



# NEMANGKAWI

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## MINING INSTITUTE



From Will to Skill



**PT FREEPORT INDONESIA**

Affiliate of Freeport-McMoRan Copper & Gold

2013 / 2014

ROZIK B. SOETJIPTO  
PRESIDENT DIRECTOR OF PT FREEPORT INDONESIA

“Operating a mining company as complex as PT. Freeport Indonesia requires people with the right competence. This is what the Nemangkawi Mining Institute aims to do, which is to equip employees with the correct skillset before they start to contribute to the company. And by contributing to the company, our employees are indirectly contributing to the nation and community. As the largest employer in Papua, we are grateful to the opportunity presented to us to service our stakeholders. Our existence as a business entity goes along side with our objective to become a Good Corporate Citizen. At Nemangkawi, we are aggressively developing the Papuans in order to play an important role in our operations.”



“PT Freeport Indonesia’s Nemangkawi Mining Institute (NMI) fosters professional development in a number of ways. Apprentices and employees engage in active learning to improve their knowledge and skill in 25 of the most needed jobs in the mining industry. In addition to their focus on theory and applied practice in these jobs, these young men and women learn about working safely and contributing as part of a work team and as family and community members.

NMI’s Papuan Bridge Program provides intensive work readiness training for new Papuan university graduates to successfully transition from student life to the world of work. And NMI’s cooperative partnerships with Indonesian universities, including the Diploma Three Administrative and graduate MBA programs, provide opportunities to connect administrative concepts to mining business and sustainability. From individuals to groups, our focus at NMI is on providing paths to move from will to skill.”

JEANNIE DUNCAN  
ORGANIZATIONAL DEVELOPMENT

*“Yayasan Nemangkawi Mining institute is an educational institution founded by PT Freeport Indonesia and is managed by PTFI’s Organizational Development. NMI is located on a 8 hectare site in PTFI’s Light industrial Park in Kuala Kencana. NMI’s purpose is to provide adult education, Pre-Apprentice training, Apprenticeships and advanced Career Development opportunities, primarily for Papuans.”*

# NEMANGKAWI HIGHLIGHTS

- ❑ NMI Started in 2003 with only three jobs – Heavy Duty Mechanics, Operators and Underground Miners. In the first year, 170 apprentices enrolled in the programs.
- ❑ NMI now offers apprenticeships for more than 20 job titles.
- ❑ Since 2003, NMI has trained a total of more than 3,800 apprentices, 1,800 are in permanent positions. NMI now maintains more than 900 active apprentices in the program.
- ❑ NMI pioneered the development of standardized occupational assessment tests in Papua. Especially adapted to test aptitudes for training, the tests lead directly into the apprenticeship or the pre-apprenticeship programs.
- ❑ In 2006 a three year D3 Business Administration Program was started in cooperation with the Semarang's State Polytechnic. Each intake begins with 24 Papuan participants. To date 54 have graduated.
- ❑ In 2007, a two year MBA program commenced in partnership with the Institute of Teknologi Bandung, with 44 selected senior PTFI employees. In 2009, 41 employees graduated and a new program commenced with 39 participants.
- ❑ Each year NMI provides over, 2.5 million training hours to all apprentices.
- ❑ In 2009, NMI completed a new 1,800 square meter workshop complex and constructed an accommodation block for PTFI employees and others undertaking further training and development.
- ❑ In 2011, 39 apprentices from BHP Coal Mine Kalimantan completed NMI's technical trade apprentice program.
- ❑ In 2011, NMI completed a new electrical facility and a new welding facility at NMI is in progress. 2 additional hectares were cleared to expand the heavy equipment and Underground Miner Program.
- ❑ 2012 NMI Commenced the Papuan Bridge Program.
- ❑ NMI has 10 training simulators for training operators of caterpillar and Western star trucks and equipment.
- ❑ NMI capital expenditure to date has reached, US\$11,800,000
- ❑ NMI will celebrate its 10<sup>th</sup> Anniversary in 2013
- ❑ NMI will take delivery of 6 new pieces of mining equipment in 2013 / 2014. This investment totals nearly US\$ 3.2 million dollars.



Heavy Equipment operator Apprentices using CAT Simulator Training.

**Adult education program** - Adult education program is conducted for indigenous tribal groups in Mimika, the Amungme and Kamoro people who need increased literacy and numeracy. The program is conducted with others to develop technical job competencies. These three year programs consist of both off-job and on-job development.

## Adult Education Program



**Pre-apprentice Program** - Pre Apprentice Program is a part of the PTFI affirmative action policy and specifically for members of the local seven tribes.

The program is conducted at NMI to help participants develop basic knowledge, skills and attitudes required to enter the Apprentice Program. Pre-Apprentice program is an off-job development program, conducted entirely at NMI over a six month at 2012 period.

## Pre-apprentice Program

**Apprenticeship program** - Apprenticeship program at NMI is designed to provide opportunities for participants to develop knowledge, skills and attitudes required to obtain jobs which include trade and operator positions at PTFI and contractors, but employment is not guaranteed. Apprenticeship involves a three year program with three to four months off-job instruction each year and around eight months on-Job training (OJT). NMI administers and monitors both the off-job and on-job development of each student as they progress through the Apprenticeship Program modules. NMI apprenticeship program follows the Indonesian Mining and Manpower Department regulations.

## Apprenticeship Program



# NMI EDUCATIONAL AND TRAINING PROGRAMS

## Master of business administration program

**Master of business administration program** - Nemangkawi Mining Institute (NMI) in cooperation with Institut Teknologi Bandung conducts an MBA program for staff of PTFI which commenced in April 2007.

# NMI EDUCATIONAL AND TRAINING PROGRAMS

## D3 Business Administration Program

**D3 Business administration program** - This program is conducted by Nemangkawi Mining Institute (NMI) in cooperation with the state Polytechnic in Semarang. The purpose of this program is to provide professional development in administration skills, with Government Certification. This program started in July 2006.

## Training and Development of PTFI Employees

**Training and development of PTFI Employees** - NMI is the center of training and development for PTFI employees. In cooperation with Quality Management Services, NMI offers training, development and assessment to enable PTFI employees to improve their knowledge and skills to increase their competencies. Training courses include off-job Technical development, computer, language and leadership skills, safety and other specific knowledge-based training.



## Papuan Bridge Program

**Papuan Bridge Program** - (PBP) provides an opportunity for Papuan university graduates to receive assistance in the transition from university into the professional work environment. The program provides basic training in leadership, computer skills, public speaking and interviewing in order to prepare themselves as independent professionals. They are then able to better compete for entry into the working world.



NMI D 3 Intake Graduation 2012

# COMMITMENT TO L

NMI provides a world class competency-based training system to support Apprentice, Pre Apprentice and Adult Education Programs. These programs give priority development and potential employment opportunities to qualifying Papuans.



- NMI is increasing the human resources in our area by providing valuable personal development to thousands of individuals.
- NMI works in partnership with the Government of Indonesia, Papua Province, Mimika regency, neighboring communities and other companies.
- NMI programs provide opportunities to Papuans by providing them with the skill sets and work experience to make them competent and marketable as prospective employees throughout Indonesia.

# LOCAL DEVELOPMENT



## PTFI Achievement

- PTFI total Papuan employee numbers grew from 844 in 1996 to more than 3000 by 2007 and more than 3,400 in 2009, and 4070 Papuans in 2012 are currently employed.
- By 2009, more than 1450 Papuans were employed by contractors serving PTFI. The number increased to 2015 by 2012.
- Papuan employees in leadership positions grew from 67 in 1996 to more than 606 in 2013.

## NMI Achievement

- Apprentices, most of whom are Papuan, receive some 2.5 million hours of on-and-off job training every year.
- In 2007, the Asian Mining Congress awarded NMI the Best Community Development Project award.
- By 2012, more than 2100 NMI Apprentices had moved to permanent PTFI or contractor companies positions and more than 900 are currently in training.
- Six fully funded scholarships were provided to Papuans to complete programs operated in conjunction with PTFI. All six graduated in 2009. A further seven scholarships have been awarded to Papuan employees who participated in the second MBA program.



# NMI WORLD CLASS FACILITIES

- ❑ A eight hectare site in the PTFI's Light Industrial Park (LIP)
- ❑ A resource center with technical library.
- ❑ Five classroom blocks.
- ❑ Two Large workshops.
- ❑ Fifty Yayasan Staff and Instructors are supported by more than 250 Organizational Development accredited instructors/assessors.
- ❑ Three full scales underground mining simulation areas with facilities for hauling, loading, dumping, ventilation, all services and the use of jacklegs. Operations trainees experience simulated UG conditions in a safe environment.
- ❑ Ten simulators for Caterpillar and Western Star trucks and equipment Operations. Trainees experience simulated pit conditions in a safe environment.
- ❑ Two hectare heavy equipment operating area for truck & equipment operations in a controlled environment.
- ❑ A total of 20 operational mining equipment are used for practical operator training at NMI. These include:
  - Three Elphinstone UG Haul Trucks
  - Three Elphinstone UG Loaders
  - One Cat 793 Haul Truck mechanical training aid
  - One CAT Telehandler
  - Two CAT 777 Haul Trucks
  - One CAT Track Excavators
  - One CAT Graders
  - Two CAT Track Dozer
  - Two western star trucks
  - One Iveco Truck
  - Cat Wheel loader
  - Cat D 40 Forklift
  - Numerous components for mechanical training
- ❑ Six new pieces of Heavy equipment have been ordered and will be delivered in 2013/2014
- ❑ Training materials, programs, and accreditation of instructors follow national and international standards.
- ❑ Facilities comply with PTFI FRESH Standard and environmental standards.



NMI 777 CAT Truck

# DEVELOPING A PERFORMANCE CULTURE



- Apprentices are required to develop technical skills, including soft skills.
- All training is competency-based.
- Each individual is assessed against their basic job competencies
- Apprentices experience on-job as well as off-job competency development. This develops skills and positive work habits.
- Training is 20% theoretical and 80% practical.

- Training includes safety, environment, communication and contribution to quality outcomes.
- Soft Skills include: Industrial relations, security, health and well-being.
- Apprentices are encouraged to apply self-study in their competency development.
- The performance indicators for all apprentices include safety health and environment, contribution to crew output and performance, initiative, attendance, behavior in the workplace and progress in completing competencies. All apprentices target 100% competency achievement.
- NMI has a fully trained administration & counseling team that assists apprentices in both the lowland & highland operations.

## Our Goal is Excellence

Instructors / Supervisors conduct daily, weekly and monthly reviews and quality evaluations. Apprentices are given every opportunity to enhance their capabilities to achieve the competency levels required.

Apprentices are eligible to fill PTFI positions during or after completing their competency development programs, provided they have successfully completed at least 33% of the jobs basic competence. Otherwise, apprentices are required to continue with the apprentice program.





Electrical Training



In class training sessions

# QUICK FACTS

602 Heavy duty  
Mechanics  
already trained  
at NMI Since  
2003

More than 924  
Heavy  
Equipment  
Operators  
trained at NMI  
since 2003

OPERATOR  
TRAINING  
SIMULATION AREA

More than 850  
Underground  
Miners trained  
at NMI since  
2003

More than 2100  
apprentices  
moved to  
permanent  
position from  
NMI since 2003



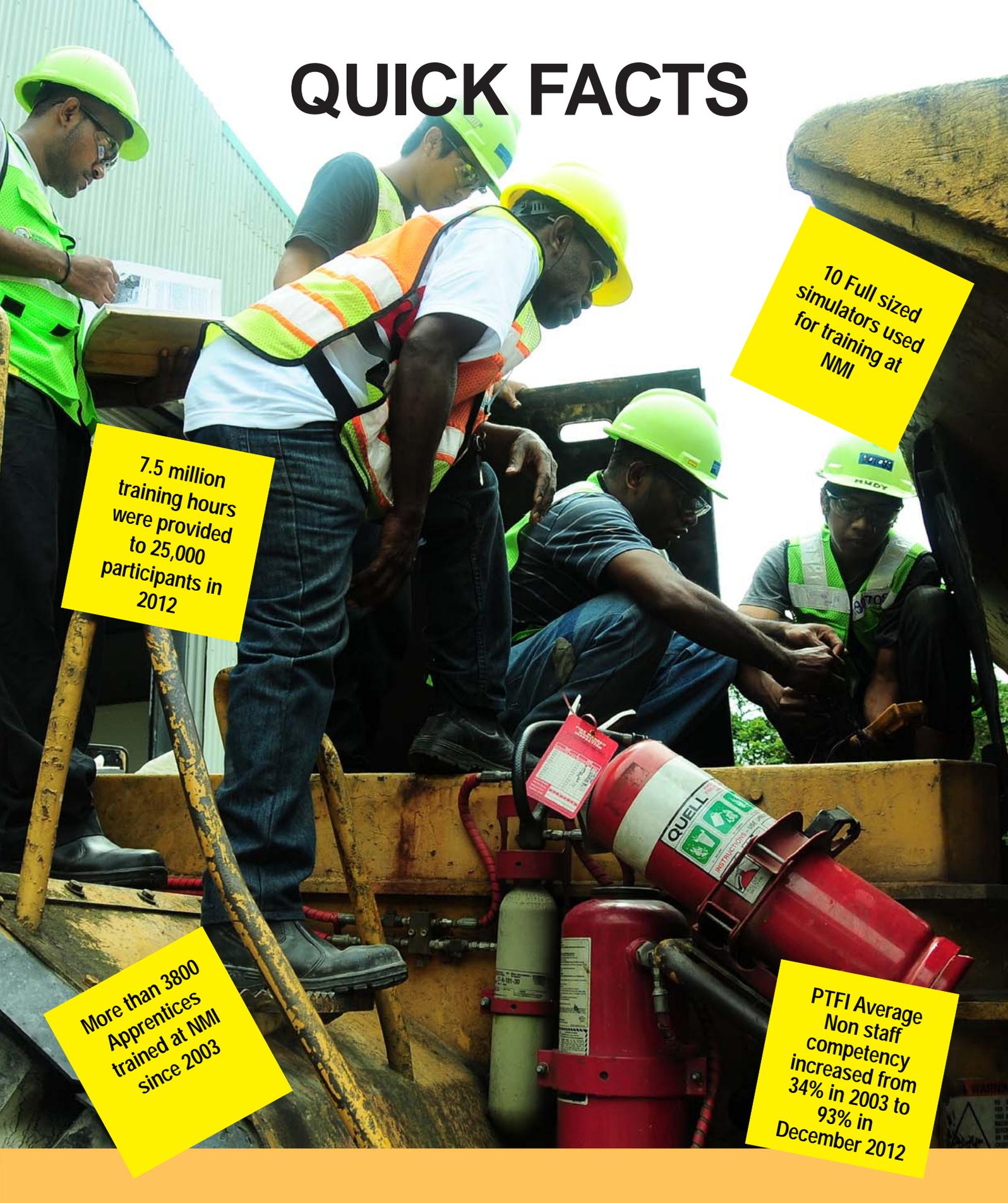
# QUICK FACTS

10 Full sized  
simulators used  
for training at  
NMI

7.5 million  
training hours  
were provided  
to 25,000  
participants in  
2012

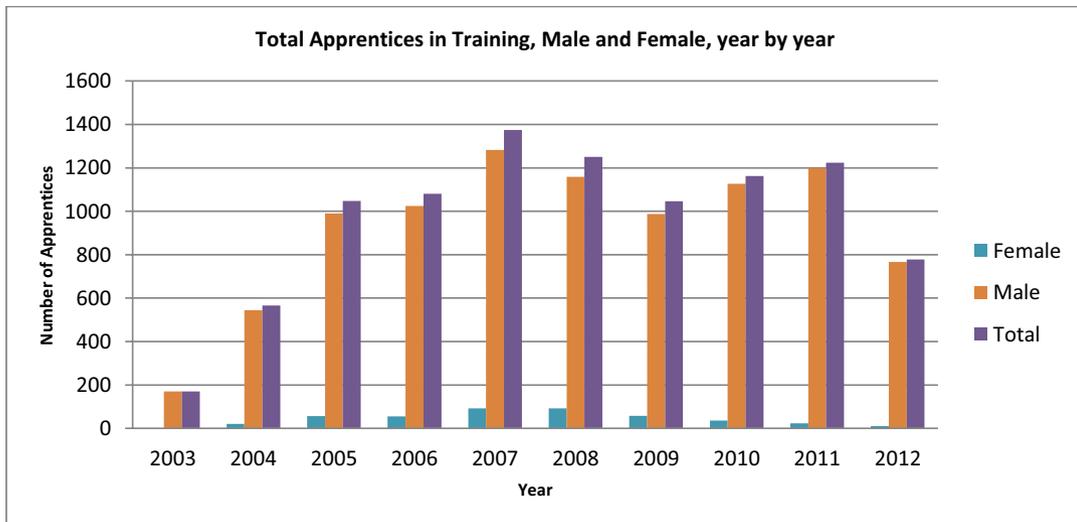
More than 3800  
Apprentices  
trained at NMI  
since 2003

PTFI Average  
Non staff  
competency  
increased from  
34% in 2003 to  
93% in  
December 2012

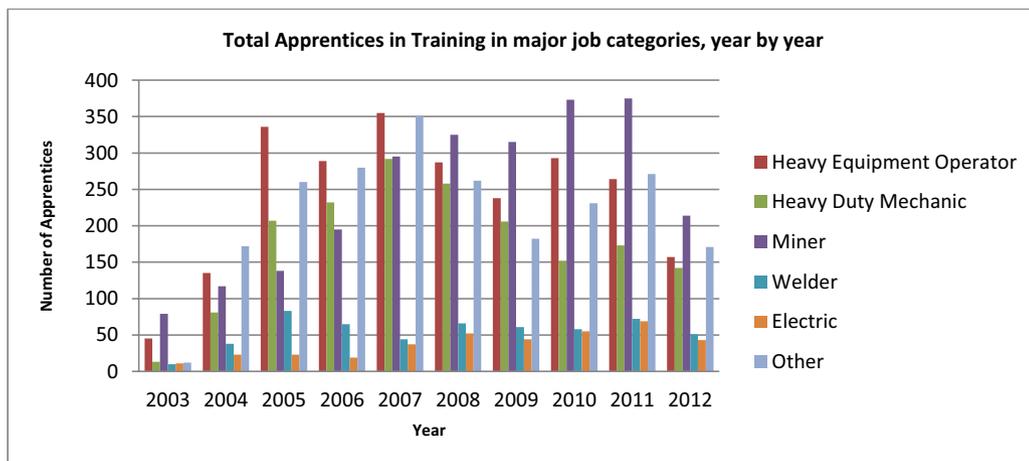
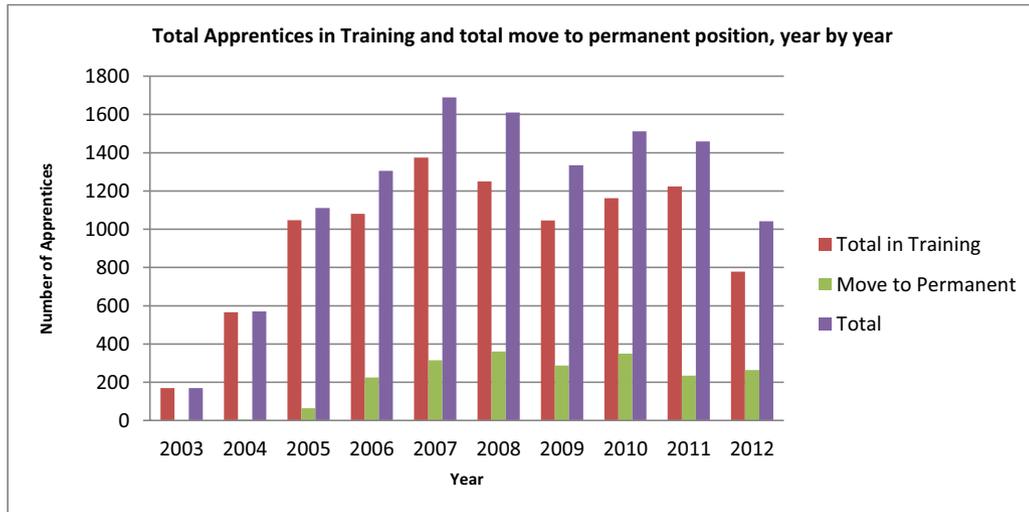


# NMI STATISTICS 2003 – 2012

1. 602 Heavy Duty Mechanics already trained at NMI since 2003
2. More than 924 Heavy Equipment Operators trained at NMI since 2003
3. More than 850 Underground Miners trained at NMI since 2003
4. More than 2,100 Apprentices move to permanent position from NMI since 2003
5. More than 3,800 Apprentices trained at NMI since 2003



# NMI STATISTICS 2003 – 2012





On the job training for Apprentices



“I HAVE  
ACQUIRED  
SKILLS  
THANKS TO  
NEMANGKAWI”

- *Noelmina Wenda* -

Female haul truck operator,  
graduate of Nemangkawi  
Mining Institute PT Freeport Indonesia

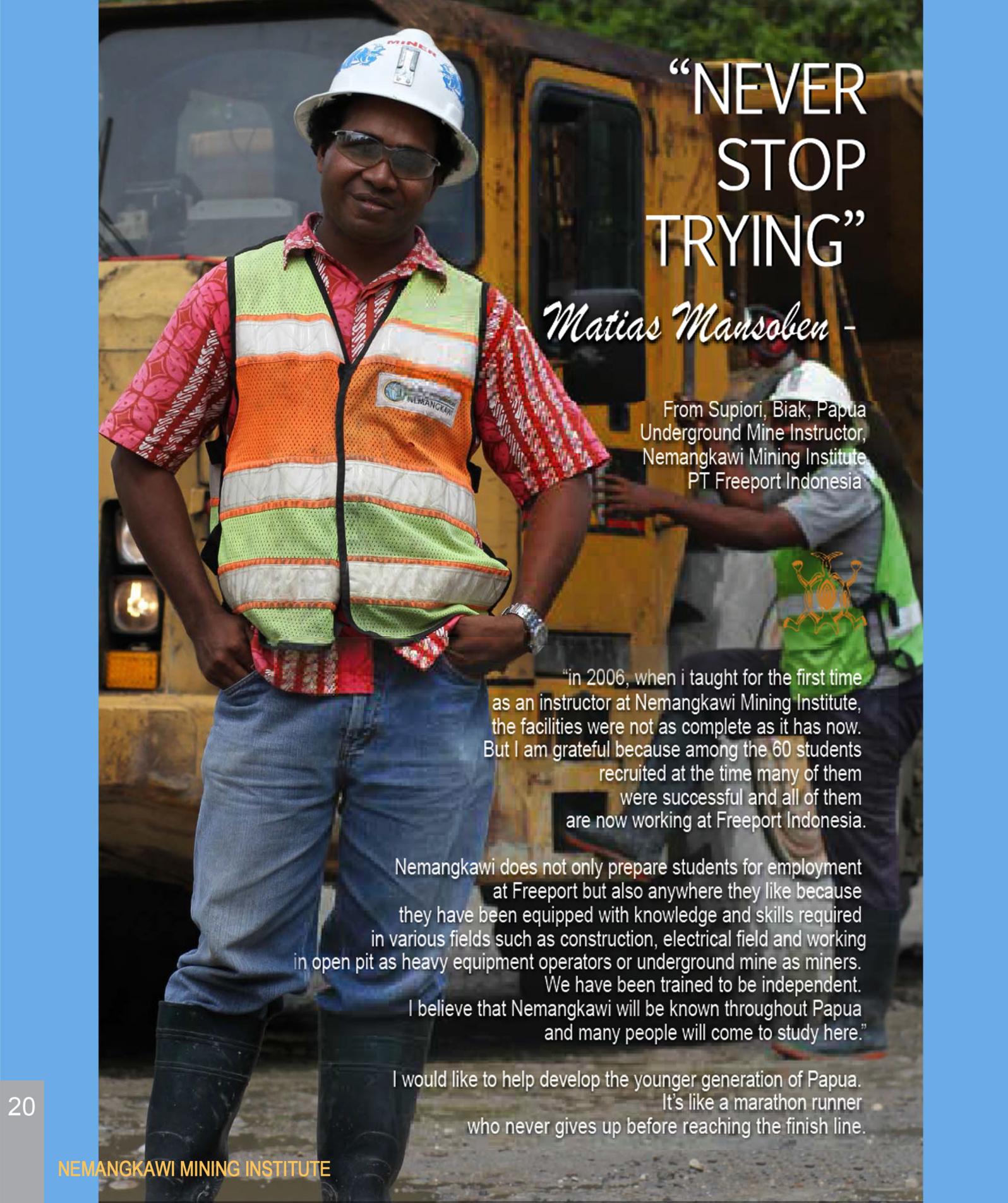


### Two Personal Success Stories.

These two real life case studies illustrate the personal growth and success experienced by many of the apprentices who develop through NMI to become full time employees. They produce standards of performance that are readily comparable with that of employees in many other mines around the world and have outstanding commitment and motivation.

“As a student of Nemangkawi Mining Institute I was trained various skills, starting from character building to techniques on how to be a haul truck operator. At Nemangkawi, we learned disciplines along with strict rules. I enjoyed various facilities, free school, monthly pocket money and free meals. I never thought that there was such a school with world-class facilities in Timika, Papua.”

If I can be successful, I am sure that people from my community can also be successful, or perhaps even more successful.”



# “NEVER STOP TRYING”

*Matias Mansoben -*

From Supiori, Biak, Papua  
Underground Mine Instructor,  
Nemangkawi Mining Institute  
PT Freeport Indonesia

“in 2006, when i taught for the first time as an instructor at Nemangkawi Mining Institute, the facilities were not as complete as it has now. But I am grateful because among the 60 students recruited at the time many of them were successful and all of them are now working at Freeport Indonesia.

Nemangkawi does not only prepare students for employment at Freeport but also anywhere they like because they have been equipped with knowledge and skills required in various fields such as construction, electrical field and working in open pit as heavy equipment operators or underground mine as miners.

We have been trained to be independent. I believe that Nemangkawi will be known throughout Papua and many people will come to study here.”

I would like to help develop the younger generation of Papua. It's like a marathon runner who never gives up before reaching the finish line.

# TOWARDS A STUDENT AGREEMENT

- NMI coordinates candidate registration with the Government Manpower Department (Kantor Dinas Tenaga Kerja – Disnaker) Timika
- Applicants send an application letter, curriculum vitae or resume, identity card, school certificate, birth certificate (18 - 30 years old) and other documents required to the Government Manpower Department.
- NMI visits Disnaker regularly to collect screened applications.
- NMI coordinates with HR Occupational Assessment Center to schedule candidate's assessment tests.
- HR Occupational Assessment Center process the test answer sheets and submits the results to NMI.
- NMI develops a list of suitable candidates based on the candidates' test results and sends it to Disnaker Timika.
- Disnaker Timika announces the candidates elected by posting the list on the Disnaker announcement board.
- NMI coordinates with PTFI designated medical doctor to conduct medical examinations for those candidates who pass the initial screening and assessments. All candidates must PASS underground medical fitness standard.
- Candidates who pass the entire process sign student agreements prepared by NMI and start their Apprenticeship, Pre-Apprentice or Adult Education program at NMI.
- Students arrange their own transportation and their accommodation in Timika.
- Students receive Monthly benefits including Pocket Money, transportation and other allowance. The actual amount is adjusted based on the apprentice's competency level and performance.



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