

23-INDUSTRY-CONSTRUCTION

Highly dependent on the **world nickel market**, metallurgy accounts for between 1 and 5% of New Caledonia's GDP over the years. With 1 300 employees at the end of 2005, it accounted for 2% of total paid employment.

The sector's origins go back to the end of the 19th century (first factory at pointe Chaleix in 1877), although its effective weight within the economy has remained modest. It is destined, however, to undergo development with the construction of 3 major projects, which could triple current production capacity by 2010.

Accordingly, in 2000 **SLN** undertook its "75 000 tonnes" programme, with a view to increasing production capacity at the Doniambo pyrometallurgic factory to 75 000 tonnes per annum by 2007-2008. In the factory, a new "Demag 10" oven was put into service in 2004 ; in terms of supply, garnieritic ore extracted from the Tiébaghi site is processed through an enrichment plant on site, prior to shipment by tanker to the Doniambo factory for transformation.

The Goro-Nickel project (Southern factory), undertaken by **INCO** (bought out by **CRVD** in 2006) with the participation of Japanese investors and **SPMSC**, aims to complete construction of a hydrometallurgic enrichment factory with an annual production capacity of 60 000 tonnes of nickel and 5 000 tonnes of cobalt, using lateritic ore extracted from the Goro massif. Work is well advanced, and operation is expected to commence before the end of 2007.

Lastly, the Koniombo pyrometallurgic factory project (Northern factory), a partnership between **SMSP** and the Canadian company **Falconbridge** (bought out by **Xstrata** in 2006), will process garnierite ore from the Koniombo massif. The factory, with an annual capacity of 60 000 tonnes, is due to be in production in 2009.

Local transformation of nickel ore creates more wealth for the New Caledonian economy than exports of the raw material : in 2005, 59 thousands of tonnes of nickel content exported as **fusion product** earned 655 million Euros, whereas the 48 thousands of tonnes of ore exports earned 133 million Euros.

► **World nickel market.** See 21.4.

► **GDP.** Gross Domestic Product. See 13.1.

► **Société Le Nickel (SLN).** Subsidiary of the French group Eramet located in New Caledonia, SLN operates mine sites (Thio, Kouaoua, Népoui-Kopéto, Tiébaghi and Kaala-Gomen), and the **Doniambo metallurgy factory** in Nouméa. It is New Caledonia's largest company : at the end of 2005 it employed 1 960 staff, with slightly more than two-thirds involved in metallurgy.

► **Doniambo factory.** Inaugurated in 1910 by Société des Hauts Fourneaux de Nouméa, it became the property of SLN in 1937. It manufactures **ferro-nickels** and **nickel mattes** using a pyrometallurgic process (combination of electric and rotating ovens).

► **INCO, Falconbridge, Eramet Xstrata, CVRD.** See section 21.4.

► **SPMSC.** Société de Participation Minière du Sud Calédonien, created in February 2005, enabling the three Provinces to purchase 10% of Goro Nickel (of which 50% for the Southern province, 25% for the Northern province and 25% for the Loyalty islands province).

► **Fusion products.** Metallurgic production comprises two main product categories.

- **ferro-nickels**, metal compounds containing an average 25% nickel and 70% iron, sold in the form of filings or lingots (the latter process ceased in mid-1999). Ferro-nickel production is exported to a variety of destinations.
- **nickel mattes**, metal compounds comprising an average 75% nickel and 20% sulphur and represent the raw material used in nickel production. These are exclusively destined for the Eramet factory at Sandoville near le Havre, in France.

SOURCES

[1] Direction de l'Industrie, des Mines et de l'Énergie (DIMENC), données statistiques.

[2] Direction Régionale des Douanes de Nouvelle-Calédonie (DRDNC), données relatives aux exportations de ferro-nickels.

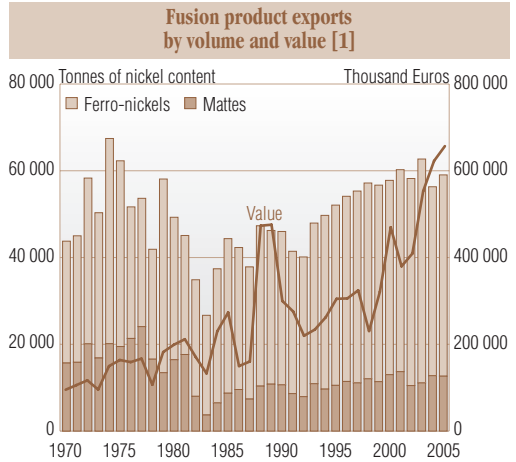
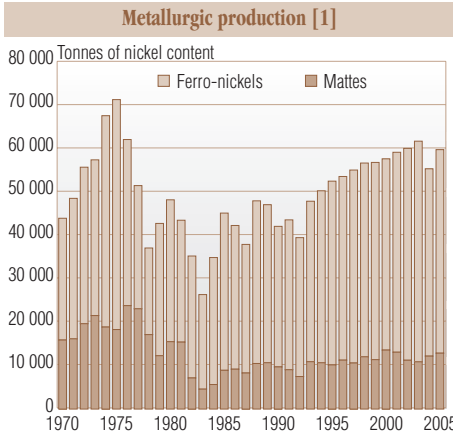
[3] Institut de la Statistiques et des Études Économiques (ISEE), Comptes économiques.

SEE ALSO

Institut de la Statistique et des Études Économiques (ISEE) : www.isee.nc

Direction Régionale des Douanes de Nouvelle-Calédonie (DRDNC) : www.douane.gouv.nc

23.1 NICKEL METALLURGY



Production and exports of fusion products* [1]

	Production		Exports	
	Volume	Value	Volume	Value
1970	43 821	43 613	43 613	94 728
1975	71 068	62 075	62 075	163 092
1980	48 059	49 104	49 104	198 388
1985	45 008	44 195	44 195	272 543
1990	41 961	45 841	45 841	298 973
1995	52 343	51 894	51 894	303 951
2000	57 463	57 579	57 579	468 660
2001	58 973	60 033	60 033	378 810
2002	59 867	58 007	58 007	408 173
2003	61 523	62 479	62 479	552 183
2004	55 180	56 112	56 112	621 427
2005	59 576	58 836	58 836	655 484

* Mattes and ferro-nickels

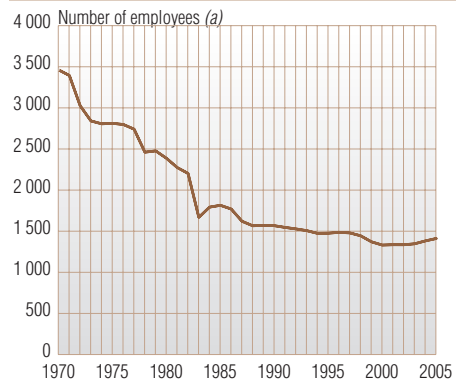
Units : tonnes of nickel content, thousand Euros

Production and added-value generated by nickel metallurgy [1 and 3]

	1998	1999	2000	2001
Production (P)	227 861	321 071	466 917	372 240
Intermediate consumption (CI)	194 584	198 103	284 576	276 456
Added-value (VA= P-CI)	33 277	122 968	182 340	95 775
Contribution to GDP	1.0	3.6	4.9	2.6

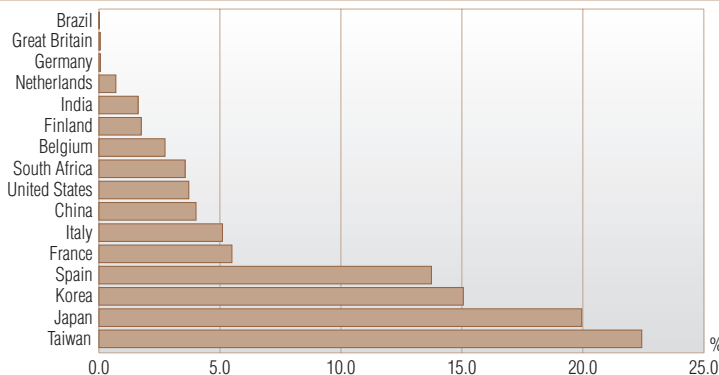
Units : thousand Euros, %

Employment in metallurgy [1]



(a) Average annual staff at the Doniambro factory.

Destinations* for ferro-nickels (2000-2005 average) [1]



* As a percentage of total value exported.