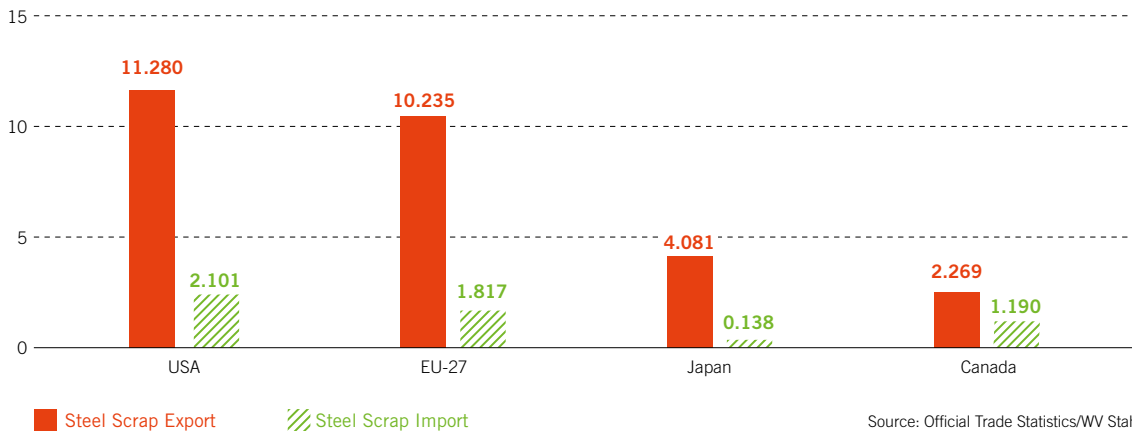


## SOUTH AFRICA STEEL SCRAP EXPORT 2011 (MILLION TONNES)



Change: % 2011/2010  
Source: Official Trade Statistics/WV Stahl

## MAJOR NET STEEL SCRAP EXPORTERS JANUARY-JUNE 2012 (MILLION TONNES)

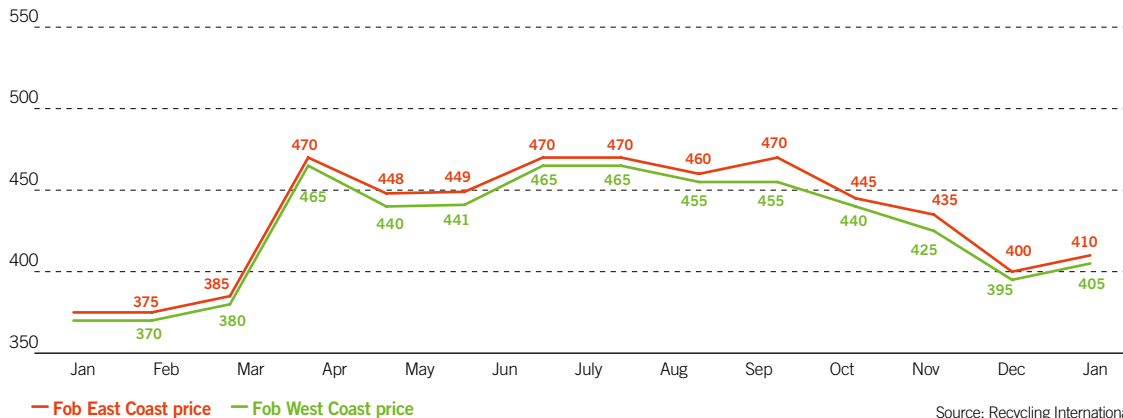


Source: Official Trade Statistics/WV Stahl

## PRICE CURVE JANUARY 2011/2012

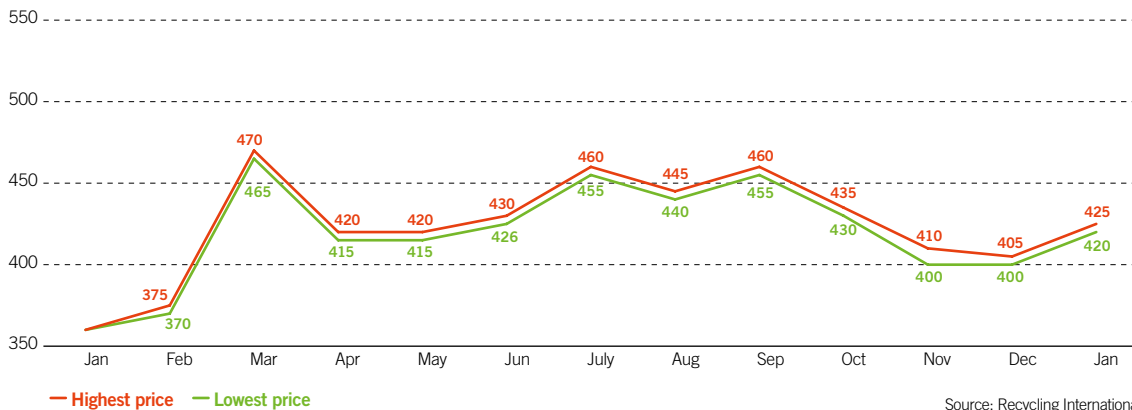
### USA Export Prices (US\$/GRT)

USA Export HMS 1, heavy steel scrap (1/4 Inch)



### Fob Rotterdam Export Prices (US\$/t)

HMS 80/20 heavy steel scrap



# GLOSSARY

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<b>BIR</b>	Bureau of International Recycling, Brussels, Belgium
<b>BDG</b>	German Foundry Association, Düsseldorf, Germany
<b>CAMU</b>	China's Association of Metalscrap Utilization, Beijing, China
<b>DCUD</b>	Turkish Iron and Steel Producers Association, Ankara, Turkey
<b>EFR</b>	European Ferrous Recovery & Recycling Federation, Brussels, Belgium
<b>EUROFER</b>	European Confederation of Iron and Steel Industries, Brussels, Belgium
<b>ISRI</b>	Institute of Scrap Recycling Industries, Washington, USA
<b>MIDREX</b>	Midrex Technologies Inc., Charlotte, USA
<b>Modern Casting</b>	Magazine for Foundries and Diecasters, Schaumburg, Illinois, USA
<b>Official Trade Statistics</b>	Prepared by WV Stahl, Düsseldorf, Germany
<b>Recycling International</b>	International trade magazine, Arnhem, The Netherlands
<b>USGS</b>	U.S. Geological Survey, Reston, USA
<b>worldsteel</b>	World Steel Association, Brussels, Belgium
<b>WV Stahl</b>	German Steel Federation, Düsseldorf, Germany



Bureau of  
International Recycling  
**Ferrous Division**

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**BIR – REPRESENTING THE FUTURE LEADING RAW MATERIAL SUPPLIERS**

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