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# "AMBATOVY WILL CONTINUE TO MEET ITS COMMITMENTS"

Madagascar's largest industrial unit is entering a new era with the arrival of its new President. After a mandate of 4 and a half years, Mr. Stuart Macnaughton, left Ambatovy, and passed the torch on to Mr. Gustavo Gomes, who will preside over the activities of the company. Mr. Gomes was introduced on Monday, November 22, 2021, in Antananarivo, to national and regional authorities and public and private sector officials in the presence of media and civil society representatives.

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## GUSTAVO GOMES: AMBATOVY'S NEW PRESIDENT

# "AMBATOVY WILL CONTINUE TO MEET ITS COMMITMENTS"

*Madagascar's largest industrial unit is entering a new era with the arrival of its new President. After a mandate of 4 and a half years, Mr. Stuart Macnaughton, left Ambatovy, and passed the torch on to Mr. Gustavo Gomes, who will preside over the activities of the company. Mr. Gomes was introduced on Monday, November 22, 2021, in Antananarivo, to national and regional authorities and public and private sector officials in the presence of media and civil society representatives.*

**H**is message at the welcoming ceremony was clear. «*I have witnessed the benefits that mining can bring to the economic and social development of a country*», he said. Gustavo Gomes is an Australian Brazilian with 35 years of experience in the mining sector, including 10 years in Africa. He is a seasoned professional who knows very well all the facets of a mining company. With great enthusiasm, Ambatovy's president announced: «*I am aware of the responsibilities that come with leading a company the size of Ambatovy. We are committed to pursuing our activities in a sustainable, responsible and efficient way and in compliance with good governance in order to generate tangible benefits for the country. It is a responsibility we gladly assume towards our employees, our host communities, our customers and subcontractors, and our shareholders – who have strongly supported this company. I can assure you that Ambatovy will continue to meet its commitments.*»

### Valuable support

As Ambatovy is aware that it holds an important place in the national economy, being the largest industrial unit of the country, the new President took the opportunity to thank the guests- mainly composed of representatives of the State and institutional authorities, civil society, media, private sector, and diplomatic corps. «*I would like to thank the Malagasy authorities for their valuable support, especially during the resumption of Ambatovy's activities after a one-year shutdown. This resumption was made possible thanks to the collaboration with our partners, who are present here,*» he said. Mr. Gomes will continue the projects already undertaken by his predecessor, Mr. Macnaughton, whom he acknowledged. «*I owe this confidence first and foremost to Stuart, who over the past four*



Ambatovy's New President, Gustavo Gomes

*years has made a significant contribution to making Ambatovy a more reliable, efficient and sustainable company, producing high quality nickel and cobalt, under his leadership,*» he said.

After the recovery from the almost year-long shutdown due to the Covid-19 pandemic, Ambatovy is gradually resuming its opera-

tions and the whole company is involved. «*I am even more confident about the human resources we have at Ambatovy. We are proud of the competent and dedicated employees of our company. I have met many of them since my arrival and I can already tell you that I am impressed. Ambatovy has a great team,*» concluded Mr. Gomes.

## EMPLOYEE TRAINING

# FOR A HIGHLY QUALIFIED WORKFORCE

*For Ambatovy, having a qualified workforce that can meet the company's needs is of paramount concern. Thus, the company gives great importance to the development of its employees through additional technical training based on what is needed for the operations from the Mine in Moramanga to the Plant in Toamasina. To this end, in 2010, Ambatovy established the Ambatovy Training Center (CFA).*



At least 60% of the training time is spent in the workshops

Following their training program at the CFA, 99 operators (21 operators in 2020 and 78 in 2021) of different levels at the Ambatovy Plant in Toamasina and its Mine in Moramanga have obtained the qualifications required for their respective positions. This program aims to provide additional training and qualifications required by the industry in order to better meet the specific needs of the operations and allow for greater mastery of their profession.

Additionally, 120 other technicians (including 20 instrument technicians, 46 welders, 18 electricians and 36 mechanics) have also completed their maintenance training course- called the «Trades Training Program»- launched in 2018. This training is prepared and organized

according to either the training requests received from each department or the requirements of equipment suppliers.

### Strategic objectives

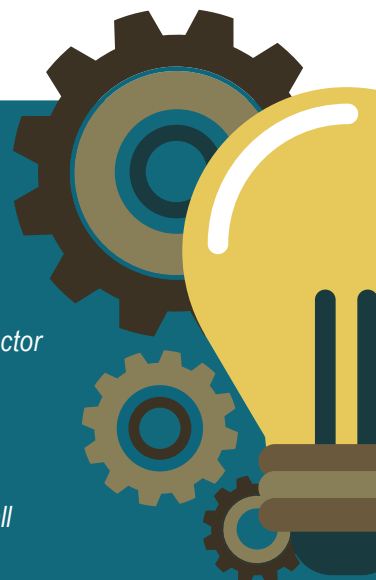
«The training programs are closely linked to the needs of each position and professions and are in line with the Company's needs. At Ambatovy, training is part of our strategic objective for organizational and operational efficiency,» declared Ludovic Randriaharihaja, Training Superintendent at Ambatovy. The training is not only limited to theory and practice in the workshop. Training participants are also mentored and undertake on-the-job practice before they are certified as qualified in the field. «For example, a technician

has to undergo four training courses consisting of four to five modules, which can last approximately 240 hours, with at least 60% of the time spent in the workshop. The training is later validated by a final evaluation. Subsequently, the technician will be coached in the field for a period of one to six months. Finally, after the on-job assessment, his/her qualification will be approved through the final validation of the training in question, » explained Nomenjanahary Rakotonirina, Maintenance Training Superintendent.

It should be noted that Ambatovy offers other training programs to develop the skills of its employees, allowing for greater control of their profession and any related responsibilities required for their role, like Leadership, Health and Safety, etc.

## SIX (06) TYPES OF TRAINING EXIST AT AMBATOVY:

- 1 **Health and Safety training** : for all Ambatovy employees and those of its subcontractors according to the requirements of their respective positions and responsibilities
- 2 **Training in Plant processes** : for all operators and team leaders
- 3 **Training in fixed equipment maintenance techniques** : for all maintenance teams
- 4 **Training in heavy equipment operation and maintenance** : for Ambatovy and subcontractor employees who are involved in the operations and maintenance techniques at the Mine in Moramanga.
- 5 **Training in leadership**
- 6 **Other skills** (language, computer skills, new employee orientation, cultural diversification): for all employees according to job requirements and responsibilities, career plans and development.





## ENVIRONMENTAL PROTECTION

CLOSE COLLABORATION BETWEEN  
AMBATOVY AND COBAS

Requisite: direct involvement of the local population is more than necessary for successful environmental protection. As part of its environmental protection activities around its Mine in Moramanga, Ambatovy supported the local communities in various ways so that they can form grassroots communities (COBAs) and manage the natural resources in their areas.

Ambatovy started its collaboration with the COBAs in 2011 by providing technical support to COBA members: various training sessions on association management were organized; the company also supported the associations during the various stages of the request submitted to the Malagasy State for the natural resource management transfer process.

In addition to providing technical support, for the COBA's management and their activities, Ambatovy is also promoting their income-generating activities. The objective is

first to motivate them in their conservation activities then to improve their standard of living and reduce their dependence on forest resources.

*«Apart from the support, or Tantsoroka, that Ambatovy brings to our natural resource conservation activities, for example its assistance during ecological monitoring (in September and October 2021), it has helped us improve our income-generating activities, particularly in foie gras and bean production as well as in plant nursery and rice cultivation,»* declared Noré Razafindrakoto, the auditor of the COBA Miaro ny Tontolo Iainana in Ambatomainty, in Moramanga.

COBA members understand the importance of and the benefits generated by their environmental commitments. Samijaona, a COBA member stated, *«environmental preservation is really beneficial to us, the community living near the forest, and environmental conservation activities are profitable for the members.»*



Some COBA members in the midst of ecological monitoring

## MINE RESTORATION

Over 200 Village Nurs  
Owners Involved

Marie RAKOTOARIMANANA,  
MTI President:



ery



View of the COBA MTI village nursery

«Initially, many of our grassroots community members were skeptical when I set up the nursery in Ambatomainity in 2018, but I set myself as an example given that I am the COBA President. The community started to be convinced and got involved in the village nursery activities when they saw the revenues I was making from it and my ability to purchase a zebu in 2019 and another in 2020.»

«Ambatovy supplies our village nurseries with seeds, and it purchases them later when the young plants are strong enough. We have a successful collaboration.»



Justin RAVAVILAHY, MTI member and forest ranger:

Ambatovy and the grassroots communities (COBA) around the Mine in Moramanga have reached a win-win collaboration on the establishment of the village nurseries. On the one hand, this collaboration helps improve the income sources of the local population and, on the other hand, these village nurseries supply Ambatovy's industrial nursery with young plants for the Mine restoration. As a reminder, Ambatovy provided these village associations with technical and material support during the first phase of the project between 2011 and 2015. These nurseries are now self-managed; however, to ensure the quality of the indigenous seedlings they produce, Ambatovy continues to supply them with seeds, provide technical support, and take charge of the transportation to the industrial nursery. In 2021, over 200 growers from six COBAs collaborated with Ambatovy in the production of indigenous plants such as Ditimena, Harongana, Hazombary, Vakoka, etc. The sector is thriving and more and more people have shown interest, explained some members of the COBA Miaro ny Tontolo Iainana (MTI) of Ambatomainity, Moramanga.



Féline Mogeance RAKOTOARISOA, MTI member:

«I'm part of a group of five producers. The project was not an immediate success when we launched it in 2017. Nevertheless, it has gradually improved over the years, and we even managed to produce tens of thousands of seedlings in 2020.»



## MINE REHABILITATION

# PRIORITY FOR SPECIES OF HIGH ECONOMIC AND ECOLOGICAL VALUE

Ambatovy's primary objective in the ecological restoration of the mine footprint in Moramanga is to reestablish a functional, multi-purpose replacement forest after its operations. To put this commitment into practice, as stipulated in its environmental specifications, Ambatovy is aligning the various methods to be adopted with the results of eight years of successful rehabilitation trials. In addition, to determine the floristic baseline for restoration, Ambatovy's technicians are conducting careful studies based on the forest species identified during a comprehensive inventory of the Mine's flora (completed in 2010).

### Medicinal virtues

In order to establish a multifunctional replacement forest, Ambatovy prioritizes species with high economic and ecological value in its industrial-scale nursery. The company prioritizes 438 out of 1,904 species, including 306 out of 691 genera, and 79 out of 152 families for the



Ambatovy has set up an industrial nursery to ensure the ecological rehabilitation at the Mine

basic floristic traits of ecological restoration.

*«Several criteria are taken into account, including ecological values, such as wildlife habitat or food use, nursery plants, hyperaccumulators, resilience to disturbance, the similarity of species to the plant formations of the original forest, and their role in the trajectory of plant succession,»* outlined Jean Emile Andriahasinoro Saotra, Ecological Restoration Supervisor at Ambatovy. *«In addition, there are plants with economic value, such as medicinal plants, timber and construction. 42.5% of these species represent high economic and trade values, 28% have medicinal virtues, while 24% serve as food for lemurs and habitat for micro mammals,»* he continued.

### Active restoration

Fast-growing plants called pioneer species that prevent erosion and allow the formation of biomass, while serving as shade for forest species, were also considered in these studies with a respective density and composition. *«In addition to the success in the planting of performing and resistant species during the trials carried out since 2010 in Analamay, Ambatovy's active restoration method enables us to demonstrate that forest rehabilitation at the self-renewal stage into the final stage of biotic succession is possible in the 12th year of rehabilitation,»* he added.

## REPOPULATION OF THE MANTELLA AURANTIACA

# ITS REINTRODUCTION INTO THE WILD CONTINUES

Ambatovy continues to support the *Mantella aurantiaca* relocation program, established in collaboration with the Mitsinjo association, following the resounding success of the first attempt to repopulate this endemic frog in 2012 and its first release into the wild in 2017.

Currently, 791 adult and 35 juvenile *Mantella aurantiaca* have been bred in captivity in the Toby Sahona center of Andasibe, managed by the Mitsinjo association. They are adapting perfectly to their new artificial habitats. This group consists of stock individuals as well as the

juveniles from the new generation. The program is well underway and its success is one of its kind in amphibian conservation in Madagascar, if not in the world. Additional individuals were reintroduced into the wild in June 2021 following the successful release of more than 1,500 frogs in April 2017. Another release is scheduled next.

### Challenges and solutions

Ambatovy's repopulation activities are not limited to the rescue of *Mantella aurantiaca* from the marshes at Toby Sahona where they are

multiplying before being reintroduced into the wild. They also include the biological monitoring of the population in their new receiving sites, and its health status, in collaboration with Ecofauna (an association of teachers from the Animal Zoology Department at the University of Antananarivo), and the laboratory of the National Museum of Natural Sciences of Madrid, in Spain.

In order to ensure the long-term viability of these frogs- endemic to Ambatovy's Mine site- while mitigating the impacts of mining activities on the *Mantella* population, the company identifies any pressures that could affect their way of living. This is why Ambatovy developed the marshes prior to a possible reduction



## PLANT OPERATIONS MAJOR ACCOMPLISHMENTS IN 2021

The year 2021 was a kind of catch-up year for Ambatovy after the 2019 Covid Shutdown, which lasted 5 months in 2020. Here are a few of the several achievements worth mentioning.

Firstly, one of the major accomplishments for the year was the safe startup and ramp up of the Plant. The Operation Departments put a strategy together to maintain the equipment on site to be ready for startup. The Process technology team supported the Operations for the correct shutdown, preservation, PSSR or Pre Startup Safety Review startup and ramp up. The Training Department verified the competency of all the operators returning on site to ensure they had all the skills and safety training required to restart the Plant. At the end of July, the production figure showed that the Plant was 2000 tonnes metal ahead of the production plan.

At the Port, we were able to operate at 105% of the unloading systems design in 2021. Two projects were completed in 2021: the redesign of the tube conveyor at the Port- which improved the unloading rates and meantime between failures- and the refurbishment of two locomotives in the last quarter of 2021, which increased the locomotive fleet from 5 to 7 going into 2022.



Production resumed safely

Then, the completion of the major shutdown of SAP1 or Sulphuric Acid Plant in the time frame of 24 days is important too. All inspection work, furnace brick linings, major duct repairs, tower inspections and cleaning were completed in the time window to ensure a smooth operation till the next shutdown in 2023. The acid plants are very important to the main operation

due to the use of acid to extract the nickel and cobalt from the ore sent from the mine. The efforts required to make this one of the most successful shutdowns in Ambatovy's history is due to everyone's efforts.

These are major achievements that enabled the Plant to reach its yearly production target for 2021.

in water level that could especially endanger the tadpoles. Actions have also been taken to eliminate predators of *Mantella aurantiaca*, including species of aquatic insects that attack the juveniles and tadpoles. Awareness campaigns are taking place to sensitize the local population on the need to prevent livestock from roaming in the spawning marshes.

Given that Ambatovy operates in a biodiversity hotspot, it implements an environmental management program that follows the mitigation hierarchy: impact avoidance, minimization, restoration and compensation.



*Mantella aurantiaca* are adapting perfectly to their new artificial habitats



## PROTECTIVE MEASURES AGAINST COVID-19

# STRINGENT MEASURES!

*Employee health and safety has always been one of Ambatovy's top priorities given that they are needed to ensure the continuity of all operations and to protect the Company from the Covid-19 hazards.*

As of its official resumption on March 23, 2020, Ambatovy has implemented stringent and rigorous measures to prevent the spread of Covid-19 among its employees, who are also encouraged to apply the same measures in their homes.

Hand sanitization begins as soon as employees board the bus to work. An empty seat, which is marked with a large red cross, is left unoccupied between each passenger, while windows are opened to increase ventilation and air circulation. At the entrance to each Ambatovy site, every employee must undergo a footwear disinfecting bath and temperature screening before they are allowed to access the site. Once inside, employees change their outside clothing to their uniforms before starting work.



*Some employees carefully wiping down their desks prior to starting work.*

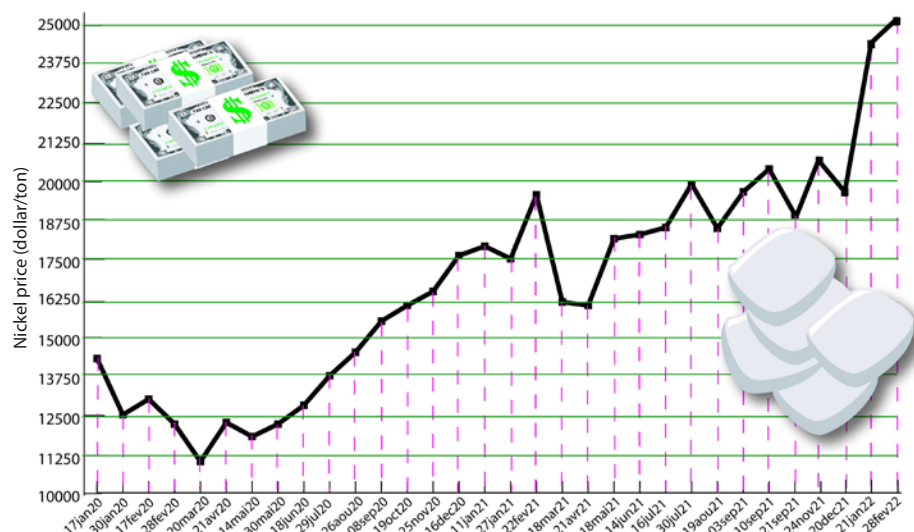
This is followed by regular disinfection and cleaning of work areas. Employees are required to carefully wipe down his or her immediate environment- computer, table, chair, tools, files, materials, etc. - with disinfectant products. Such a measure is further applied to shared spaces, canteens, and meeting rooms, as

well as respecting social distancing and resorting to virtual meetings to the extent possible. Ambatovy has put floor markings throughout its sites to enable each employee to comply with the social distancing measures. Outside, every vehicle, machine and other rolling stock is regularly disinfected by users.

Like in all companies, Ambatovy has vaccinated its employees based on their personal choice, following the provision of few thousands doses provided by the State. This is the only guarantee that the Company will be able to continue its activities and protect itself from all incidents.

## NICKEL PRICE TREND: JANUARY 2020 - FEBRUARY 2022

The nickel price has increased slightly but steadily since the second half of 2020, reaching around \$20,000 in early 2021. This upward trend was due to the growing demand for electric vehicle batteries and the resumption of industries in Asia following the recession caused by the Covid-19 pandemic. In addition, the global stock for class 1 nickel has fallen, and fears of a possible nickel shortage on the market have caused the price to jump to \$25,240 per tonne on the LME on February 28, 2022.



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