



2015 Minerals Yearbook

NEW CALEDONIA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF NEW CALEDONIA

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New Caledonia, which is an overseas territory of France, is located in the Pacific Ocean about 1,500 kilometers (900 miles) east of Australia. One-third of New Caledonia's main island, Grande Terre, is covered by the Peridotite Nappe terrane, which hosts one of the world's largest supergene nickel deposits. In 2015, New Caledonia's nickel deposits accounted for 8.2% of the world's production of mined nickel and 2.9% of its mined cobalt. In addition to nickel and cobalt, New Caledonia has historically produced antimony, copper, gold, lead, and zinc (Sevin and others, 2014; U.S. Central Intelligence Agency, 2016; Schnebele, 2017; Shedd, 2017).

In 2015, despite an increase in the tonnage of exports, the drop in the world nickel price affected ore sales. Overall, New Caledonia's economy continued to have a moderate rate of growth. The estimated gross domestic product (GDP) for 2015 increased to \$8.85 billion from \$8.84 billion in 2014.¹ The nickel industry contributed 3% to the GDP; and the services, administration, commerce, and agriculture sectors contributed 46%, 17%, 12%, and 2%, respectively (Institut de la Statistique et des Études Économiques Nouvelle Calédonie, 2015b, d; Comptes Économiques Rapides de l'Outre-mer, 2016).

Production

In 2015, New Caledonia produced 14.2 million metric tons (Mt) of crude nickel ore—9.3 Mt of saprolite ore and 4.9 Mt of laterite ore. The total nickel content obtained was 186,065 metric tons (t)—144,224 t from saprolite ore and 41,841 t from laterite ore. The gross weight and nickel content increased by 8.9% and 4.4%, respectively, compared with that of 2014. In 2015, New Caledonia produced 56,486 t of ferronickel and 6,761 t of nickel matte, representing a 3% increase and an 18% decrease, respectively, from that of 2014 (table 1; Direction de l'Industrie, des Mines et de l'Énergie de Nouvelle-Calédonie, 2015).

Structure of the Mineral Industry

The Directeur de l'Industrie, des Mines et de l'Énergie de la Nouvelle-Calédonie [New Caledonian Department of Industry, Mines, and Energy] (DIMENC) is the Government agency responsible for industrial development in the areas of energy and mining. The Mining Code of New Caledonia was established in 2009 for the purpose of simplifying and restructuring the country's mining laws and revising the mining regulations. The Mining Code includes a provision to establish conditions conducive for foreign investment and sets up an environmental protection framework. The Mining Code also includes provision for an inventory of New Caledonia's mineral resources and a

framework of principles for the export of metallurgical products (International Business Publications, 2013).

Major companies actively involved in nickel mining operations in New Caledonia included Koniambo Nickel SAS, Nickel Mining Company SAS (NMC), Société Le Nickel (SLN), Société Minière George Montagnat (SMGM), and Vale Nouvelle Calédonie S.A.S. (VNC). The following three companies operated nickel smelting facilities in New Caledonia: SLN (the Doniambo plant), Koniambo Nickel (the Koniambo plant), and VNC (the Goro plant). Société Minière du Sud Pacifique (SMSP) was New Caledonia's leading nickel exporter. Société du Nickel de Nouvelle-Calédonie et Corée Co. Ltd. (SNNC) was a joint venture between South Korean steelmaker POSCO and SMSP. SNNC produced and sold ferronickel and other products. The ownership, location, and production capacity of these facilities are provided in table 2 (Institut de la Statistique et des Études Économiques Nouvelle Calédonie 2015d; POSCO, 2017).

Commodity Review

Metals

Nickel and Cobalt.—Eramet SA of France (a mining and metallurgical group), through its subsidiary SLN, operated five mines and a metallurgical plant in New Caledonia. In 2015, SLN, in which Eramet owned a 56% stake, moved into a negative cash position. In an effort to reduce costs, Eramet decided to suspend its major projects in New Caledonia indefinitely, including halting the construction of a new powerplant at the Doniambo site. In 2015, the Doniambo plant produced 53,369 t of metallurgical products (ferronickel and nickel matte) compared with 55,012 t in 2014. As of 2015, SLN had 834 employees at its mining sites (Kouaoua, Nepoui-Kopeto, Thio, and Tiebaghi) and 1,241 employees at its Doniambo plant (Institut de la Statistique et des Études Économiques Nouvelle Calédonie, 2015c; Eramet Group, 2016).

SMSP held a 51% share in Koniambo Nickel, and the remaining 49% was held by Glencore plc. This joint venture processed garnierite ore (nickel ore) mined from the Koniambo Massif deposit located between Kone and Voh in New Caledonia's North Province. SMSP also held a 51% share in both NMC and SNNC, and POSCO held the remaining 49% share of these joint ventures. As of 2015, SMSP owned about 25% of the nickel reserves in New Caledonia (Koniambo Nickel SAS, 2016; POSCO, 2017).

VNC produced cobalt and nickel. VNC is located in southern New Caledonia, and its main shareholder was Vale S.A. of Brazil. In 2015, owing to the drop in prices and demand for nickel, VNC considered various options to ensure the continuation of production in New Caledonia as it continued to ramp up its operations there. VNC indicated, however, that if the options proved to be not feasible and conditions continued to be

¹Where necessary, values have been converted from Central Pacific francs (CFP) to U.S. dollars (US\$) at an average annual exchange rate of CFP 0.00917=US\$1.00.

adverse, then reductions in production might be considered for an unspecified period of time. In 2015, VNC produced 2.5 Mt of ore at a grade of 1.41% nickel compared with 2.1 Mt of ore at a grade of 1.44% nickel in 2014. In 2015, VNC produced 2,391 t of cobalt as a byproduct of nickel production compared with 1,384 t in 2014. This increase was a result of the rampup of operations at the company's Goro site (Vale S.A., 2016).

As of December 30, 2015, VNC did not report reserves for its New Caledonia operations. VNC indicated, however, that they expected future prices to rebound and that their operations in New Caledonia would continue to be economically viable. As of 2015, VNC had 444 employees at its mining sites and 526 employees at its Goro plant (Vale S.A., 2016).

In 2015, news of the possible closure of New Caledonia's main buyer of laterites, Palmer Nickel and Cobalt Refinery of Australia, caused nickel producers in New Caledonia to ask the Government for a permit to export laterites to other countries. The proposal was initially rejected by the Government, causing protests in Noumea, the capital of New Caledonia; however, the Government eventually agreed to allow certain companies to export nickel ore to China (Institut de la Statistique et des Études Économiques Nouvelle Calédonie, 2015a).

Outlook

The nickel sector suffered some setbacks in 2015 owing to the decrease in the world prices of nickel; however, New Caledonia's production remained stable. In 2016, New Caledonia's total exports of nickel ore will likely increase significantly owing to the authorizations granted by the Government in 2015 to allow some companies to export nickel ore to China. New Caledonia is expected to remain a significant producer of cobalt and nickel (Institut de la Statistique et des Études Économiques Nouvelle Calédonie, 2015a; L'Institut d'Émission d'Outre-Mer, 2016; Les Services de l'État en Nouvelle-Calédonie, 2017).

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TABLE 1
NEW CALEDONIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2011	2012	2013	2014	2015	
Cement	147,761	123,668	118,531	106,469	112,041	
Nickel:						
Ore:						
Gross weight	thousand metric tons	8,835	9,659	12,004	13,115	14,293
Co content		3,240	3,500	3,190	4,400 ^c	5,600 ^c
Ni content		128,732	131,693	164,406	178,080	186,065
Ferronickel:						
Gross weight		169,513	184,476	171,000 ^c	231,000 ^c	240,000 ^c
Ni content		40,015	43,030	40,459	54,683	56,486
Nickel matte:						
Gross weight ^c		18,400	17,900	17,700	11,000	10,000
Ni content		13,780	13,417	13,279	8,241	6,761

^cEstimated; estimated data are rounded to no more than three significant digits.

¹Table includes data available through January 4, 2017.

²In addition to the commodities listed, chromite, copper, crushed stone, gold, iron, manganese, silica, and silica sand were produced, but available information was inadequate to make reliable estimates of output.

TABLE 2
NEW CALEDONIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2015

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity ^c
Cement	Tokuyama Nouvelle Calédonie S.A. (Tokuyama Corp., 74.6%)	Grinding plant, Noumea	200,000
Cobalt, in ore and concentrate, Co content	Société Le Nickel (SLN) [Eramet Group, 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Kouaoua, Nepoui-Kopeto, Etoile du Nord, Thio, and Tiebaghi mining centers	3,000
Do.	Vale S.A., 80.5%; Sumic Nickel Netherlands B.V., 14.5%; Société de Participation Minière du Sud Calédonien SAS, 5%	Goro, 58 kilometers east of Noumea in the South Province	4,500
Nickel:			
In ore and concentrate, Ni content	Société Le Nickel (SLN) [Eramet Group, 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Kouaoua, Nepoui-Kopeto, Etoile du Nord, Thio, and Tiebaghi mining centers	55,000
Do.	Nickel Mining Company SAS (NMC) [Société Minière du Sud Pacifique (SMSP), 51%, and POSCO, 49%]	Ouaco, Poya, Nakety, Kouaoua, and Boakaine mining centers	31,000
Do.	Société des Mines de la Tontouta, 100%	Moneo and Nakety mining centers	50,000
Do.	Other small nickel mining companies, which include Société Minière George Montagnat SA (SMGM)	Tontouta mining center	1,000
Do.	Vale Nouvelle Calédonie S.A.S. (VNC) (Vale S.A., 80.5%; Sumic Nickel Netherlands B.V., 14.5%; Société de Participation Minière du Sud Calédonien SAS, 5%)	Goro, 58 kilometers east of Noumea in the South Province	60,000
In ferronickel, Ni content	Koniambo Nickel SAS (Société Minière du Sud Pacifique (SMSP), 51%, and Glencore plc, 49%)	Koniambo plant in the North Province	60,000
Do.	Société Le Nickel (SLN) [Eramet Group, 56%; Société Territoriale Calédonienne de Participation Industrielle (STCPI), 34%; Nisshin Steel Co., 10%]	Doniambo, Noumea	60,000
In nickel matte, Ni content	do.	do.	15,000
In nickel oxide, Ni content	Vale Nouvelle Calédonie S.A.S. (VNC) (Vale S.A., 80.5%; Sumic Nickel Netherlands B.V., 14.5%; Société de Participation Minière du Sud Calédonien SAS, 5%)	Goro plant in the South Province	57,000

^cEstimated. Do., do. Ditto.