WORLD STEEL RECYCLING IN FIGURES 2008 – 2012

Steel Scrap – a Raw Material for Steelmaking

Bureau of International Recycling
Ferrous Division

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FOREWORD

The new edition of our BIR ferrous report "World Steel Recycling in Figures", which covers the five-year period between 2008 and 2012, highlights the importance of scrap as a global raw material for the world's steelworks and foundries.

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

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

In addition to scrap usage information for the EU, China, the USA, Japan, Russia and Turkey, we have updated our calculation models covering 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 figures, global scrap use in steelmaking has been between 440m and 570m tonnes per annum in recent years, while its annual use in iron and steel foundries has amounted to between 56m and 74m tonnes.

We have also provided more information about world trade in steel scrap. For example, we show in a new graph the volume of global steel scrap trade, including inter-EU trade since the year 2000. In addition, we have developed four flow charts relating to steel scrap exports from the USA, the EU-27, Japan and Russia. And we complete our fourth edition of "World Steel Recycling in Figures" with an overview of 2012 export prices for the USA and the EU.

The scale of world trade in steel scrap underlines the need for a free raw materials market. Our industry lives from free trade worldwide, enabling us to bridge the global imbalance between net scrap exporters and net scrap importers.

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 which has been extended by some four pages such that it contains a total of 38 graphs and tables – seven more than its predecessor.

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

We hope that "World Steel Recycling in Figures 2008-2012" will be useful to you in your day-to-day business operations.

Brussels, May 2013

Christian Rubach
President of the BIR Ferrous Division

EXECUTIVE SUMMARY

Final figures for 2012 show a record world steel output and virtually unchanged global steel scrap use for steelmaking.

World crude steel production increased 1.2% in 2012 to a record-breaking 1.547bn tonnes, according to worldsteel. The growth came mainly from Asia and North America while crude steel production fell last year in the EU-27 and South America.

Looking at the main scrap-using countries, worldsteel confirms in our last year's statistics that China's crude steel production reached 716.54m tonnes in 2012 for an increase of 3.1% over the previous year; the country's share of world crude steel production increased from 45.4% in 2011 to 46.3% last year. Other positives include increased crude steel production in the USA (+2.7% to 88.7m tonnes), in Russia (+2.3% to 70.4m tonnes) and in Turkey (+5.2% to 35.9m tonnes). In contrast, there were reductions in crude steel output in the EU-27 (-4.9% to 168.9m tonnes) and in Japan (-0.3% to 107.2m tonnes).

Global steel scrap use was unchanged at around 570m tonnes in 2012 although developments differed from country to country.

Regarding global scrap use, we are still dependent on estimates for many areas of the world. So, in collaboration with experts from the German Steel Federation (WV Stahl), we have calculated scrap usage in world steel production of around 570m tonnes in 2012 – unchanged from 2011. Owing to last year's 1.2% increase in world crude steel output, the proportion of steel scrap used in crude steel production fell from 37.3% to 36.8%.

According to our calculations, there was also no change last year in own arisings (circulating scrap) at 200m tonnes. The proportion of own arisings used in crude steel production dropped from 13.1% to 12.9% as a result of mills' efforts to improve yields through the wider use of continuous casting and of near-net-shape casting. For 2012, we have calculated unchanged steel scrap purchases by steelworks at around 370m tonnes.

One of the main reasons why global steel scrap use did not mirror the increase in world steel output last year was the situation in China. As the world's biggest steel producer, China is attracting particular attention regarding its scrap usage; in 2012, its steel industry sharply reduced its scrap usage – by 12.3% to 79.8m tonnes – despite the fact that the country's crude steel production was in positive

territory (+3.1% over 2011). For the Chinese market, iron ore was cheaper for many months last year and so the cost of blast furnace iron was less than steel scrap for many of the country's steelmakers. This assessment is supported by last year's 6.8% growth in global pig iron production to 1.105bn tonnes – an increase which was much higher than the 1.2% gain in world steel output. Chinese steelmakers also benefitted from an increasing domestic scrap supply which caused prices to decline. Together, these facts limited China's need to import steel scrap. This is in line with the insistence of the country's new president Xi Jinping that China will put more into its 'green' efforts, including recycling and low-carbon developments.

The EU-27 recorded a drop in steel scrap usage in 2012 (-6% to 94.1m tonnes) while the region's crude steel production fell by a smaller proportion (-4.9%). The biggest steel scrap user in the EU-27 was Italy on 20.8m tonnes (-5.8%). Also in decline during 2012 was steel scrap consumption in Russia (-4.4% to 20.1m tonnes), even though the country's crude steel production increased 2.3%, and also in Japan (-4.6% to 35.5m tonnes) where crude steel output slipped only 0.3%.

The only major positives in our least year's statistics were the steel scrap usage gains in the USA and in Turkey. The increase in US steel scrap use (+9.4% to 61.7m tonnes) was greater than the growth in domestic crude steel production (+2.7%). A possible explanation for higher steel scrap usage in the USA is the increased use of lower-quality grades by integrated plants as they make use of their ability to dilute residuals in these lesser grades of scrap. Last year's upturn in Turkish steel scrap consumption was around 5.1% to 32.4m tonnes although growth in the country's crude steel production was higher still (+5.2%). But we can assume that in 2012, we also had a higher steel scrap usage in two other big steel producing countries, i.e. India and the Republic of Korea. India increased its steel output (+4.3% to 76.7m tonnes) and steel scrap imports (+32.4% to 8.180m tonnes), and the Republic of Korea increased its steel output (+0.8% to 69.1m tonnes) and steel scrap imports (+17.4% to 10.126m tonnes).

Global annual scrap use in iron and steel foundries is between 56m and 74m tonnes

We are able to present again a calculation model for global scrap use in iron and steel foundries, produced 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 2008 to 2011; it was not possible to incorporate figures for 2012 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 2011, we have calculated global scrap usage of 69.7m tonnes for a world iron and steel casting production of 82m tonnes. For the period 2008 to 2011, annual scrap use in iron and steel foundries amounted to between 56m and 74m tonnes. Furthermore, we have calculated annual scrap purchases by the world’s iron and steel foundries at around 43.1m tonnes for 2011.

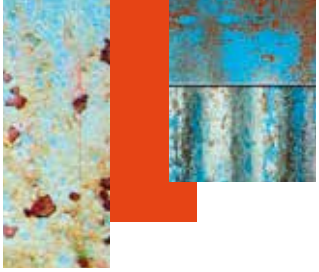
In 2012, Turkey remained the world’s foremost importer of steel scrap whereas China sharply reduced its imports

In 2012, Turkey’s overseas purchases of steel scrap climbed around 4.5% to 22.415m tonnes to reinforce the country’s position as the world’s foremost importer of steel scrap. As previously stated, it was similarly interesting to note substantially increased imports by the Republic of Korea (+17.4% to 10.126m tonnes) and by India (+32.4% to 8.18m tonnes). Also in positive territory last year were steel scrap imports into Canada (+22.6% to 2.343m tonnes).

China recorded a substantial drop in overseas steel scrap purchases last year (-26.5% to 4.974m tonnes), while declines were also registered by Taiwan (-7% to 4.955m tonnes), the USA (-7.2% to 3.711m tonnes), the EU-27 (-8.1% to 3.412m tonnes), Indonesia (-9.9% to 1.944m tonnes), Malaysia (-11.4% to 1.816m tonnes) and Thailand (-9.4% to 1.701m tonnes).

The USA remained the world’s leading exporter of steel scrap in spite of a drop in 2012

In 2012, there was a decline in US steel scrap exports of around 12.2% to 21.397m tonnes from the high figure of 2011. But in spite of this drop, the USA remained the world’s leading exporter of steel scrap – the biggest buyer of which was Turkey (+13.8% to 6.398m tonnes). It is also worth highlighting a steep decline in US shipments to China (-54% to 1.945m tonnes) as well as a drop in Canada’s steel scrap exports of around 12.1% to 4.248m tonnes.



Whereas EU steel mills reduced their steel scrap usage, the region's exports jumped 2.1% to 19.214m tonnes in 2012, with Turkey maintaining its position as the biggest buyer of EU steel scrap on 11.05m tonnes (+10.9% over 2011). It is noticeable that, in 2012, Turkey was the biggest buyer of steel scrap for all the main exporting countries of the EU-27. However, there was a sharp decline in EU shipments to China (-37.2% to 0.522m tonnes). The EU-27's internal steel scrap exports last year amounted to around 29.364m tonnes (-6.8% over 2011) – a figure which was clearly higher than shipments to third countries and which confirms the active role of inter-EU trade in the raw materials supply chain for European steel production.

After a difficult 2011, Japan's steel scrap export volumes jumped 57.9% to 8.459m tonnes last year, with shipments to the Republic of Korea soaring 69.9% to 4.862m tonnes. The second biggest buyer of Japan's exports was China on 3.13m tonnes (+28.2% over 2011). Clearly, Japan's exports were positively influenced by favourable short shipping routes. In 2012, higher overseas shipments of steel scrap were also recorded by Russia (+7.6% to 4.349m tonnes), Australia (+28.7% to 2.245m tonnes) and South Africa (+13.6% to 1.436m tonnes).

Our new graph shows that worldwide, total external steel scrap trade reached 106.6m tonnes in 2012 (-1.9% over 2011), of which nearly 28% was attributable to inter-EU trade. It is also noticeable that all the world's leading steel scrap exporters are major net steel scrap exporters: the export surplus was, for example, 17.7m tonnes for the USA and 15.8m tonnes for the EU-27 in 2012.

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

Finally, market developments in 2012 highlighted the global importance of scrap as an ecologically beneficial raw material for steelworks and foundries, and at the same time underlined the need for a free world raw material market.

Rolf Willeke
Statistics Advisor of the BIR Ferrous Division

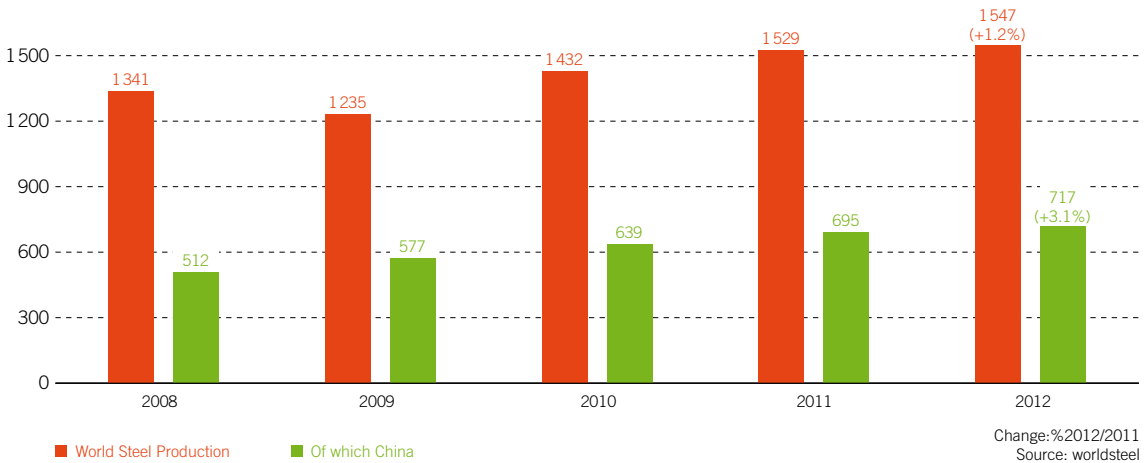
GRAPHS AND TABLES

WORLD CRUDE STEEL PRODUCTION – SUMMARY (MILLION TONNES)

	2008	2009	2010	2011	2012	% 2012/ 2011
Europe	**344.3**	**265.3**	**314.7**	**329.5**	**319.8**	**-2.9**
of which:						
EU (27)	198.2	139.3	172.8	177.7	168.9	-4.9
CIS	**114.3**	**96.9**	**108.2**	**112.7**	**111.0**	**-1.5**
of which:						
Russia	68.5	60.0	66.9	68.9	70.4	+2.3
North America	**124.5**	**82.6**	**111.6**	**118.9**	**121.8**	**+2.5**
of which:						
United States	91.4	58.2	80.5	86.4	88.7	+2.7
South America	**47.4**	**37.8**	**43.9**	**48.4**	**46.9**	**-3.0**
Africa	**17.0**	**15.4**	**16.6**	**15.7**	**15.8**	**+0.7**
Middle East	**16.6**	**17.7**	**20.0**	**23.0**	**24.2**	**+5.3**
Asia	**783.0**	**810.3**	**916.7**	**986.5**	**1012.4**	**+2.6**
of which:						
China	512.3	577.1	638.7	694.8	716.5	+3.1
Japan	118.7	87.5	109.6	107.6	107.2	-0.3
Australia / New Zealand	**8.4**	**6.0**	**8.1**	**7.2**	**5.8**	**-19.9**
World	**1341.2**	**1235.1**	**1431.7**	**1529.2**	**1546.8**	**+1.2**

Source: worldsteel

WORLD CRUDE STEEL PRODUCTION (MILLION TONNES)



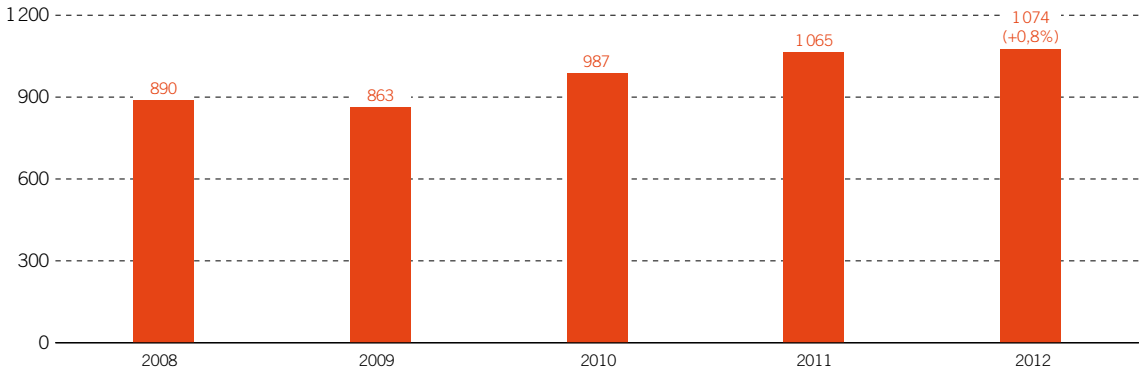
Change:%2012/2011
Source: worldsteel

THE LARGEST 12 STEEL PRODUCING COUNTRIES (MILLION TONNES)

		2008	2009	2010	2011	2012	% 2012/ 2011
1	China	512.3	577.1	638.7	694.8	716.5	+3.1
2	Japan	118.7	87.5	109.6	107.6	107.2	-0.3
3	United States	91.4	58.2	80.5	86.4	88.7	+2.7
4	India	57.8	63.5	69.6	73.6	76.7	+4.3
5	Russia	68.5	60.0	66.9	68.9	70.4	+2.3
6	Korea Rep.	53.6	48.6	58.9	68.5	69.1	+0.8
7	Germany	45.8	32.7	43.8	44.3	42.7	-3.7
8	Turkey	26.8	25.3	29.1	34.1	35.9	+5.2
9	Brazil	33.7	26,5	32.9	35.2	34.7	-1.5
10	Ukraine	37.3	29.9	33.5	35.3	33.0	-6.7
11	Italy	30.6	19.8	25.8	28.7	27.2	-5.3
12	Taiwan	19.9	15.8	19.8	20.2	20.7	+2.4

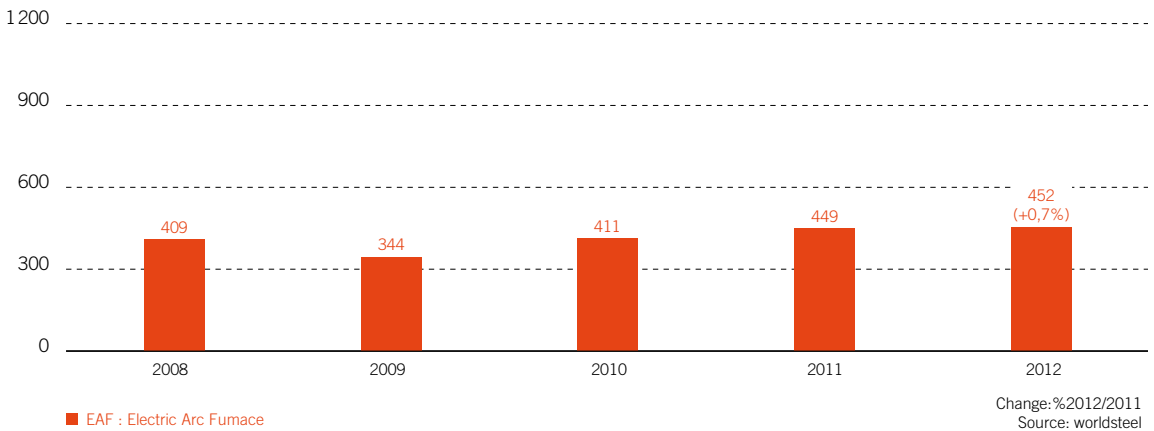
Source: worldsteel

WORLD BOF PRODUCTION (MILLION TONNES)



Change:%2012/2011
Source: worldsteel

WORLD EAF PRODUCTION (MILLION TONNES)



Change:%2012/2011
Source: worldsteel

TOTAL METALLICS FOR STEELMAKING IN THE WORLD (MILLION TONNES)

	2008	2009	2010	2011	2012	% 2012/ 2011
Crude Steel Production	1341	1235	1432	1529	1547	+1.2
of which Oxygen (BOF)	890	863	987	1065	1074	+0.8
Electric (EAF)	409	344	411	449	452	+0.7
(Share EAF of Crude Steel) in %	**30.5**	**27.9**	**28.7**	**29.4**	**29.2**	
Pig Iron	949	933	1034	1035	1105	+6.8
(Ratio Pig Iron / Crude Steel) in %	**70.8**	**75.5**	**72.2**	**67.7**	**71.4**	
Steel Scrap	530	440	530	570	570	±0.0
(Ratio Steel Scrap / Crude Steel) in %	**39.5**	**35.6**	**37.0**	**37.3**	**36.8**	
DRI	68	64	70	72	73	+1.4
(Ratio DRI / Crude Steel) in %	**5.1**	**5.2**	**4.9**	**4.7**	**4.7**	
Total Metallics	1547	1437	1634	1677	1748	+4.2
(Ratio Total Metallics / Crude Steel) in %	**115.4**	**116.4**	**114.1**	**109.7**	**113.0**	

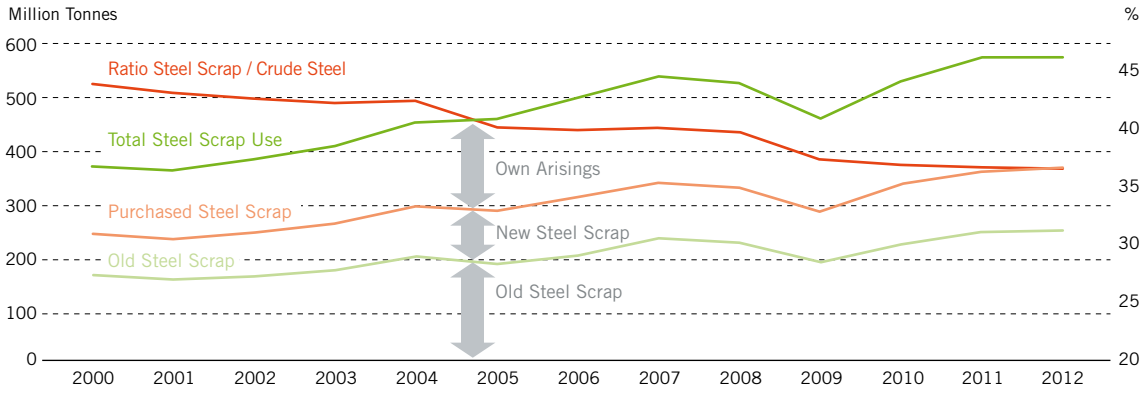
Source: worldsteel, Midrex and own calculations by WV Stahl/BIR

STEEL SCRAP FOR STEELMAKING IN THE WORLD (MILLION TONNES)

	2008	2009	2010	2011	2012	% 2012/ 2011
Crude Steel Production	1341	1235	1432	1529	1547	+1.2
Total Steel Scrap Use	530	440	530	570	570	±0.0
(Ratio Steel Scrap / Crude Steel) in %	**39.5**	**35.6**	**37.0**	**37.3**	**36.8**	
of which:						
Own Arisings (Circulating Scrap)	195	176	190	200	200	±0.0
(Share Own Arisings of Scrap Use) in %	**36.8**	**39.8**	**35.9**	**35.1**	**35.1**	
Purchases by Steelworks	335	265	340	370	370	±0.0
(Share Purchases of Scrap Use) in %	**63.2**	**60.2**	**64.2**	**64.9**	**64.9**	
of which:						
New Steel Scrap (Process Scrap)	105	90	110	120	120	±0.0
(Share New Steel Scrap of Total Purchases) in %	**31.3**	**34.0**	**32.4**	**32.4**	**32.4**	
Old Steel Scrap (Capital Scrap)	230	175	230	250	250	±0.0
(Share Old Steel Scrap of Total Purchases) in %	**68.7**	**66.0**	**67.8**	**67.6**	**67.6**	

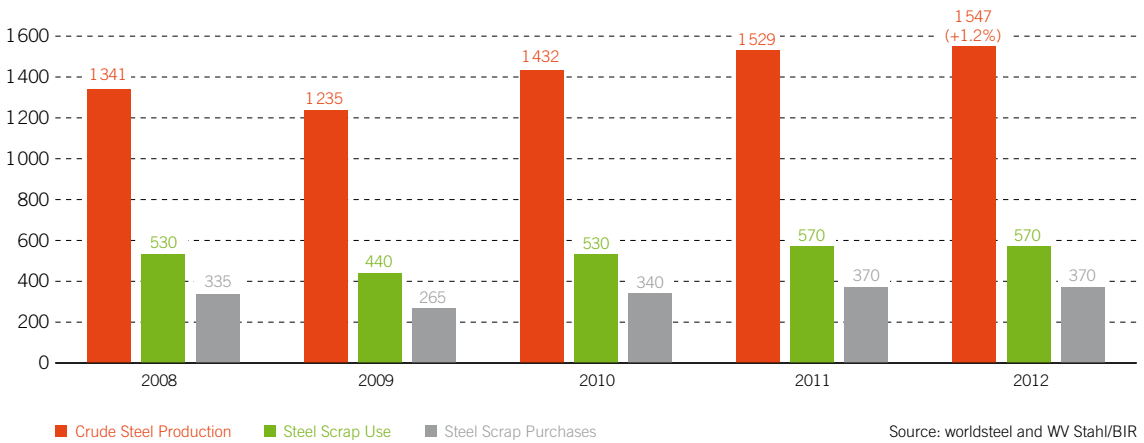
Source: worldsteel and own calculations by WV Stahl/BIR

STEEL SCRAP FOR STEELMAKING IN THE WORLD



Source: WV Stahl/BIR

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



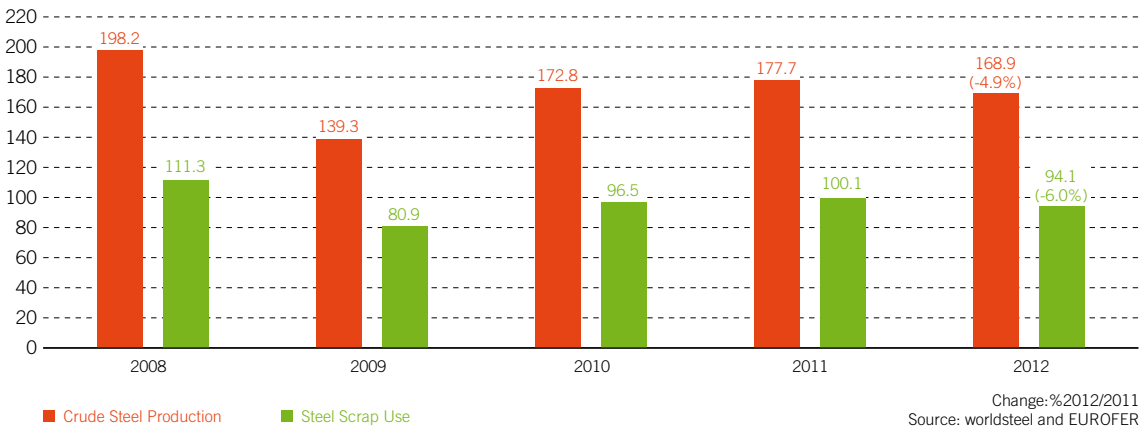
Source: worldsteel and WV Stahl/BIR

STEEL SCRAP FOR STEELMAKING IN MAJOR COUNTRIES (MILLION TONNES)

	Steel Scrap Consumption			Crude Steel Production		
	2012	2011	% Change	2012	2011	% Change
EU-27	94.1	100.1	-6.0	168.9	177.7	-4.9
China	79.8	91.0	-12.3	716.5	694.8	+3.1
USA	61.7	56.4	+9.4	88.7	86.4	+2.7
Japan	35.5	37.2	-4.6	107.2	107.6	-0.3
Turkey	32.4	30.8	+5.1	35.9	34.1	+5.2
Russia	20.1	21.0	-4.4	70.4	68.9	+2.3

Source: worldsteel, EUROFER, CAMU, ISRI/USGS, DCUD, Japan Ministry of Economy, Impextrade LLC, Russia

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



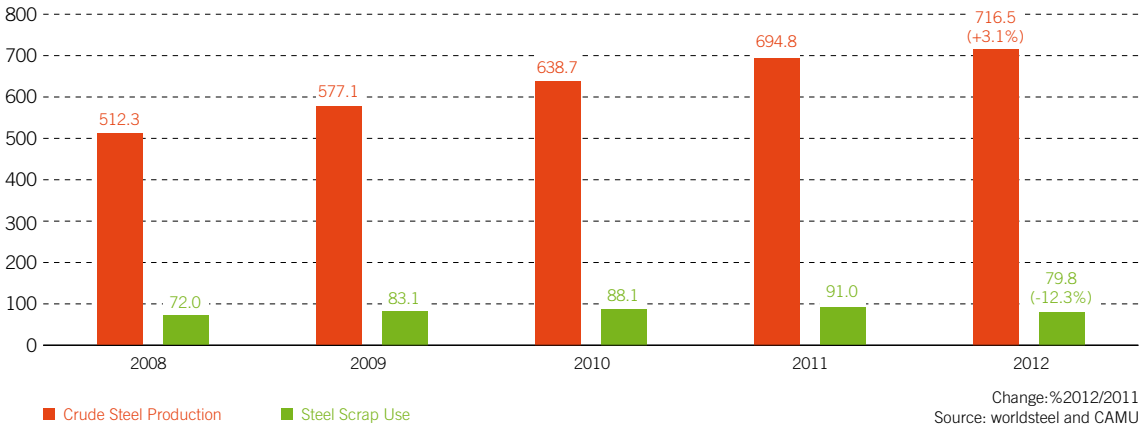
Change: %2012/2011
Source: worldsteel and EUROFER

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

	Steel Scrap Consumption			Crude Steel Production		
	2012	2011	%Change	2012	2011	%Change
Austria	2.539	2.526	+0.5	7.421	7.474	-0.7
Belgium	3.128	3.181	-1.7	7.301	8.026	-9.0
Bulgaria	0.690	0.910	-24.1	0.632	0.835	-24.3
Czech Republic	2.006	2.288	-12.3	5.072	5.583	-9.2
Finland	1.721	1.668	+3.1	3.759	3.989	-5.8
France	8.326	8.747	-4.8	15.609	15.780	-1.1
Germany	19.152	19.794	-3.2	42.661	44.284	-3.7
Greece	1.462	2.270	-35.6	1.247	1.934	-35.5
Hungary	0.385	0.526	-26.8	1.542	1.746	-11.7
Italy	20.845	22.132	-5.8	27.216	28.735	-5.3
Latvia	0.906	0.409	+48.2	0.805	0.568	+41.7
Luxembourg	2.473	2.824	-12.4	2.208	2.521	-12.4
Netherlands	1.678	1.765	-4.9	6.879	6.937	-0.8
Poland	5.619	5.971	-5.9	8.366	8.801	-4.9
Portugal	2.100	1.520	+38.2	1.866	1.871	-0.2
Romania	1.988	2.330	-14.7	3.780	3.835	-1.4
Slovakia	1.345	1.188	+13.2	4.403	4.236	+3.9
Slovenia	0.696	0.734	-5.2	0.632	0.648	-2.4
Spain	11.392	13.118	-13.2	13.628	15.504	-12.1
Sweden	2.032	2.349	-13.5	4.326	4.867	-11.1
United Kingdom	3.658	3.890	-6.0	9.579	9.478	+1.1
EU-27	**94.139**	**100.139**	**-6.0**	**168.935**	**177.652**	**-4.9**

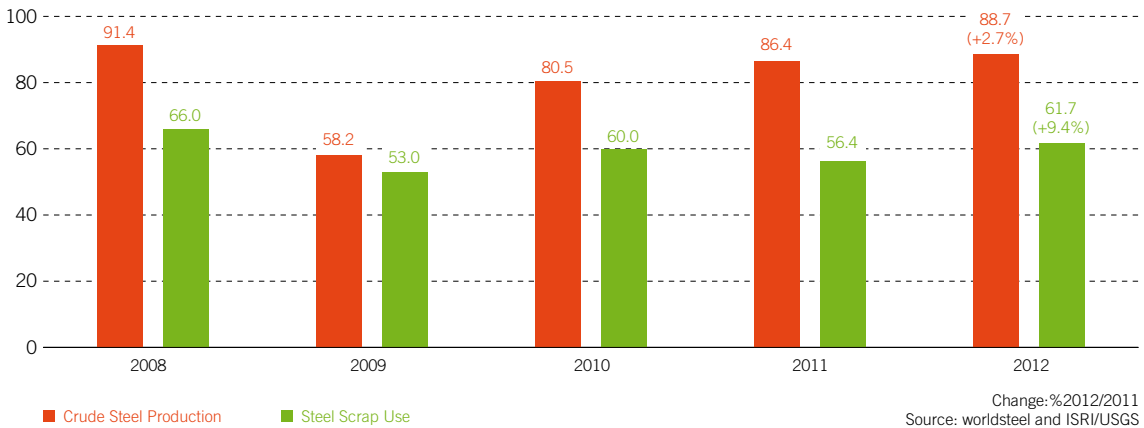
Source: Steel Scrap Consumption: EUROFER, Steel Production: worldsteel

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



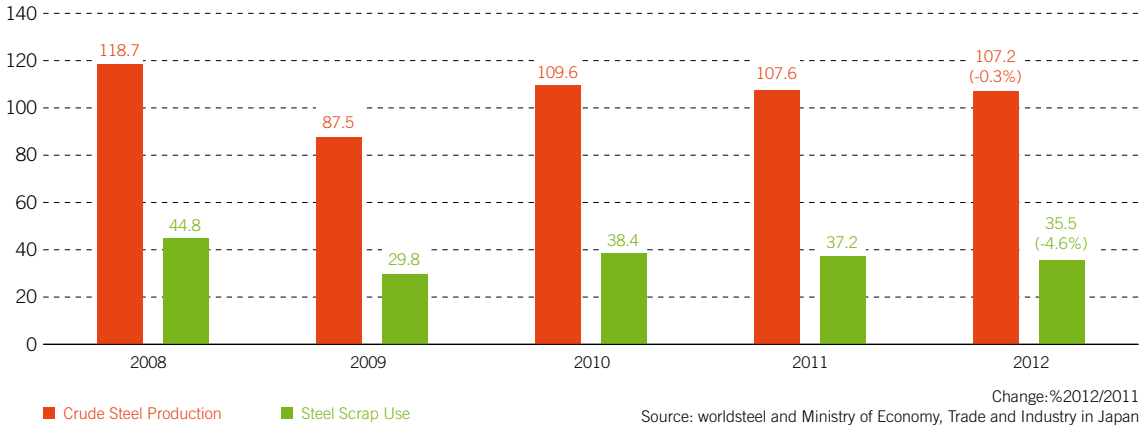
Change:%2012/2011
Source: worldsteel and CAMU

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



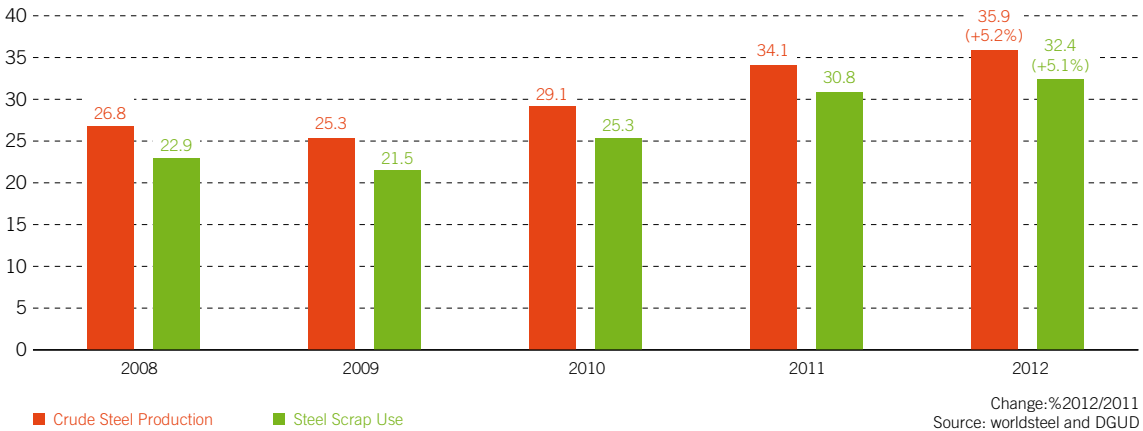
Change:%2012/2011
Source: worldsteel and ISRI/USGS

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



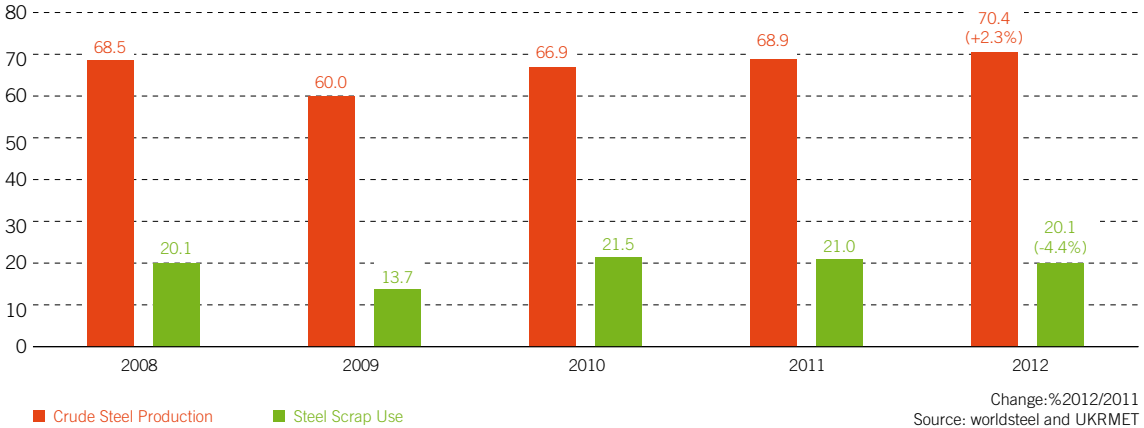
Change:%2012/2011
Source: worldsteel and Ministry of Economy, Trade and Industry in Japan

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



Change:%2012/2011
Source: worldsteel and DGUD

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



Change:%2012/2011
Source: worldsteel and UKRMET

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

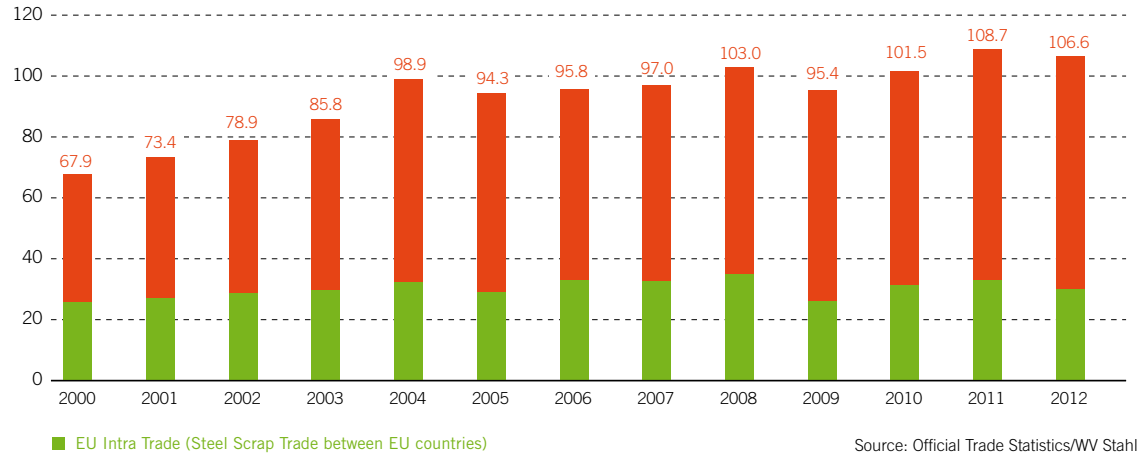
	2008	2009	2010	2011	% 2011/ 2010
Iron Steel and Malleable Casting Production	78.8	67.6	76.9	82.0	+6.6
Total Scrap Use	73.6	56.9	64.4	69.7	+8.2
(Ratio Scrap Use / Casting Production) in %	**93.4**	**84.2**	**83.8**	**85.0**	
of which:					
Own Arisings (Circulating Scrap)*	28.1	21.7	24.6	26.6	+8.1
(Share Own Arisings of Scrap Use) in %	**38.2**	**38.1**	**38.2**	**38.2**	
Scrap Purchases	45.5	35.2	39.8	43.1	+8.3
(Share Purchases of Scrap Use) in %	**61.8**	**61.9**	**61.8**	**61.8**	

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.

VOLUME OF GLOBAL EXTERNAL STEEL SCRAP TRADE (MILLION TONNES)

Steel Scrap External Trade Including EU Intra Trade



Source: Official Trade Statistics/WV Stahl

MAIN STEEL SCRAP IMPORTERS (MILLION TONNES)

	2008	2009	2010	2011	2012	% 2012/ 2011
Turkey	17.415	15.665	19.192	21.460	22.415	+4.5
Korea Rep.	7.319	7.800	8.091	8.628	10.126	+17.4
India	4.579	5.336	4.643	6.175	8.180	+32.4
China	3.590	13.692	5.848	6.767	4.974	-26.5
Taiwan	5.539	3.912	5.364	5.328	4.955	-7.0
USA	3.571	2.986	3.775	4.003	3.711	-7.2
EU-27	4.809	3.270	3.646	3.714	3.412	-8.1
Canada	1.674	1.408	2.226	1.911	2.343	+22.6
Indonesia	1.899	1.484	1.642	2.157	1.944	-9.9
Malaysia	2.293	1.683	2.292	2.050	1.816	-11.4
Thailand	3.142	1.323	1.282	1.877	1.701	-9.4

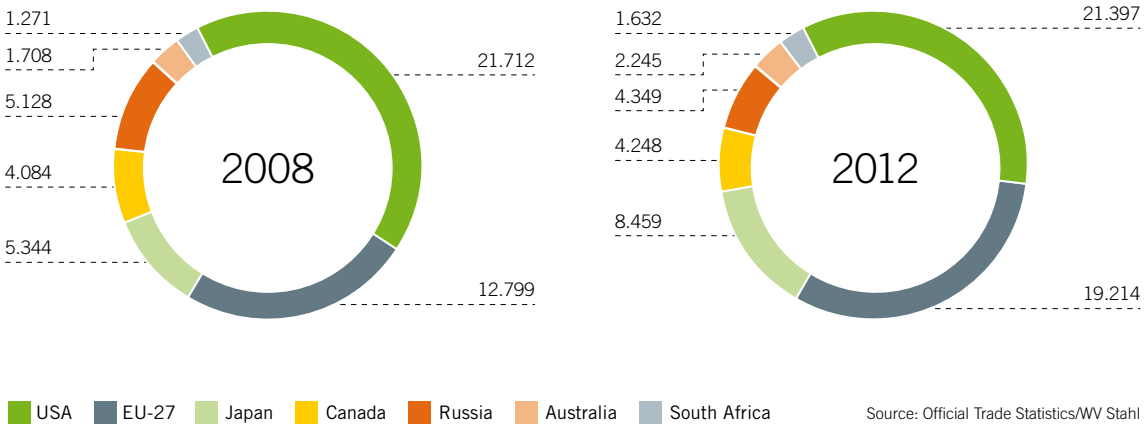
Source: Official Trade Statistics/WV Stahl

MAIN STEEL SCRAP EXPORTERS (MILLION TONNES)

	2008	2009	2010	2011	2012	% 2012/ 2011
USA	21.712	22.439	20.556	24.373	21.397	-12.2
EU-27	12.799	15.779	19.033	18.813	19.214	+2.1
Japan	5.344	9.398	6.472	5.442	8.459	+57.9
Russia	5.128	1.202	2.390	4.042	4.349	+7.6
Canada	4.084	4.792	5.154	4.832	4.248	-12.1
Australia	1.708	1.925	1.636	1.745	2.245	+28.7
South Africa	1.271	1.144	1.224	1.436	1.632	+13.6

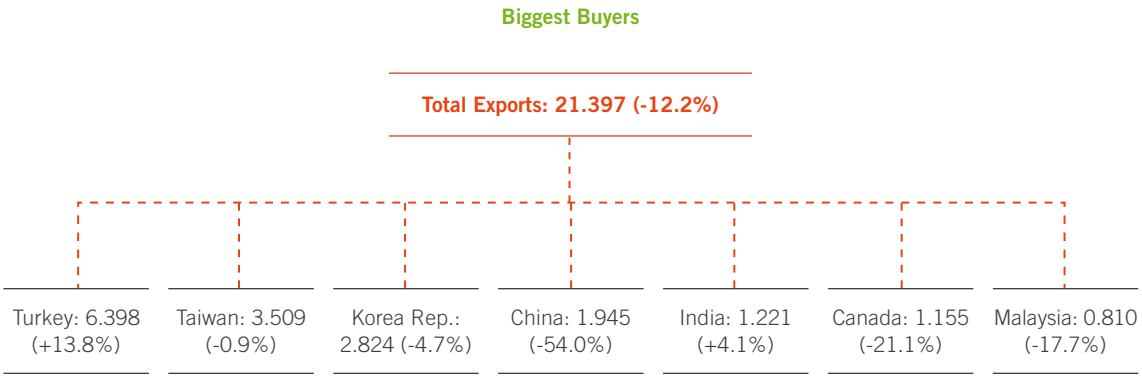
Source: Official Trade Statistics/WV Stahl

MAIN STEEL SCRAP EXPORTERS – DEVELOPMENT 2008 VS. 2012 (MILLION TONNES)



Source: Official Trade Statistics/WV Stahl

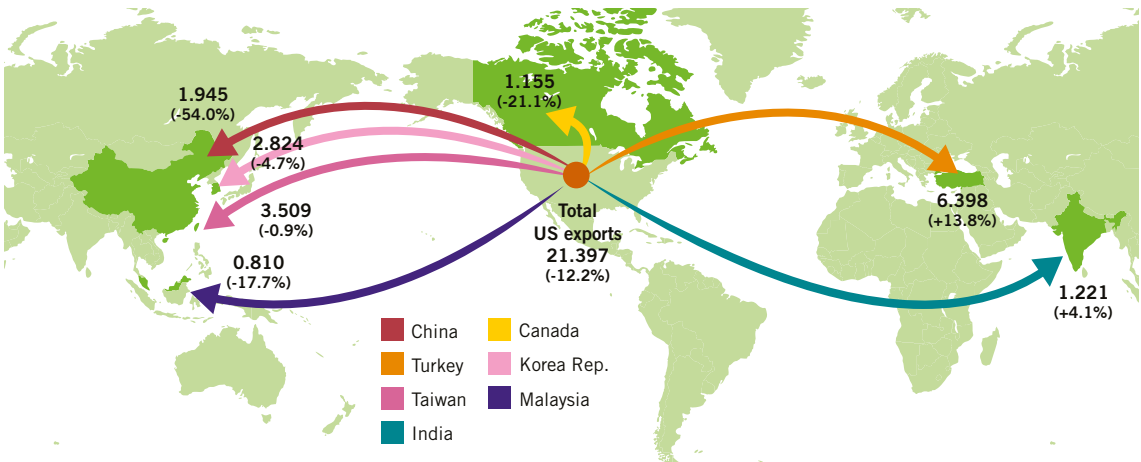
US STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2011/2010

Source: Official Trade Statistics/WV Stahl

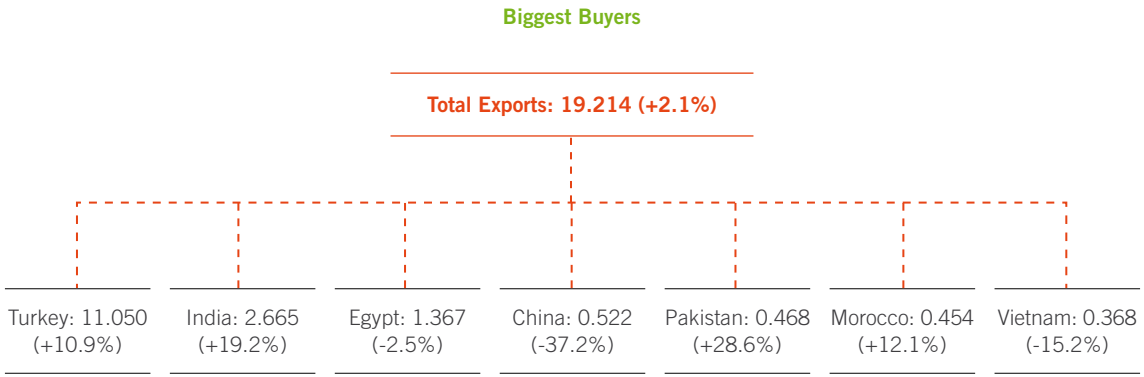
MAIN FLOWS OF US STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

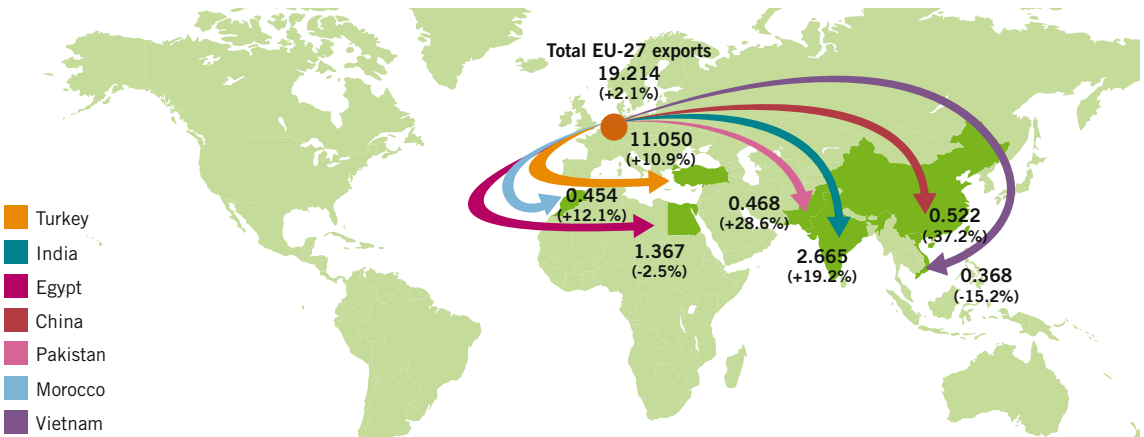
EU-27 STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2011/2010

Source: Official Trade Statistics/WV Stahl

MAIN FLOWS OF **EU-27** STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

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	2012	2011	%Change	Biggest Buyers	2012	2011	%Change
United Kingdom	5.170	5.376	-3.8	Turkey	2.330	2.087	+11.6
				India	1.311	1.090	+20.3
				Egypt	0.426	0.281	+51.6
				Pakistan	0.205	0.148	+38.5
				Morocco	0.173	0.216	-19.9
				USA	0.155	0.068	+127.9
Netherlands	2.839	2.570	+10.5	Turkey	1.671	1.281	+30.4
				India	0.246	0.226	+8.8
				Egypt	0.192	0.386	-50.3
				China	0.180	0.180	±0.0
				Vietnam	0.120	0.063	+90.5
Belgium	2.230	2.248	-0.8	Turkey	1.313	1.240	+5.9
				Egypt	0.662	0.680	-2.6
Germany	1.651	1.674	-1.4	Turkey	0.652	0.700	-6.9
				India	0.385	0.251	+53.4
				Switzerland	0.246	0.321	-23.4
				Egypt	0.079	0.053	+49.1
France	0.908	0.765	+18.7	Turkey	0.529	0.321	+64.8
				Morocco	0.153	0.167	-8.4
				India	0.074	0.080	-7.5
Romania	1.724	2.061	-16.4	Turkey	1.724	2.061	-16.4
Sweden	0.869	0.758	+14.6	Turkey	0.383	0.293	+30.7
				Norway	0.113	0.068	+66.2
				India	0.100	0.141	-29.1
Bulgaria	0.686	0.730	-6.0	Turkey	0.598	0.514	+16.3
				Macedonia	0.071	0.203	-65.0
EU-27 Extra Trade	**19.214**	**18.813**	**+2.1**				

Source: Official Trade Statistics/WV Stahl

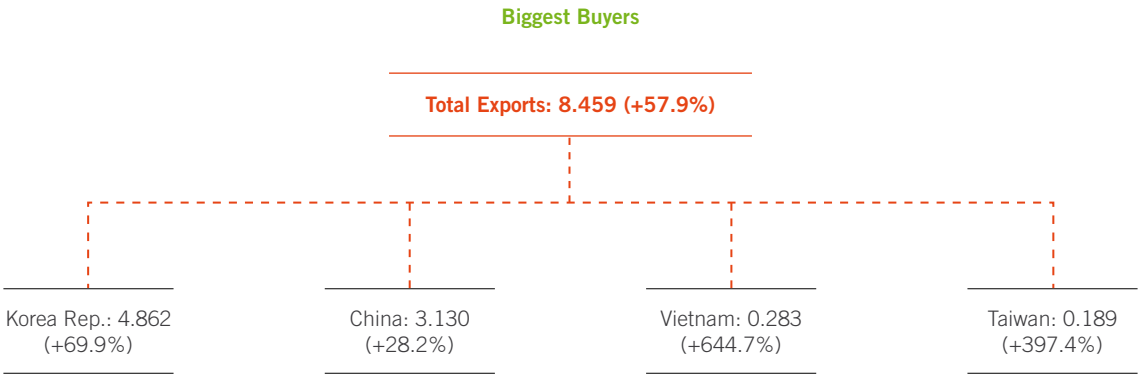
EU-27 INTERNAL STEEL SCRAP EXPORTS BY COUNTRY (MILLION TONNES)

Main Steel Scrap Exports between EU-27 Countries

Exporters	2012	2011	%Change	Biggest Buyers	2012	2011	%Change
Germany	7.857	8.293	-5.3	Netherlands	1.765	2.154	-18.1
				Italy	1.758	1.548	+13.6
				Luxembourg	1.265	1.488	-15.0
				Belgium	1.089	0.980	+11.1
				France	1.027	1.234	-16.8
France	5.248	5.485	-3.7	Belgium	1.513	1.618	-6.5
				Spain	1.503	1.657	-9.3
				Luxembourg	0.889	0.686	+29.6
				Italy	0.734	0.763	-3.8
Netherlands	2.332	2.620	-11.0	Belgium	0.811	0.949	-14.5
				Germany	0.725	0.874	-17.0
				Finland	0.426	0.390	+9.2
United Kingdom	2.126	2.438	-12.8	Spain	1.013	1.162	-12.8
				France	0.454	0.363	+25.1
				Portugal	0.431	0.427	+0.9
Czech Republic	1.981	1.992	-0.6	Germany	0.915	0.977	-6.1
				Italy	0.345	0.387	-10.9
Poland	1.648	1.672	-1.4	Germany	1.014	1.180	-14.1
				Czech Republic	0.325	0.294	+10.5
Belgium	1.394	1.273	+9.5	France	0.606	0.517	+17.2
				Luxembourg	0.279	0.257	+8.6
				Netherlands	0.275	0.286	-3.8
				Spain	0.142	0.056	+153.6
Austria	0.980	0.891	+10.0	Italy	0.506	0.453	+11.7
				Germany	0.356	0.337	+5.6
EU-27 Intra Trade	**29.364**	**31.506**	**-6.8**				

Source: Official Trade Statistics/WV Stahl

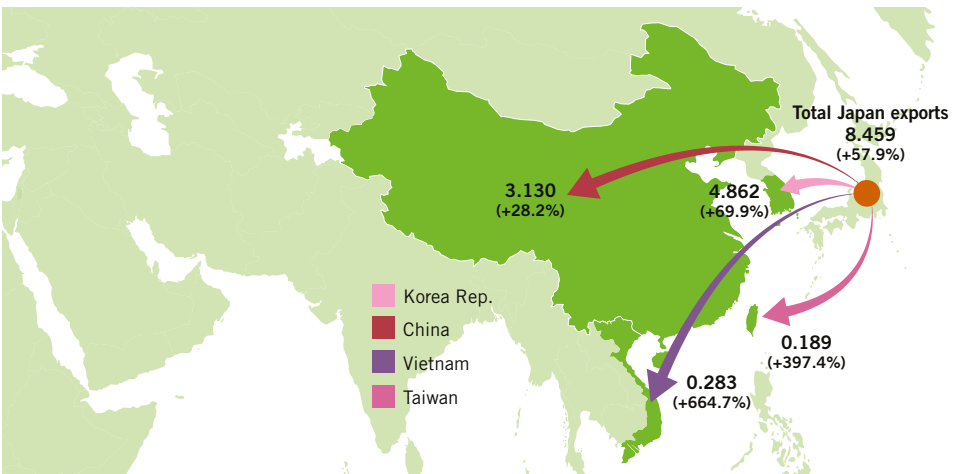
JAPAN STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

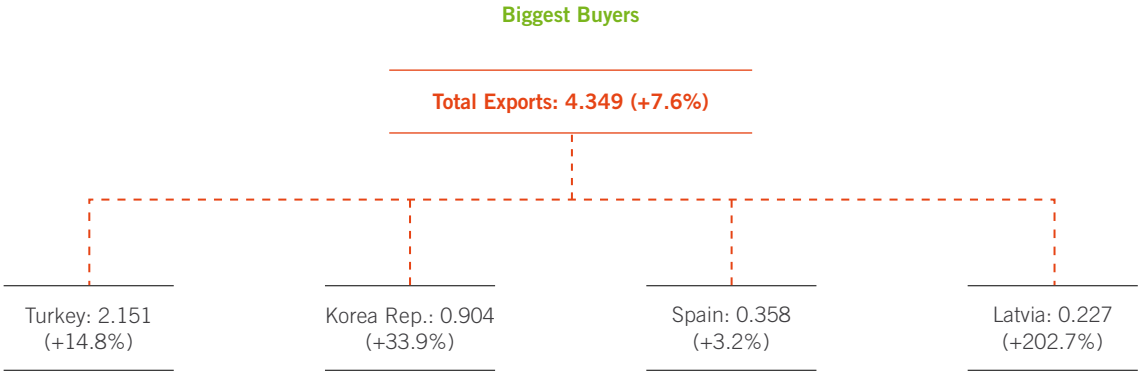
MAIN FLOWS OF JAPANESE STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

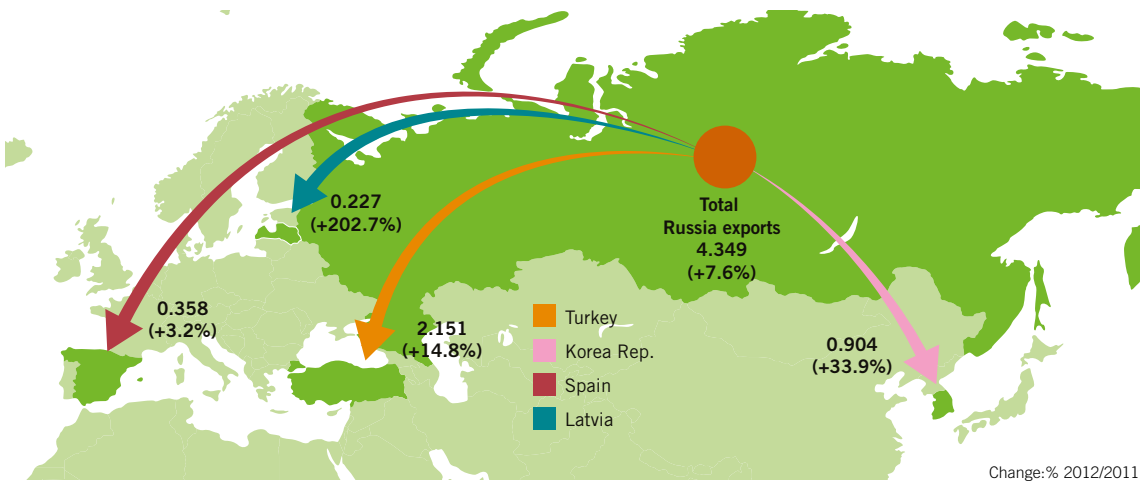
RUSSIA STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

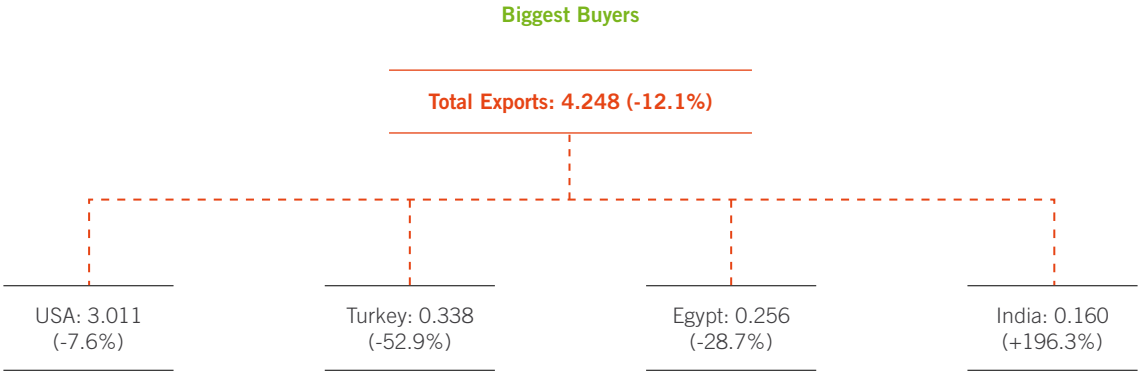
MAIN FLOWS OF RUSSIAN STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

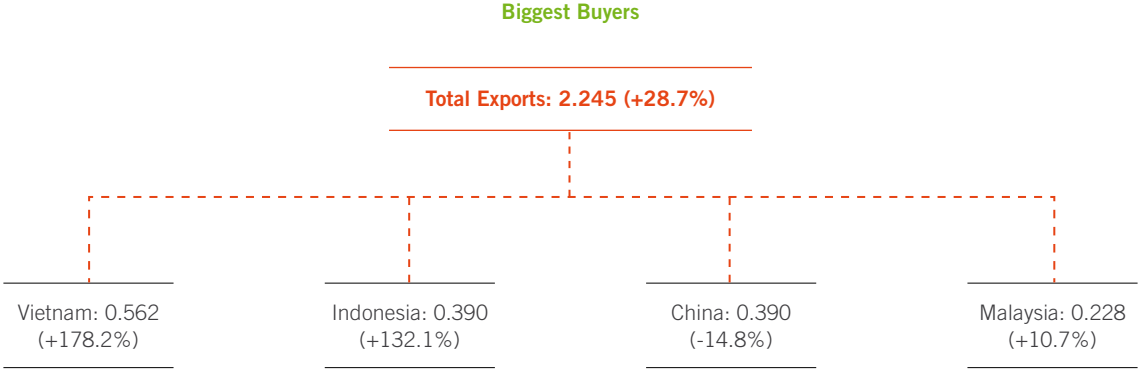
CANADA STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

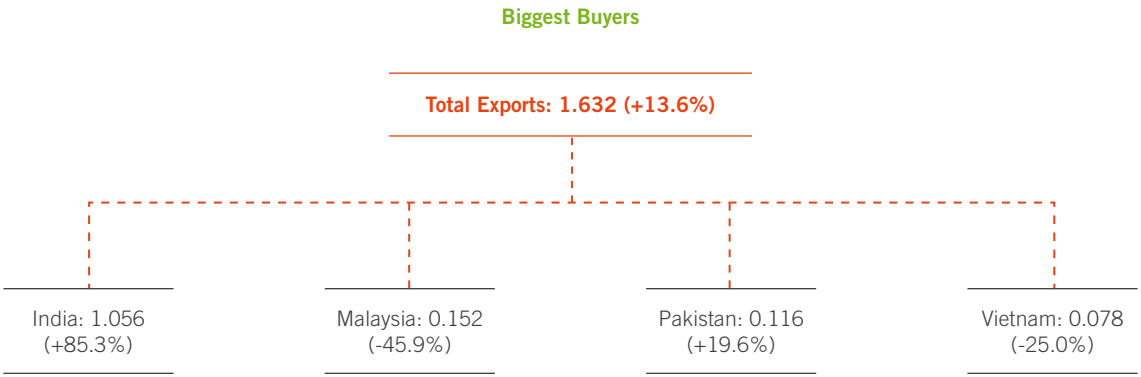
AUSTRALIA STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

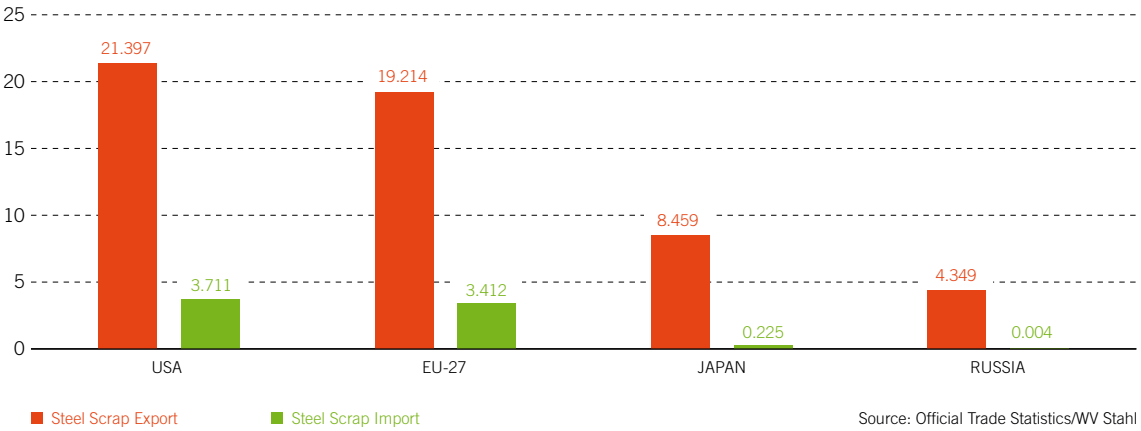
SOUTH AFRICA STEEL SCRAP EXPORTS 2012 (MILLION TONNES)



Change:% 2012/2011

Source: Official Trade Statistics/WV Stahl

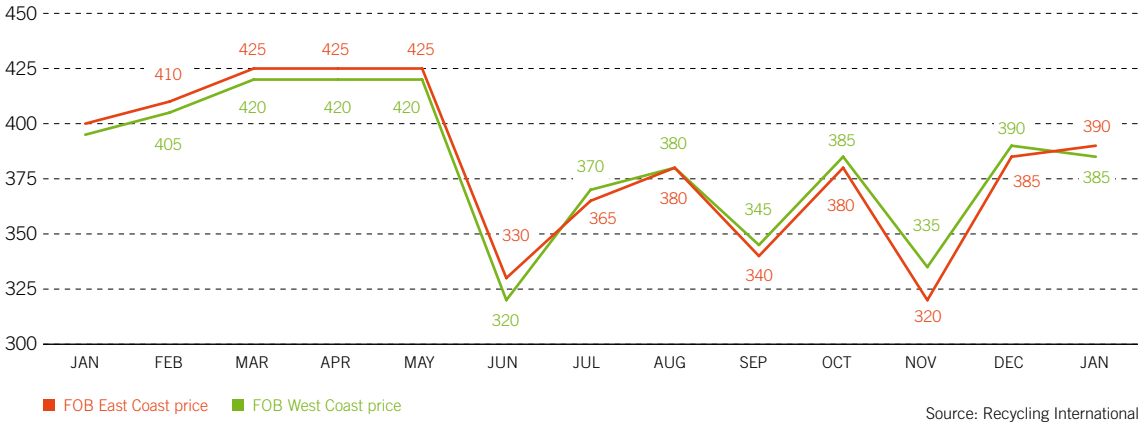
MAJOR NET STEEL SCRAP EXPORTERS 2012 (MILLION TONNES)



Source: Official Trade Statistics/WV Stahl

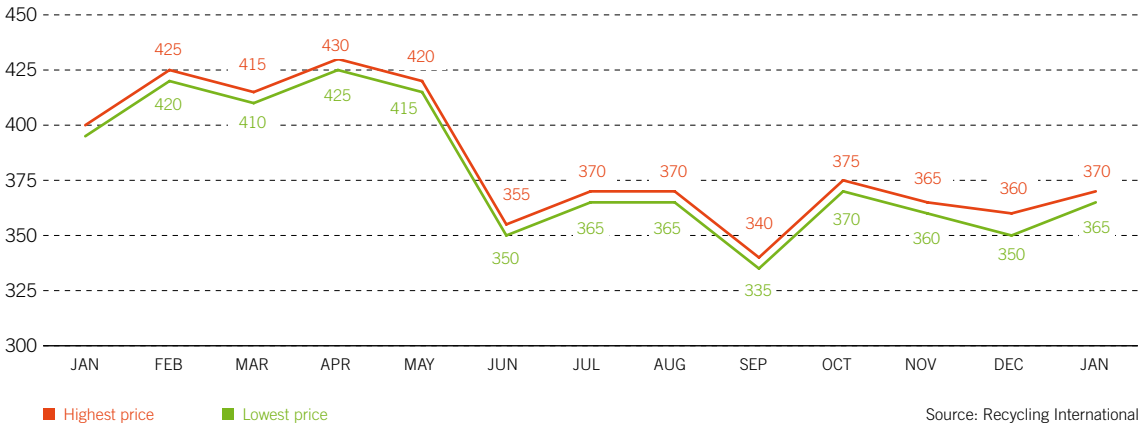
PRICE CURVE JANUARY 2012/2013

USA Export Prices (US$/GRT)
HMS 1, heavy steel scrap (1/4 inch)



Source: Recycling International

FOB Rotterdam Export Prices (US$/t)
HMS 80/20 heavy steel scrap



Source: Recycling International

GLOSSARY

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

Design by karakas

Bureau of
International Recycling
Ferrous Division

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