

NEW CALEDONIA

By a Special Contributor

New Caledonia is located in the southwest Pacific Ocean, and comprises three regions. Grande Terre Island is divided into Northern and Southern Provinces, and the remaining region holds the Loyalty Islands of Ouvea, Lifou and Mare. The country is a French Territory, although a referendum four years ago may lead to increased autonomy. A further referendum on full autonomy from France is scheduled within 20 years.

New Caledonia is the world's fourth-largest producer of mined nickel and the largest producer of ferro-nickel, and nickel products dominate the economy. Nickel is produced from laterites which have higher nickel grades than those in Australia where lateritic nickel mining has presented numerous problems over the past few years.

The main producer in New Caledonia is Société Le Nickel (SLN), a 60%-owned subsidiary of the French group Eramet. The remaining interests in SLN are held by STCPI (30%), a company representing the interests of the indigenous Kanaks, and Nisshin Steel of Japan (10%). SLN operates four open-pit mines, and a fifth is operated by a sub-contractor. In addition to its mines, SLN operates the Doniambo ferro-nickel smelter at Nouméa, which processes about 3 Mt/y of nickel ore from the Thio, Kouaoua, Tiébaghi and Népoui-Kopeto pits, and from the Etoile du Nord operated by Soc. Georges Montagnat. The Doniambo smelter produces 80% of its 62,000 t/y capacity as ferro-nickel, and the remaining 20% as nickel matte (75% Ni) for refining at Eramet's plants in France. The smelter's capacity is scheduled to be expanded to 75,000 t/y at an estimated cost of US\$180 million. The facility produced 58,973 t of nickel (in ferronickel and matte) in 2001.

New Caledonia's second major nickel producer is Soc. Minière du Sud Pacifique

(SMSP), majority-owned by the Northern Province. It operates five limonitic nickel mines and the ore is delivered to the Yabulu smelter in Australia, operated by BHP Billiton.

SMSP was the recipient of the Koniambo nickel deposit in an asset swap instigated by the New Caledonian Government in 1997, and is now in a joint venture with Falconbridge Ltd concerning the development of Koniambo. Falconbridge plans to construct a smelter in the north of Grande Terre, which would rely on Koniambo ore as its main source of feed. Early this year, the joint venture secured a 15-year 100% tax holiday, plus a further, five-year 50% tax holiday for the project from the New Caledonian authorities. Prefeasibility and environmental impact studies are scheduled for completion this year. Koniambo is estimated to contain a resource of 151 Mt at an average grade of 2.58% Ni.

Inco Ltd holds 85% of the Goro lateritic nickel project in Southern Province in joint venture with France's Bureau de Recherches Géologiques et Minières (15%). Following a detailed feasibility study completed in March 1997 and involving SNC Lavalin and two other engineering firms, the partners spent some US\$50 million on constructing a 12 t/d integrated pilot plant and engineering work related to proprietary hydrometallurgical and solvent-extraction technology. In April 2001, Inco announced that the trials had been successful and that a full-scale nickel-cobalt plant would be constructed at a cost of US\$1.4 billion. In March 2001, Inco, which regards Goro as the centre-piece of its growth strategy, raised US\$200 million in a bond issue as part of the necessary financing but is seeking a suitable partner to share the cost. Sumitomo Metal Mining Co. announced in May 2002, that it has been in negotiations with Inco concerning participation in Goro for the past three years.

Production at Goro is expected to commence in late 2004 with an annual capacity of 54,000 t nickel and 5,400 t cobalt. The end products will be nickel oxide (78% Ni) and cobalt carbonate. Cash operating costs, after allowing for by-product credits, are estimated at less than US\$1.00/lb of nickel. The authorities have also granted Goro a 15-year, 100% tax holiday, followed by a five-year, 50% tax holiday. The new plant will provide around 800 permanent jobs and a further 1,500 indirectly. Goro has total resources of 370 Mt averaging 1.6% Ni and 0.17% Co, including proven and probable reserves of 47 Mt.

Inco was granted a preliminary exploration permit for the Prony lateritic nickel deposit by the Southern Province authorities in May 2002.

In October 2001, Perth-based Argosy Minerals Inc. finalised an agreement with Norilsk Mining Co. and Soc. Mines de la Tontouta (SMT) concerning a tripartite venture for the development of the US\$800 million Nakety - Bogota lateritic nickel project. Under the terms of the agreement, Norilsk will reimburse Argosy 45% of its costs to date (US\$7.17 million) and, thereafter, Norilsk can earn a 45% interest in the project by completing a bankable feasibility study over two years.

The feasibility study is expected to cost US\$15 million and includes additional resource/reserve drilling on the Bogota concessions. Nakety alone is estimated to contain a measured and indicated nickel

resource of 680,000 t in 34.6 Mt of ore, and Argosy has envisaged a mine and pressure acid-leach process capable of producing around 50,000 t/y of nickel. The feasibility study will be completed by Bateman Engineering in Australia, in conjunction with Norilsk's GipproNickel Institute in St Petersburg. Bogota is estimated to contain further resources of 140 Mt at an average grade of 1.5% Ni and 0.13% Co.

Norilsk can sequentially increase its stake by paying Argosy a further US\$17.5 million and providing the necessary banking guarantees to secure project financing for a further year. This would raise Norilsk's interest to 70%. Thereafter, a further payment to Argosy of US\$12.5 million, plus a final payment of an agreed 20% of the net present value of the project, would raise Norilsk's interest to 90%, with SMT holding the remaining 10%.

Future minerals legislation in New Caledonia is under review, as part of the process of devolvement of power from the French authorities to the New Caledonian Government. The Congress of New Caledonia is expected to have to prepare and adopt new mineral legislation, which will be effected by the adoption of other parliamentary or regulatory laws to be issued within the same transitional period. Mining investors and operators should expect significant changes in the overall framework for mining, in addition to new laws directly concerning the mining industry that have already been passed by the New Caledonia Congress.