



LE NICKEL - SLN

# TIEBAGHI

**La mine et la communauté**

***Mining and the community***

## **Tiébaghi : Mining and the Community**

Sln ( Société Le Nickel ) have been operating mines in New Caledonia for more than a hundred years. First world producer of ferronickel widely used in the stainless steel industry Sln is currently implementing its 75000 T expansion program on the island in order not only to keep up with the yearly increase in consumption of about 3 to 5% but also to improve its productivity.

The program requires the expansion of one of the 4 mining operations ( Tiébaghi mine ) and the revamping of one of the 3 electric furnaces of the smelting plant of Doniambo in Nouméa. Work currently in progress is bringing economic vitality to the island and especially to its Northern part.

The expansion of the mine of Tiébaghi with the creation of about 240 direct jobs and 70 indirect jobs set high expectations in the population of the town of Koumac where the mine is located but also in the surrounding communities.

Its own growth being closely related to New Caledonian history for the last hundred years and as a company largely in favour of sustainable development , Sln has continuously encouraged involvement of the Community as a whole during all the stages of implementation of the project.

The participation of the Community at different levels i.e French and New Caledonian Governments, Provincial and Municipal Councils, Customary organisations and local tribes and the local population is promoted through numerous formal and informal meetings where the program is presented and explained to everyone.

Training also an important part of the global effort towards the Community aims to employ as many as possible local people.

The very close work with the municipal council of Koumac focus on coordinating the expansion of the mine with the development of this small town of about 3200 inhabitants. During the construction period, regular contacts with local contractors allow their contributions to the project within their capabilities.

Speakers:

Dominique Chu Van:

Manager of the Engineering Department of Sln  
In charge of design and implementation of expansion and heavy maintenance programs for the mining operations and the smelting plant.

René Féré:

Administrative manager of the Tiébaghi Mine  
In charge of Public and Human relations

# The ERAMET Group

- **ERAMET is a French Group with Head Office in Paris**

Major shareholders are : SODRAME + CEIR (37,4%), Public (29,9%), AREVA + BRGM (27,6%), STCPI (5,1%)

- **ERAMET is a fully integrated mining and metallurgical Company**

it is a producer of non ferrous-metals and of non-ferrous metal chemicals and by-products, of special high quality steel, of nickel alloys and superalloys, and heavy duty components for industry.

- **Turnover : 2 100 millions euros (2002)**

- **Staff : 14.545**

- **Internet site : [//www.eramet.fr](http://www.eramet.fr)**



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# 3 Areas of Business

## Operations

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### ERAMENT Alloys

Turnover : 720 M (Euros)

Staff: 5 128

Special high quality steel making,  
nickel alloys and superalloys, and metal products from these  
and also from aluminium and titanium, including:

← Bar, sheet, wire, strip, coil and profiles.

← Castings and die casts...

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### ERAMET Manganese

Turnover : 879 M (Euros)

Staff: 7 060

Production of manganese alloys (ferro-manganese and  
silicomanganese)

and refined alloys and chemical by-products including their  
Oxides, Sulphates and Chlorides

Industrial Services : recovery and recycling of metals contained in  
catalyst used in the petroleum industry, batteries and acids  
from the electronic industry

A producer of high quality carbon black

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### ERAMET Nickel

Turnover : 501 M (Euros)

Staff : 2 357

Production of ferro-nickels and of high purity nickel.

Nickel and Cobalt Salts

Tungsten and cobalt powder making



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# SLN - LE NICKEL

## World Position :

First producer of ferro nickel in the world

One of three only high grade nickel metal producer in the world

## Markets :

Stainless Steel Industries (ferro nickel)

Aviation Industry, power production, electronics, surface treatment, coinage (high purity nickel)

Chemical Industry (nickel chloride)

## Production :

↖ From 4 mines (THIO, NEPOUI, KOUAOUA and TIEBAGHI) and the smelter in NOUMEA

↖ 59 000 tonnes of contained Nickel (2002) as ferronickel and nickel matte

↖ Increase in production to 75 000 tonnes



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## SLN's 75 000 T program

- Increase in SLN's production capacity (nickel metal)
  - 2002 : 60 000 T
  - 2006 : 75 000 T
- Objectives
  - Keep up with Nickel market growth
  - Strengthen SLN's competitiveness
- The projects
  - Develop the Tiebaghi mine
  - Renovate one electric furnace at Doniambo, take measures to reduce dust discharge







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**Tiebaghi  
Mine**

Developing the Tiebaghi mine involves raising its production capacity from 250 000 T in 2002, to over one million tonnes in 2006, to meet the additional requirements resulting from the Doniambo plant's increased metallurgical capacity

## **Planned investment**

Renovating one of the 3 electric furnaces, with new technology, for increased production capacity.



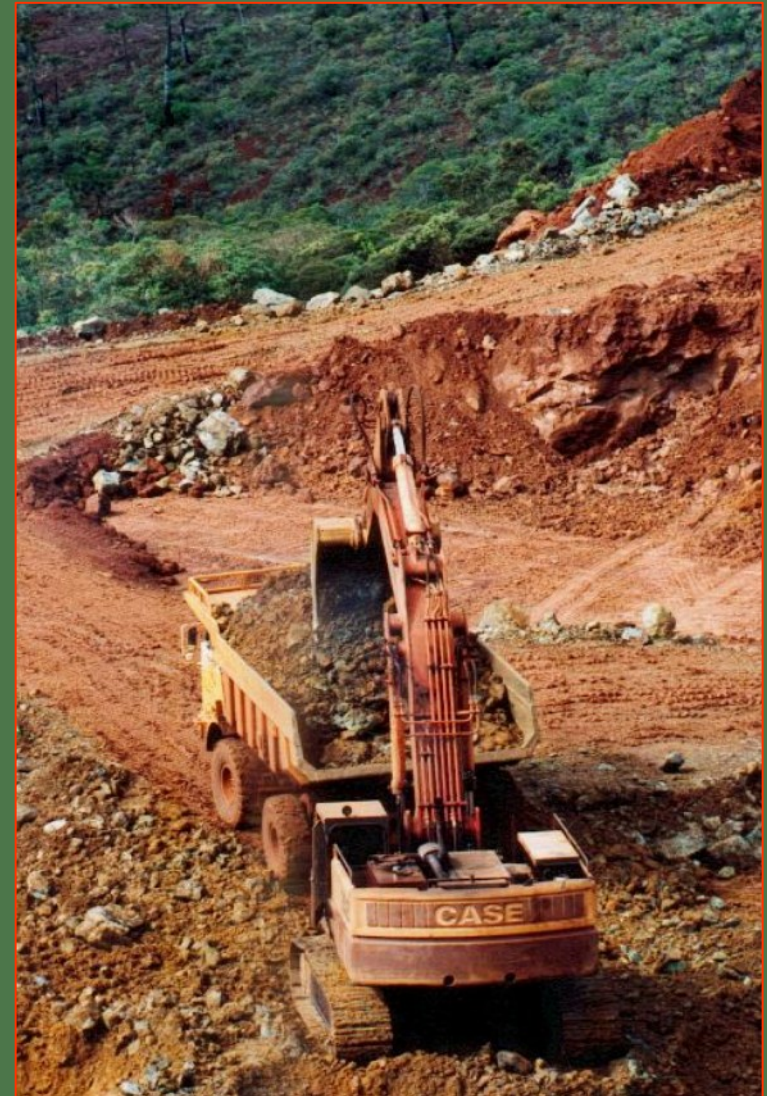
**Doniambo  
Plant**



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# The Tiebaghi Center Development 2002 – 2003

- Purchase of mining machines and equipment
- Construction of a seaside stockpile (stacker-reclaimer)
- Construction of a mechanized sea loading facility (at Pointe Elvie)
- Increase of SLN workforce to 240







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# Mine workshops and offices - Location





# Seaside stockpiling and sea loading

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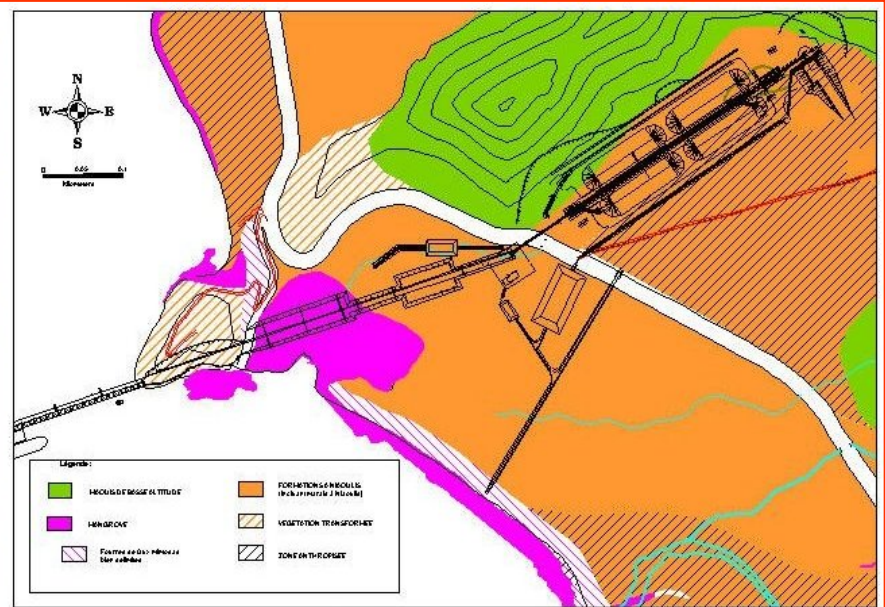
# Seaside stockpiling and sea loading





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# Seaside stockpiling and sea loading site





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# Seaside stockpiling and sea loading objectives

- To have a mechanized stockpiling and sea loading facility that can ship out over one million tonnes/year, while improving
  - Productivity
  - Work safety
  - Environmental protection
- The sea loading conveyor characteristics
  - Total length approximately 1.7 Km, with 1.2 Km over the sea



# Stockpiling and sea loading

## Environmental protection (1)

- Protective measures
  - Balance of cuts & fills: no opening of new quarries
  - Impact on the landscape
    - stockpiling: replanting along the main road
  - Noise reduction:
    - construction of a vegetation-covered embankment along the ore transport route



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# Stockpiling and sea loading Environmental protection (2)

- Protective measures (continued)
  - Water management on land
    - collection of runoff around the facilities and treatment in storm water catchments
    - collection of water from the facilities and treatment in settling tanks
    - protection of facilities from flooding by diverting a creek located above them
    - drains under the mangrove fills to allow water to flow through



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- Protective measures (continued)
  - Sea conveyor
    - dry cleaning of conveyor belts
    - scrapings recovery system
    - reversal of conveyor belt over the sea (returns empty)
    - slow-moving wide belt (1 400mm)





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# ☆ - THE COMMUNITY



# 1.1 – Accompanying action by the authorities

- Independent monitoring of development work at Tiebaghi by a Committee comprising representatives of the French Government the Territory of New Caledonia, the North Province, the Municipal Council and the Customary Authorities.

Purpose: review implementation of the investment program and any problems encountered.

- At Provincial level:
  - Provincial Commissions
- At Municipal level:
  - Information of the municipal council





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## 1.2 – Accompanying action in the community

- Anthropological study of local communities
- Conducting a large number of meetings with a limited audience
- Identification of motivation and skills,
- Distribution of direct jobs
- Development of local businesses





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## - EMPLOYMENT





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## 2.1 – Job creation

- creation of 240 direct jobs and 70 indirect jobs

## 2.2 – Type of skilled jobs

- machine operators
- mechanical and electrical maintenance technicians
- industrial operators (in charge of running installations)
- mining and environment technicians
- geology technicians
- office workers





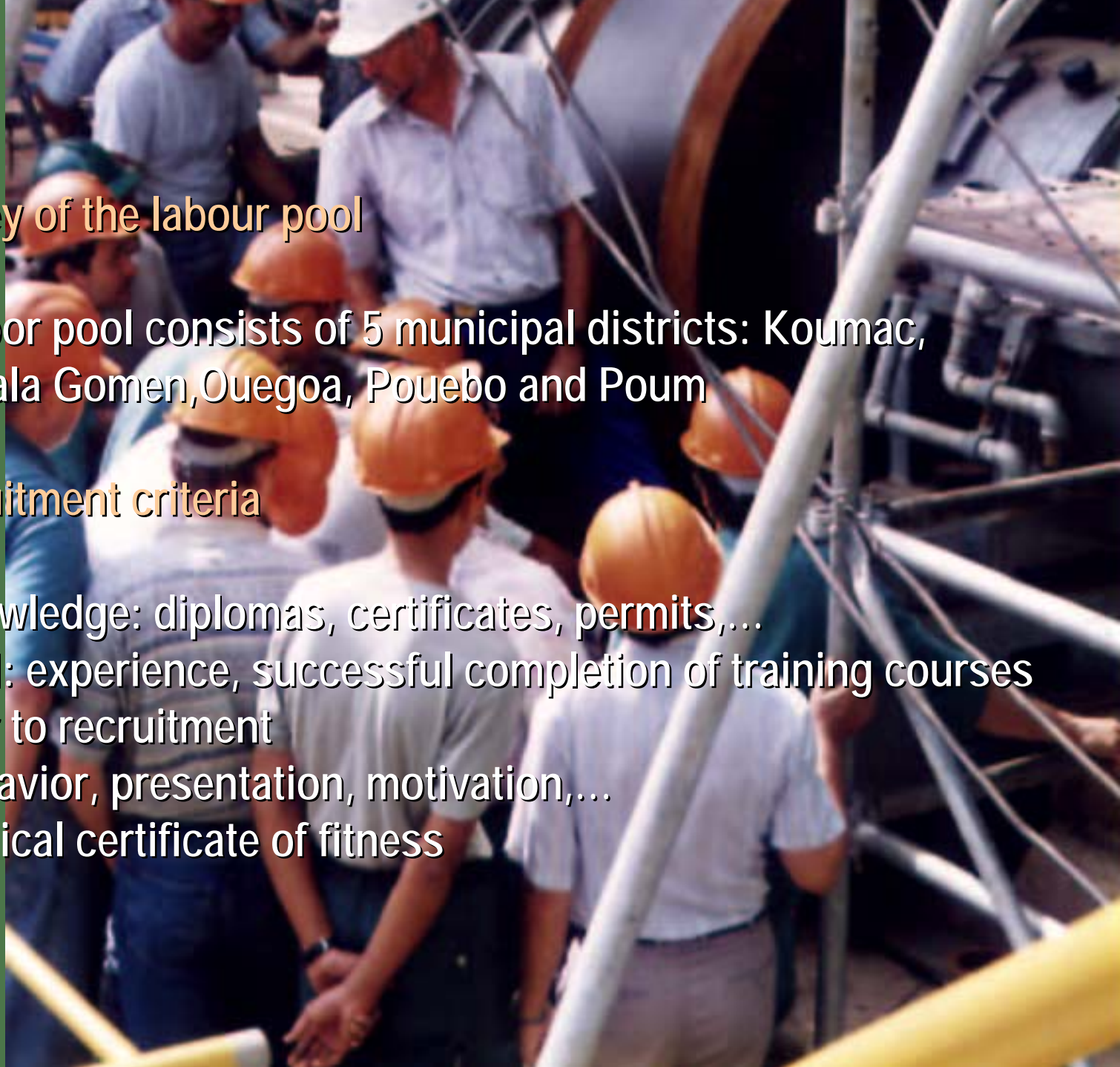
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## 2.3 – Survey of the labour pool

- Labor pool consists of 5 municipal districts: Koumac, Kaala Gomen, Ouegoa, Pouebo and Poum

## 2.4 – Recruitment criteria

- Knowledge: diplomas, certificates, permits,...
- Skill: experience, successful completion of training courses prior to recruitment
- Behavior, presentation, motivation,...
- Medical certificate of fitness





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# - TRAINING





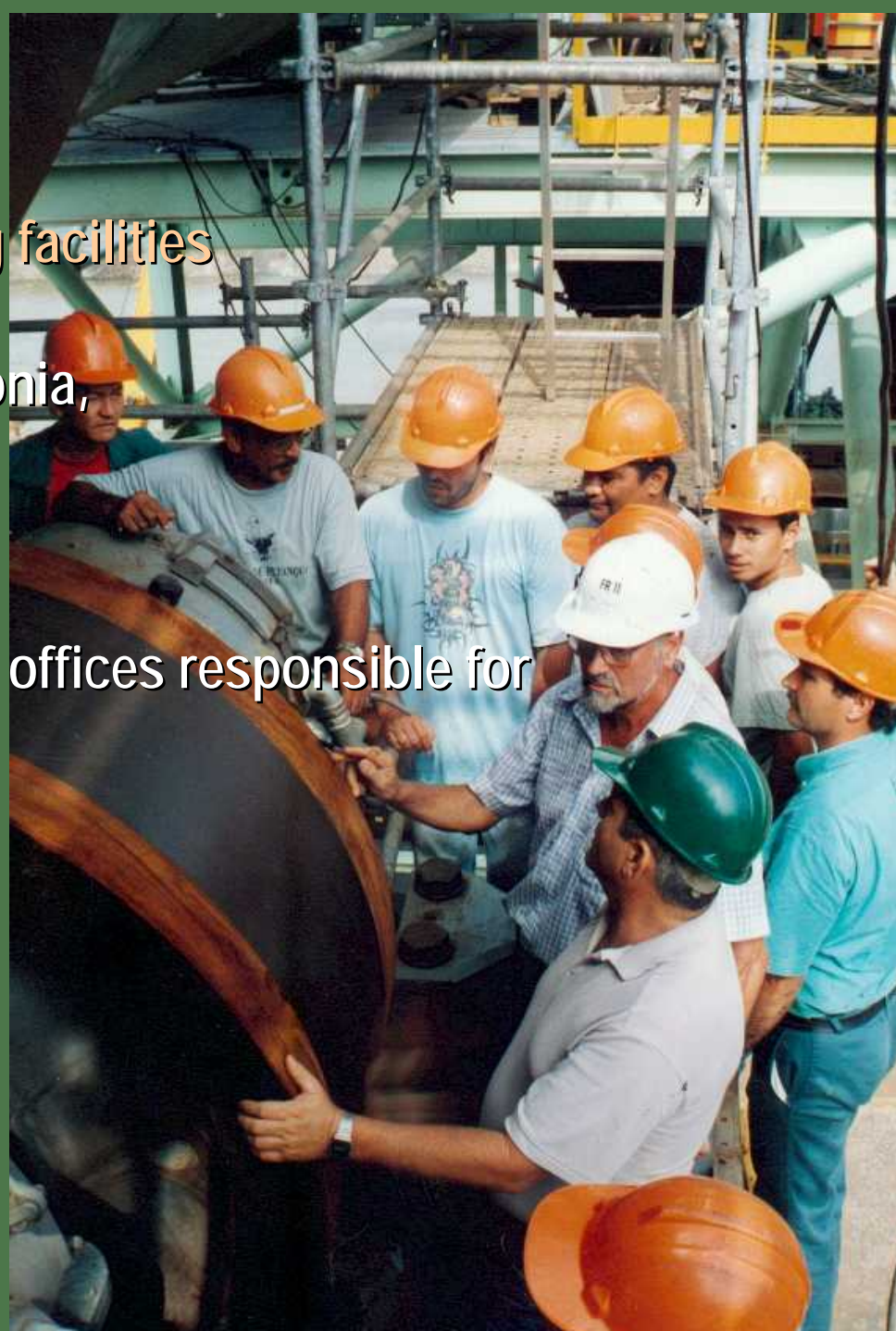
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### 3.1 – Cooperation with local training facilities

- University of New Caledonia,
- CFTMC
- ETFPA
- GSMA
- Territorial and Provincial offices responsible for vocational training

### 3.2 – In-house training

- pre-recruitment
- on-the-job





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🕒 - COORDINATING THE DEVELOPMENT  
OF THE MINE WITH THE GENERAL  
DEVELOPMENT OF THE KOUMAC DISTRICT





## 4.1 – Expected population increase in Koumac township and surrounding areas

- about 50% over the next 5 years

## ■ 4.2 – Infrastructure requirements

- Water, energy, roads, schools
- Public welfare services
- Administration
- Health
- Communication
- Safety





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## 4.3 - Housing

- municipal subdivisions
- hotels
- private building operations
- tax benefit schemes
- social housing

