



**INTERNATIONAL
NICKEL STUDY GROUP**

**WORLD NICKEL
STATISTICS**

Yearbook

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International Nickel Study Group
Rua Almirante Barroso 38 - 5th
1000-013 Lisbon
Portugal

Tel: (+351) 213 567 030
Fax: (+351) 213 567 039
E-mail: insg@insg.org
Website : <http://www.insg.org>

THE INTERNATIONAL NICKEL STUDY GROUP

Introduction

The International Nickel Study Group (INSG) is an autonomous, intergovernmental organization established in 1990. Membership comprises nickel producing, consuming and trading countries. The INSG has no provision for market stabilization activities or market intervention of any kind. It has no formal connections with any other international organizations, whether intergovernmental or private sector.

Objectives

The objectives of the Group are:

- to collect and publish improved statistics on nickel markets (including production, consumption, trade, stocks, prices and other statistics such as recycling);
- to publish other information on nickel, such as data on industry facilities and environmental regulations;
- to provide a forum for discussions on nickel issues of interest to nickel producing and consuming countries and their industries, including environmental issues;
- to undertake economic analysis of nickel markets and related topics.

Members

The following are members of the INSG:

Australia	Brazil	Cuba	European Union
Finland	France	Germany	Greece
Italy	Japan	Norway	Portugal
Russian Federation	Sweden	United Kingdom	

Members together account for over sixty percent of world nickel mine production, seventy five percent of world primary nickel trade and well over half of nickel usage. The Group is very interested in broadening its membership to include all other countries with an interest in nickel production, consumption or trade so as to be fully representative of the international nickel economy.

Products

The INSG initially concentrated on statistics, including the production of a monthly bulletin on world nickel statistics. It also publishes a world directory of nickel production facilities (for INSG publications see inner back cover).

Other outputs, which generally are available to members only, include:

- a semi-annual, short-term forecast of nickel production, consumption and the market balance;
- the development of a data base on nickel;
- an annual review of new developments in nickel mining, smelting and refining as well as closures.
- an annual compilation of existing or proposed regulations regarding environmental, health and safety concerning nickel.

All enquiries relating to this bulletin should be addressed to Mr. S. Tollin, Chief Statistician.



**INTERNATIONAL
NICKEL STUDY GROUP**

**WORLD NICKEL
STATISTICS**

Yearbook

SAMPLE
please do not quote

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NOTES TO READERS

- Hong Kong has been moved from the section "West" to the section "East".
- Greater China is the sum of China P.R., Hong Kong and Taiwan, China.

- Due to a change in statistical collection procedures in 1997, data reported by the Netherlands now include some transit trade. The reader should be aware that from 1997 these data are not comparable with prior years and is referred to Transit Trade Tables in the Bulletin.

- Stainless steel and nickel scrap statistics are included in the Bulletin commencing with the year 1995.

- In the summary tables (pp 3-8) the "West" comprises market-economy countries while the "East" includes command-economy (or former command-economy) countries. The distinction between "West" and "East" remains necessary owing to a continued lack of statistics for the "East".

- Blanks shown in tables refer to periods for which data have not been submitted.

- All figures are expressed in nickel content unless stated otherwise.

- In the tables on pp 3-14 figures in bold denote actual data; those in italics denote estimates.

- Exports and imports of nickel oxide sinter may include other intermediate products of nickel metallurgy (excluding matte).

- Stocks are at the end of period stated.

- Yearly totals may differ from sum of figures because of rounding.

- Adjustments are included in certain tables. These are due to differences between reported totals and calculated totals of reported figures.

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DEFINITIONS AND EXPLANATORY NOTES

PRODUCTION

Mine products

Nickel content reported for laterite based production equals the amount of nickel contained in ores mined. Nickel content reported for sulphide based production equals the amount of nickel contained in concentrate production.

Intermediate products

Nickel content reported equals the amount of nickel contained in matte, mixed sulphide concentrates (containing more than 35 per cent combined nickel and cobalt), and other intermediate products of nickel metallurgy, including salts and oxides for further refining.

Primary nickel products

Nickel contained in products of smelters and refineries in a form which is ready for use by consumers; this includes:

Refined nickel (class I) - products with a nickel content of 99% or more:

- Electrolytic nickel
- Pellets
- Briquettes
- Granules
- Rondelles
- Powder/Flakes

Charge nickel (class II) - products with a nickel content of less than 99%:

- Ferro-nickel
- Nickel oxide sinter
- Utility (Japan, Korea, Rep., Taiwan, China)
- Nickel pig iron (China)

Chemicals

- Chemical nickel oxide
- Nickel sulphate
- Nickel chloride
- Nickel carbonate
- Nickel acetate
- Nickel hydroxide
- Other salts and chemicals

USAGE (CONSUMPTION)

Nickel contained in smelter/refinery nickel products used by consumers for the manufacture of products in each of the categories shown below.

Stainless steels, other than castings, containing by weight 1.2% or less of carbon and 10.5% or more of chromium, with or without other elements.

Other alloy steels, (excluding castings).

Steel castings, alloyed (including cast iron).

Non-ferrous products (including castings): products of pure nickel (98-100% Ni), nickel base alloys (50-97% Ni), iron-nickel (-chrome) alloys (30-49% Ni), copper base alloys (1-49% Ni) and clad materials.

Plating: nickel metal used for plating (N.B. nickel used to manufacture chemicals and nickel chemicals used for plating should be included under "Other uses").

Other uses: catalysts, batteries and chemicals.

TRADE

Quantities of nickel products exported or imported during the period stated. Wherever possible, trade item descriptions are followed by the corresponding code numbers of the Harmonized System (HS). Nickel trade statistics refer to:

- Ores and concentrates (26.04.00)
- Ferro-nickel (72.02.60)
- Waste and scrap of stainless steel (72.04.21)
 - 72.04.21.10 - nickel content 8% or greater,
 - 72.04.21.90 - nickel content less than 8%,
- Nickel matte (75.01.10)
- Nickel oxide sinter and other intermediate products of nickel metallurgy, excluding matte (75.01.20)
- Unwrought nickel, not alloyed (75.02.10)
- Nickel waste and scrap (75.03.00)
- Nickel powder and flakes (75.04.00)

It should be noted that HS 75.01.20 includes intermediate nickel products requiring further processing and not just finished nickel oxide suitable for direct use by consumers.

STOCKS

Nickel contained in primary nickel products held by nickel producers (and their agents), consumers, commodity exchanges (such as the LME), traders and in government stockpiles. LME stocks are held at various locations in warehouses approved by the LME. Strategic stocks are known to be held in Japan and Russian Federation.

PRICES

LME Prices

The London Metal Exchange (LME) acts as a barometer of nickel supply/demand world-wide. Trading on the LME takes place in two daily sessions (morning and afternoon). The two sessions are each broken down into two rings made up of five minutes trading in each contract (cash and 3-months). The official prices for the day are assessed after the second ring of the morning session by a "quotation committee" in light of the dealings and prices quoted during the day's morning session. LME official nickel prices are used as benchmark prices by the international trade.

Nickel on the LME is primary nickel of minimum 99.8% purity, in specified forms of cathode, pellets or briquettes. It is traded in lots of 6 tonnes each. All sales due for delivery are backed by warehouse warrants.

Cash: the price paid - expressed in US\$ per tonne - for primary nickel, the warrants of which are delivered immediately (the next market day).

Settlement: expressed in US\$ per tonne, is equivalent to the seller's cash price.

3-months: the price paid - expressed in US\$ per tonne - for primary nickel, the warrants of which are to be delivered in three months time.

Tables reporting LME prices include LME price equivalents in US\$/lb.

LME turnover

This is the turnover as released daily by the LME. The official LME turnover includes futures as well as options and reflects trading between all Clearing Members from cash to 27 months and takes into the reckoning client cross-trade.

GENERAL NOTES

Statistics on mine production and on trade in nickel mine products are normally given in terms of nickel content (exceptions are noted in footnotes). Production and consumption figures are actual or estimated. Actual figures are generally as reported by government agencies while estimated figures are usually as calculated by the Secretariat. Stocks of refined nickel are as of end of period shown and normally exclude recycled (secondary) nickel. The monthly and annual average prices of the LME nickel market shown in the Bulletin are calculated by the Secretariat based on the number of market days and checked against the averages published

by the Metal Bulletin. Prices are not weighted according to volumes traded.

World total refers to all countries (whenever figures are available).

Blanks indicate that figures or comparable figures are not to hand.

Footnotes are under "Notes to table" below individual tables.

Quantities are expressed in **tonnes** (metric tons):

1 tonne (metric ton) = 1000 kg. = 2204.622 lb.
1 lb. = 0.4536 kg.

SYMBOLS

In the tables on pp 5-20 of this issue **bold** figures denote actual data and those in *italics* estimates.

The following symbols are used throughout:

*	an asterisk is used to draw the attention of the reader to apparent anomalies	0 or 0.0	less than half the unit employed
	break in series	mc	market closed
-	nil	p	preliminary or provisional
..	not available or not available separately	r	revised
		* *	increase above 300 %.

ACKNOWLEDGMENTS

Compilation of the Monthly Bulletin on nickel is made possible thanks to the co-operation of Member and non-member governments, international bodies, trade associations, market and research organizations and specialist commodity institutions.

The INSG gratefully acknowledges the assistance of:

- Assomet - Italy
- BCL Limited - Botswana
- BHP Billiton - Australia
- Bindura Nickel Corp. Ltd. - Zimbabwe
- Cerro Matoso S.A. - Colombia
- Vale Inco Limited - Brazil/Canada
- Information Center of China National Non-ferrous Metals Industry; Antaike Information Co. Ltd - China, P.R.
- Eurofer - Belgium

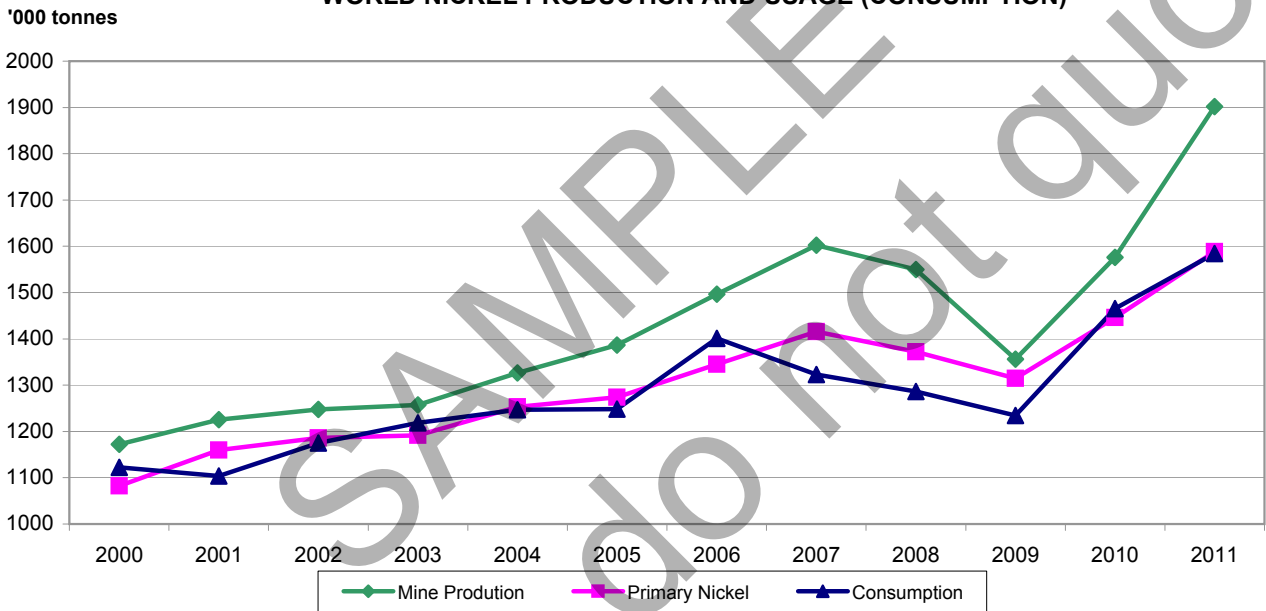
- Eramet - France
- Instituto de Metais Não Ferrosos - Brazil
- Japan Mining Industry Association - Japan
- London Metal Exchange (LME) - United Kingdom
- Minerals Bureau - Republic of South Africa
- Mines and Geosciences Bureau - Philippines
- Norilsk Harjavalta Metals Oy - Finland
- Rio Tinto Zimbabwe Limited - Zimbabwe
- Unidad de Planeación Minero Energética - Colombia
- US Geological Survey - United States
- Xstrata Nickel Plc - Canada

SUMMARY PRODUCTION / USAGE / STOCKS / PRICES

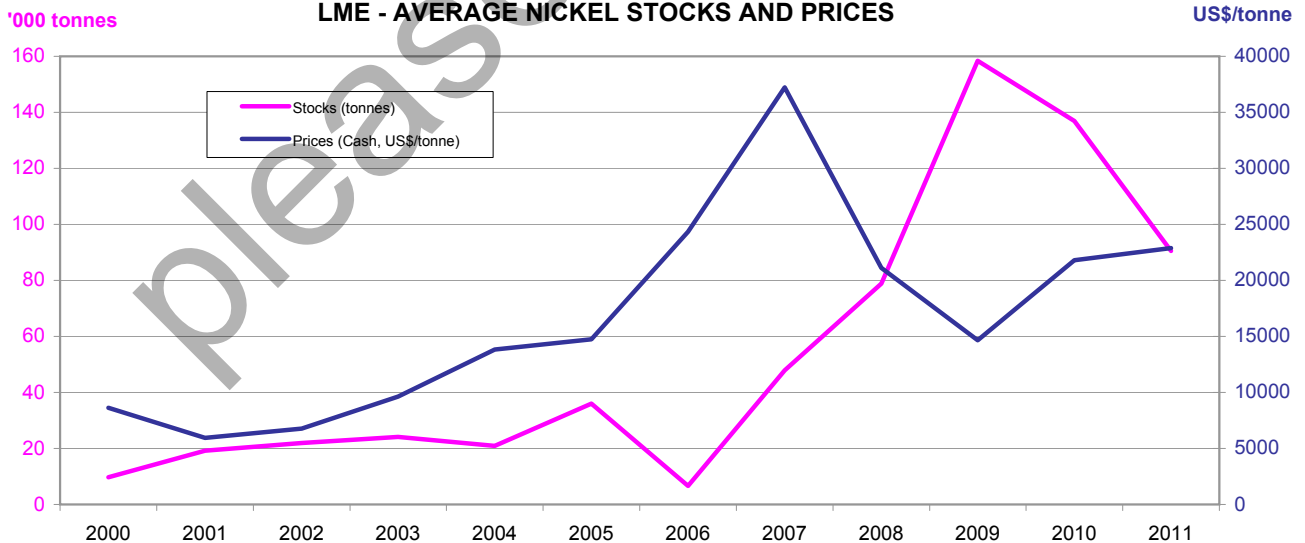
Year	WORLD				LME			
	Nickel Mine Production '000 tonnes	Production of Primary Nickel '000 tonnes	Nickel Usage (Consumption) '000 tonnes	Producers' Stocks '000 tonnes	Stocks '000 tonnes	Nickel Price - Average		3-months US\$/tonne
						Settlement US\$/tonne	Def. US\$/tonne	
2000								
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008								
2009								
2010								
2011								

Notes to table: a) Stocks at end of period. Stocks with producers include mainly class I and class II nickel. Some producers' stocks may be included in LME stocks as well.
 Source Producers' Stocks: International Nickel Study Group.
 b) Deflated settlement price in constant 2011 US\$/tonne, calculated using US GDP deflator.

WORLD NICKEL PRODUCTION AND USAGE (CONSUMPTION)



LME - AVERAGE NICKEL STOCKS AND PRICES



LME STOCKS BY LOCATION

tonnes

Location	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Belgium												
Antwerp												
Germany												
Bremen												
Hamburg												
Italy												
Genoa												
Leghorn												
Trieste												
Korea, Rep.												
Busan												
Gwangyang												
Netherlands												
Rotterdam												
Vlissingen												
Singapore												
Singapore												
Spain												
Bilbao												
Sweden												
Gothenburg												
Helsingborg												
United Kingdom												
Hull												
Liverpool												
Tyne & Wear												
USA												
Baltimore												
Chicago												
Longbeach												
New Hav												
St. Louis												
Total												

Notes to table: Stock at end of period.

SUMMARY

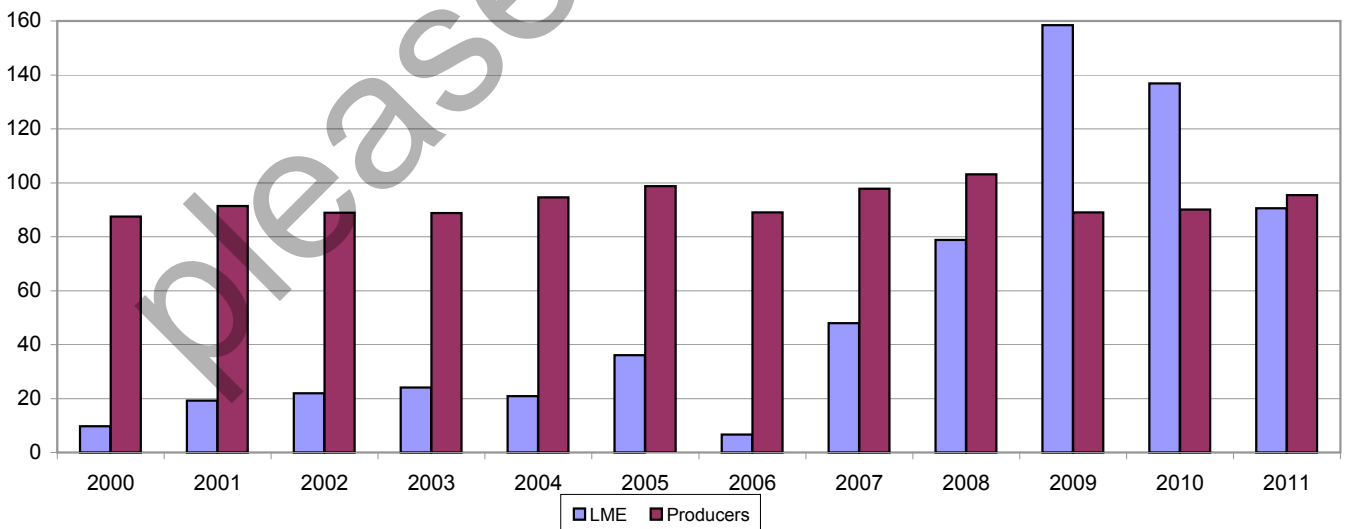
NICKEL PRODUCERS' STOCKS, LME AND USA STOCKPILE

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Refined nickel (Class I)												
Charge nickel (Class II)												
Sub-total												
LME stocks												
Total												
USA DN Stockpile												

Notes to table: Stocks at the end of period. Stocks with producers (in nickel content) refer to aggregate INSG producers' stocks.

LME AND PRODUCERS' STOCKS

'000 tonnes



SUMMARY

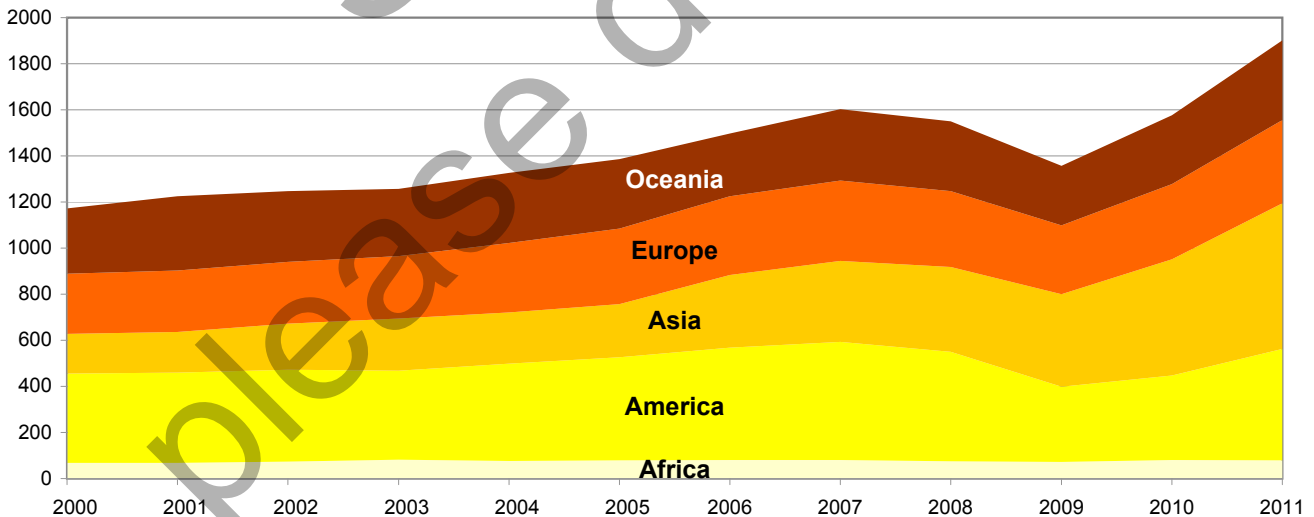
NICKEL MINE PRODUCTION

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Africa													
Botswana													
South Africa													
Zambia													
Zimbabwe													
America													
Brazil													
Canada													
Colombia													
Cuba													
Dominican Rep.													
United States													
Venezuela													
Asia													
China, P.R.													
Kazakhstan													
Indonesia													
Philippines													
Europe													
EU27													
Finland													
Greece													
Spain													
Albania													
FYROM													
Norway													
Serbia													
Russian Fed.													
Turkey													
Ukraine													
Oceania													
Australia													
New Caledonia													
World Total													

Notes to table:

- See Notes to Readers on page ii.
- For Brazil figures refer to recoverable nickel content.
- For Dominican Republic figures refer to nickel content of ferro-nickel.
- FYROM stands for Former Yugoslavian Republic of Macedonia.



SUMMARY

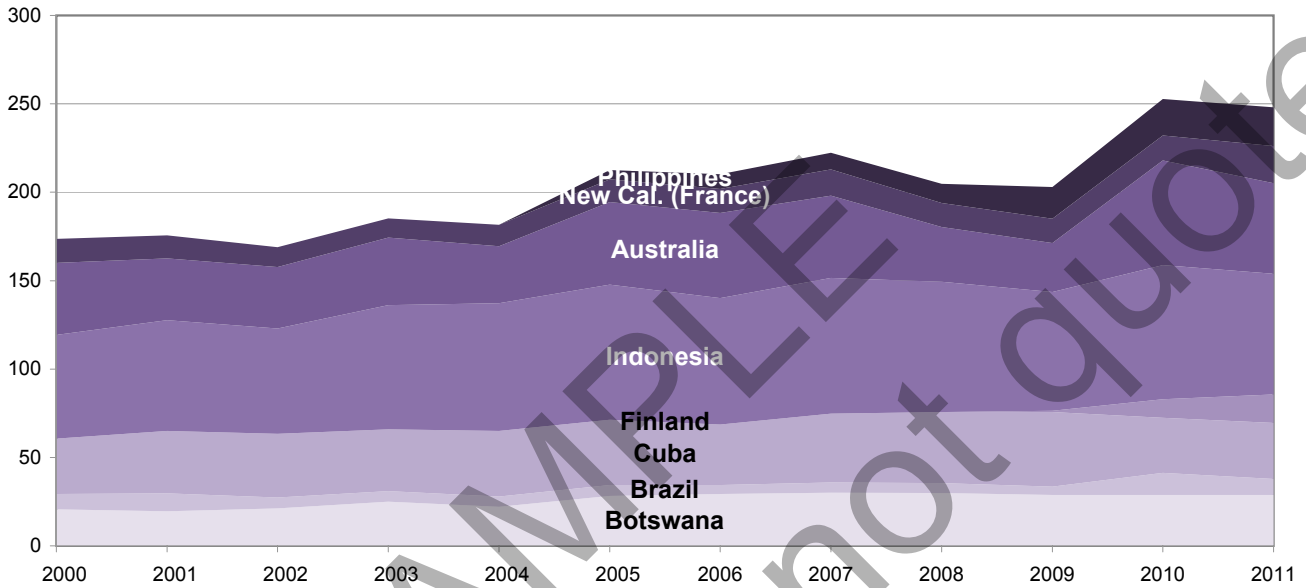
PRODUCTION OF INTERMEDIATE PRODUCTS

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Botswana													
Brazil													
Cuba													
Finland													
Indonesia													
Australia													
New Cal. (France)													
Philippines													
World Total													

Notes to table:

- a) For definition of intermediate products see page iii.
b) Figures refer to material normally exported to other countries for further processing.



SUMMARY

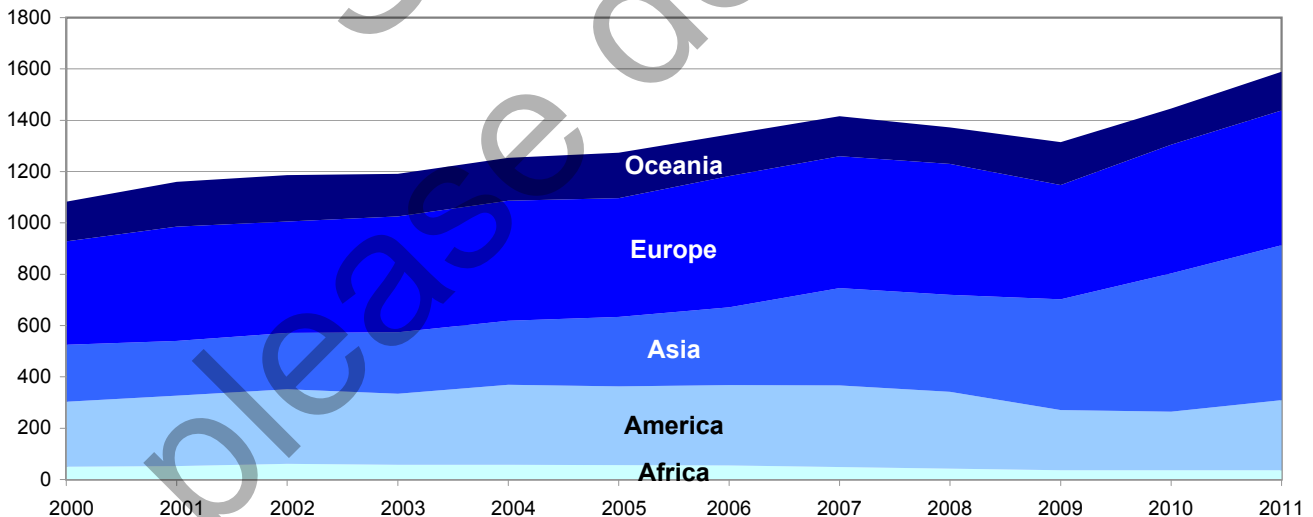
PRODUCTION OF PRIMARY NICKEL

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Africa													
South Africa													
Zimbabwe													
America													
Brazil													
Canada													
Colombia													
Cuba													
Dominican Rep.													
United States													
Venezuela													
Asia													
China, P.R.													
Indonesia													
Japan													
Korea, Rep.													
Europe													
EU27													
Austria													
Finland													
France													
Greece													
United Kingdom													
FYROM													
Norway													
Russian Fed.													
Serbia													
Ukraine													
Oceania													
Australia													
New Caledonia													
World Total													

Notes to table:

- a) See Notes to Readers on page ii.
- b) For South Africa figures include nickel sulphate exported until 2005.
- d) For Canada and for Australia refined production figures include the nickel content of intermediate material and oxide sinter further processed in China P. R., Korea, Rep. and Taiwan, China.
- e) FYROM stands for Former Yugoslavian Republic of Macedonia.



SUMMARY

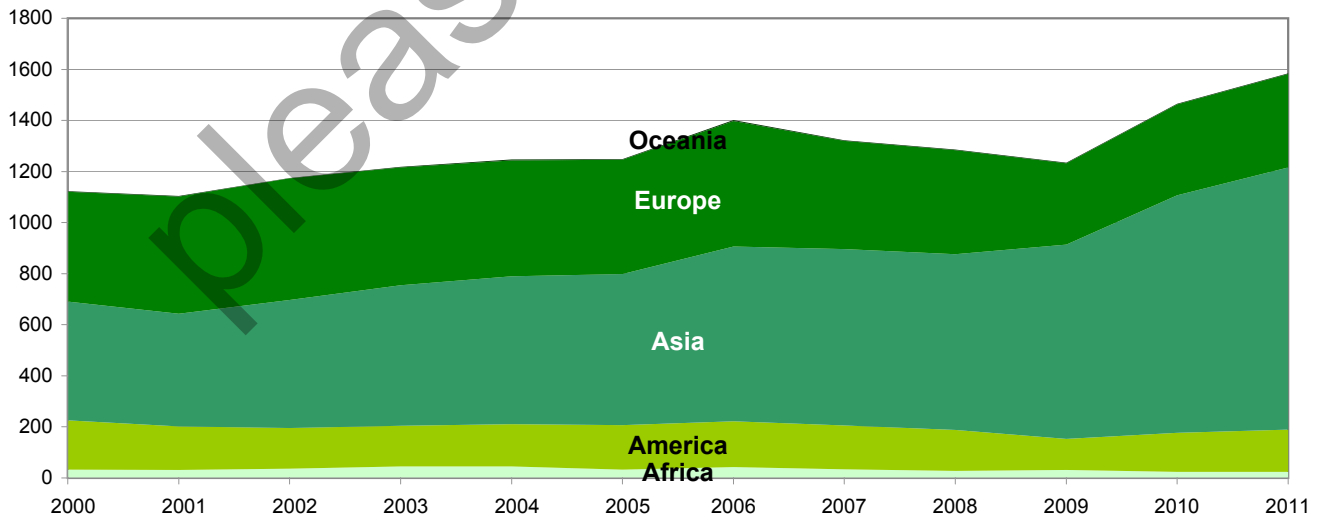
NICKEL USAGE (CONSUMPTION)

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Africa													
South Africa													
Other Africa													
America													
Brazil													
Canada													
Cuba													
Mexico													
United States													
Other America													
Asia													
China, P.R.													
Hong Kong													
India													
Japan													
Korea P.R.													
Korea, Rep.													
Taiwan, China													
Thailand													
Turkey													
Other Asia													
Europe													
EU27													
Austria													
Belgium/Lux.													
Bulgaria													
Czech Republic													
Finland													
France													
Germany													
Hungary													
Italy													
Poland													
Romania													
Slovenia													
Spain													
Sweden													
United Kingdom													
Other EU													
Norway													
Russian Fed.													
Switzerland													
Ukraine													
Oceania													
Australia													
New Zealand													
World Total													

Notes to table:

See Notes to Readers on page ii.



SUMMARY

WORLD MINE PRODUCTION, NICKEL PRODUCTION AND NICKEL USAGE

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Africa													
Mine Production													
Usage													
Balance													
America													
Mine Production													
Usage													
Balance													
Asia													
Mine Production													
Usage													
Balance													
Europe													
Mine Production													
Usage													
Balance													
European Union 27													
Mine Production													
Usage													
Balance													
Oceania													
Mine Production													
Usage													
Balance													
World Total													
Mine Inter.													
Production													
Usage													
Balance													

WORLD PRIMARY NICKEL PRODUCTION, USAGE (CONSUMPTION) AND BALANCE

'000 tonnes



**DELIVERIES TO BONDED WAREHOUSES IN THE NETHERLANDS
FERRO-NICKEL (HS 72.02.60)**

tonnes

From	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bulgaria											
Brazil											
China, P.R.											
Colombia											
Cuba											
Estonia											
Dominican Rep.											
European Union											
Germany											
Latvia											
Lithuania											
Moldova											
Russian Fed.											
Ukraine											
United States											
Venezuela											
Total	61145	56908	40577	7096	355	27757	35016	8044	7377	23266	14715

Notes to table: a) Tonnages in gross weight.
b) Figures refer to tonnages delivered to bonded warehouses in the Netherlands, including LME warehouses.

Source: Central Bureau of Statistics - The Netherlands.

**RELEASES FROM BONDED WAREHOUSES IN THE NETHERLANDS
FERRO-NICKEL (HS 72.02.60)**

tonnes

To	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Australia											
Brazil											
Canada											
China, P.R.											
Colombia											
Dominican Rep.											
European Union											
Austria											
Belgium / Luxemb.											
Finland											
France											
Germany											
Italy											
Spain											
Sweden											
United Kingdom											
Bulgaria											
Estonia											
India											
Japan											
Korea, Rep.											
Latvia											
Libya											
Russia											
Slovakia											
Slovenia											
South Africa											
Taiwan, China											
Ukraine											
United States											
Other											
Total											

Notes to table: a) Tonnages in gross weight.
b) Figures refer to tonnages delivered to bonded warehouses in the Netherlands, including LME warehouses.

Source: Central Bureau of Statistics - The Netherlands.

**DELIVERIES TO BONDED WAREHOUSES IN THE NETHERLANDS
UNWROUGHT NICKEL, NOT ALLOYED (HS 75.02.10)**

tonnes

From	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Australia											
Brazil											
Canada											
China, P.R.											
Colombia											
Czech Rep.											
Estonia											
European Union											
Belgium / Luxemb.											
Finland											
France											
Germany											
Italy											
Spain											
Sweden											
United Kingdom											
Hungary											
Israel											
Latvia											
Lithuania											
Norway											
Poland											
Russian Fed.											
Ukraine											
Slovakia											
South Africa											
Switzerland											
UnArabEmi											
Ukraine											
United States											
Zimbabwe											
Other											
Total											

Other

Figures refer to tonnages delivered to bonded warehouses in the Netherlands, including LME warehouses.

Source:

Central Bureau of Statistics - The Netherlands.

**RELEASES FROM BONDED WAREHOUSES IN THE NETHERLANDS
UNWROUGHT NICKEL, NOT ALLOYED (HS 75.02.10)**

tonnes

To	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Argentina											
Australia											
Azerbaijan											
Bolivia											
Brazil											
Bulgaria											
Canada											
China, P.R.											
Croatia											
Cuba											
Cyprus											
Czech Rep.											
Egypt											
Estonia											
European Union											
Austria											
Belgium / Luxemb.											
Denmark											
Finland											
France											
Germany											
Greece											
Ireland											
Italy											
Portugal											
Spain											
Sweden											
United Kingdom											
Hong Kong											
Hungary											
India											
Japan											
Korea, Rep.											
Malaysia											
Mexico											
Nigeria											
Norway											
Pakistan											
Peru											
Poland											
Romania											
Russian Fed.											
Singapore											
Slovakia											
Slovenia											
South Africa											
SriLanka											
Switzerland											
Syria											
Taiwan, China											
Thailand											
Turkey											
Ukraine											
UnArabEmi											
United States											
Zimbabwe											
Other											
Total											

Notes to table: Figures refer to tonnages released from bonded warehouses in the Netherlands, including LME warehouses.
Source: Central Bureau of Statistics - The Netherlands.

SUMMARY**TRADE IN REFINED NICKEL (CLASS I)**

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
EXPORTS													
Australia													
Brazil													
Canada													
China, P.R.													
European Union 27													
Belgium													
Finland													
France													
Germany													
Italy													
Netherlands													
Spain													
Sweden													
United Kingdom													
Hong Kong													
Japan													
Korea, Rep.													
Norway													
Russian Fed.													
Singapore													
South Africa													
Taiwan, China													
United States													
Zimbabwe													
IMPORTS													
Australia													
Brazil													
Canada													
China, P.R.													
Czech Rep.													
European Union 27													
Austria													
Belgium													
Finland													
France													
Germany													
Italy													
Netherlands													
Poland													
Spain													
Sweden													
United Kingdom													
Hong Kong													
India													
Japan													
Korea, Rep.													
Mexico													
Russian Fed.													
Singapore													
South Africa													
Switzerland													
Taiwan, China													
Thailand													
Turkey													
Ukraine													
United States													

Notes to table:

- a) Nickel trade refers mainly to trade in class I nickel (unwrought nickel, not alloyed, and nickel powder and flakes). For further notes also check the Nickel statistics by country section.
- b) Exports and imports for Brazil refer to electrolytic nickel as from 1997.
- c) For Hong Kong exports refer to re-exports.
- d) For Mexico, Poland and Turkey imports refer to unwrought nickel, not alloyed, only.

SUMMARY**TRADE IN CHARGE NICKEL (CLASS II)**

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
EXPORTS													
Australia #													
Brazil													
Canada #													
Colombia #													
Cuba #													
Dominican Rep. #													
European Union 27													
Austria #													
Belgium													
France													
Germany													
Greece #													
Netherlands													
United Kingdom													
FYROM													
Hong Kong #													
Indonesia #													
Japan #													
New Cal. (Fr.) #													
Russian Fed.													
Ukraine													
United States #													
Venezuela													
Yugoslavia													
IMPORTS													
Brazil													
Canada													
China, P.R.													
European Union 27													
Austria													
Belgium													
Finland													
France													
Germany													
Italy													
Netherlands													
Spain													
Sweden													
United Kingdom													
Hong Kong													
India													
Japan #													
Korea, Rep.													
Norway													
South Africa													
Taiwan, China													
United States #													

Notes to table:

- a) Nickel trade refers mainly to trade in class II nickel (ferro-nickel and nickel oxide sinter). Figures may include other intermediate products of nickel metallurgy, excluding nickel matte. For further notes also check the Nickel statistics by country section.
- b) Figures for countries marked with a # refer to nickel content. Figures for countries not marked with a # refer to gross weight.
- c) For Austria import figures for 1997 refer to oxide sinter only, exports as reports by importing countries
- d) For Canada export figures refer to oxide sinter only.
- e) For Dominican Republic exports as reported by importing countries.
- f) For China, P.R. up to 1997 imports as reported by exporting countries.
- g) For Italy import figures may include nickel matte.

PRODUCTION OF CRUDE STAINLESS STEEL

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
European Union													
Austria													
Belgium													
Finland													
France													
Germany													
Italy													
Spain													
Sweden													
United Kingdom													
Czech Rep.													
Poland													
Slovenia													
Total of countries above													
Stainless steel													
Of which austenitic													
Austenitic ratio (%)													
Japan													
Stainless steel													
Of which austenitic													
Austenitic ratio (%)													
United States													
Stainless steel													
Of which austenitic													
Austenitic ratio (%)													
Brazil													
Stainless steel													

- a) The European Union includes Austria, Belgium, Finland, France, Germany, Italy, Spain, Sweden and the United Kingdom up to 2002, after also the Czech Rep., Poland and Slovenia.
- b) For Japan data are based on hot-rolled steel (excluding heat resisting steel).
- c) Figures may not be comparable between areas because of the different methods used in compiling data.

USAGE (CONSUMPTION) OF NICKEL-BEARING SCRAP IN THE PRODUCTION OF STAINLESS STEEL

'000 tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
European Union													
Nickel-bearing scrap													
Nickel content													
Japan													
Nickel-bearing scrap													
Nickel content													
United States													
Nickel-bearing scrap													
Nickel content													

Notes to table:

- a) Nickel content estimated by the INSG Secretariat at 8% for the European Union and Japan and at 7.5% for the United States.
- b) The European Union includes Austria, Belgium, Finland, France, Germany, Italy, Spain, Sweden and the United Kingdom. Figures refer to purchased stainless steel scrap. For the European Union nickel scrap may include "high grade" scrap imported from CIS (former USSR) and therefore the overall nickel content may be underestimated.
- c) For Japan data refer to purchased and revert waste or scrap of nickel and nickel alloys, with a nickel content of 2% or more used for the production of stainless steel and alloy steels.
- d) For the United States figures refer to gross weight of purchased stainless steel scrap. All figures for the United States are subject to revision.
- e) Figures may not be comparable between areas because of the different methods used in compiling data.

AUSTRALIA

AUSTRALIA		NICKEL PRODUCTION										tonnes
Production	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Mine												
Intermediate												
Refined (class I)												
Charge (class II)												
Total finished												

AUSTRALIA		IMPORTS OF NICKEL ORES AND CONCENTRATES (HS 26.04.00)										tonnes
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Indonesia												
New Cal. (France)												
Philippines												
Total												

AUSTRALIA		IMPORTS OF NICKEL OXIDES AND HYDROXIDES (HS 28.25.40)										tonnes
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Other												
Total												

AUSTRALIA		IMPORTS OF NICKEL CHLORIDES (HS 28.27.35)										tonnes
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Other												
Total												

AUSTRALIA		IMPORTS OF NICKEL SULPHATES (HS 28.33.24)										tonnes
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Other												
Total												

AUSTRALIA		IMPORTS OF UNWROUGHT NICKEL, NOT ALLOYED (HS 75.02.10)										tonnes
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Canada												
Other												
Total												

AUSTRALIA		IMPORTS OF UNWROUGHT NICKEL, NOT ALLOYED (HS 75.02.10)										tonnes
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Canada												
Finland												
Hong Kong												
Norway												
Singapore												
United Kingdom												
Total												

Notes to table: Import figures as reported by exporting countries.

AUSTRALIA

AUSTRALIA IMPORTS OF WASTE & SCRAP OF STAINLESS STEEL (HS 72.04.21)											<i>tonnes</i>	
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
New Zealand												
Papua New Guinea												
Other												
Total												

Notes to table: Tonnages in gross weight.

AUSTRALIA IMPORTS OF NICKEL WASTE AND SCRAP (HS 75.03.00)											<i>tonnes</i>	
From	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
United Kingdom												
United States												
Other												
Total												

Notes to table: Tonnages in gross weight.

AUSTRALIA EXPORTS OF WASTE & SCRAP OF STAINLESS STEEL (HS 72.04.21)											<i>tonnes</i>	
To	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Bangladesh												n.a.
China, P.R.												
Hong Kong												
India												
Indonesia												
Japan												
Korea, Rep.												
Malaysia												
Myanmar (Burma)												
Netherlands												
New Zealand												
Pakistan												
Singapore												
Taiwan, China												
Thailand												
United Kingdom												
Vietnam												
Other												
Total												

Notes to table: a) Tonnages in gross weight.
 b) Figures for 2005 and 2006 under investigation.
 c) "Other" could include Taiwan, China for 2008 to 2011.

AUSTRALIA EXPORTS OF NICKEL WASTE AND SCRAP (HS 75.03.00)											<i>tonnes</i>	
To	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10/11
Malaysia												
Other												
Total												

Notes to table: a) Tonnages in gross weight.
 b) Malaysia is under investigation.

NICKEL CONTENT OF PRODUCTS FROM MINES, SMELTERS AND REFINERIES

These two tables on nickel content of products from mines, smelters and refineries are produced to assist users in converting gross weight of traded nickel products to nickel content. Missing information and corrections are welcomed for future issues.

MINES			
Country/Company	Location	Ore type	Ni content of ore (conc.)
Australia			
Outokumpu Mining Australia	Black Swan	Ni sulphides	
Titan Resources NL	Radio Hill	Ni sulphides	
WMC Limited	Mount Keith	Ni sulphides	
Finland			
Outokumpu Finmines Oy	Hitura	Ni, Ni-Cu sulphides	
Indonesia			
PT Aneka Tambang	S.E. Sulawesi Gebe Island	Laterite Laterite	
New Caledonia (France)			
Berton	Nakety M.C.	Laterite	
Nickel Mining Corp.	Kouaoua M.C.	Garnierite Laterite	
Soc. Le Niquel-SLN	Kouaoua, Thio and Nepoui M.C.	Garnierite Laterite	
Soc. Georges Montagnat	Tontouta & Karembe M.C.	Garnierite	
Soc. des Mines de la Tontouta	Moeno, Tontouta, Karembe M.C.	Garnierite Laterite	
Soc. Minière du Sud Pacifique	Ouaco, Boakaine, Poum and Poya M.C.	Garnierite Laterite	
Norway			
Nikkel og Olivin A.S.	Ballangen	Olivene + Ni as byproduct	
Titania A.S.	Hauge i Dalane	Ilmenite ore with sulphides	
Philippines			
Hinatuan Mining Corp.	Surigao/Eastern Samar District	Laterite	
Rio Tuba Mining	Palawan Island	Laterite	
Taganito Mining	Mindanao Island	Laterite	

SMELTERS AND REFINERIES			
Country/Company	Location	Product	Ni content
Australia			
Anaconda Nickel Ltd.	Murrin Murrin	Ni powder, briquettes	
Centaur Mining & Exploration Ltd.	Cawse	Ni cathode	
Preston Resources Ltd.	Bulong	Ni cathode	
QNI Ltd.	Yabulu	Ni rondelles Higrade Ni rondelles Ni oxide sinter granules, powder	
WMC Limited	Kalgoorlie Kwinana	Ni Matte Ni powder, briquettes Ni-Co Sulphide	
Austria			
Treibacher Industrie A.G.	Treibach	Fe-Ni granules	
Botswana			
BCL Ltd.	Selebi Phikwe	Ni-Cu sulphide matte	
Brazil			
Codemin	Niquelândia, Goiás	Fe-Ni granules, ingots	
Mineração Serra de Fortaleza Ltda	Minas Gerais	Ni Matte	
Cia. Niquel Tocantins	São Miguel Paulista, São Paulo	Ni cathode	

(table continued)