

## **Table of Contents**

List of Acronyms	4
Message from our President	8
About This Report	10
About Us	12
Our Operations and Facilities	13
Our Products	14
2021 Highlights	15
Corporate Governance	16
Our Sustainability Commitment	17
The Sustainable Development Goals	17
Key Impacts, Risks and Opportunities	18
Stakeholder Engagement	21
Governance and Human Rights	27
Economic Performance	33
Communities and Social Relations	37
Environment	43
A Safe and Rewarding Workplace	53
Responsible Production	59
Letter from our Vice President, Sustainability	62
Appendix 1: The Sustainable Development Goals	63
Appendix 2: Partnerships and Associations	66
Appendix 3: Compliance to External Initiatives	67
Appendix 4: Social Investment Fund (SIF)	69
Appendix 5: Priority Species	70
Appendix 6: Ambatovy Offset Sites	76
Appendix 7: GRI Content Index	78
Appendix 8: Additional References	82
About Forward Looking Statements	83

# List of Acronyms

ACA	Additional Conservation Action  Ambatovy Environmental Management System		Comité National pour la Lutte contre le Sida (National Committee for the Fight against AIDS)	
AEMS				
AfDB	African Development Bank	СОВА	Community-based Association	
AFNOR	Association Française de Normalisation (French Standardization Association)	CPN CR	Child Protection Network  Critically Endangered Species	
AIMS	Ambatovy Incident Management System	CRBPs	Children's Rights and Business Principles	
ALBI	Ambatovy Local Business Initiative	CRC	Convention on the Rights of the Child	
AMSA	Ambatovy Minerals S.A.			
APELL	Awareness and Prevention of Emergencies at the Local Level	CRGRC Comité Régional de Gestion des Risques et Catastrophes (Regional Committee for Disa Risk Management)		
ВВОР	Business and Biodiversity Offsets Program	CSR	Communities and Social Relations	
ВІ	Business Improvement	DGDD	Direction Générale du Développement Durable (General Directorate of Sustainable Development)	
BNGRC	Bureau National de Gestion des Risques et Catastrophes (National Office of Disaster Risk Management)	DMAIC	Define – Measure – Analyze – Improve – Control	
CAHRA	Conflict-Affected and High-Risk Area	DMSA	Dynatec Madagascar S.A.	
CAZ	Couloir Ankeniheny Zahamena (Ankeniheny- Zahamena Corridor)	DRAE	Direction Régionale de l'Agriculture et de l'Elevage (Regional Directorate of Agriculture and Livestock)	
ссо	Centre de Commandement Opérationnel (Operational Command Center)	DREAH	Direction Régionale de l'Eau, de l'Assainissement et de l'Hygiène (Regional Directorate of Water, Sanitation and Hygiene)	
ccs	Centre Culturel et Social (Cultural and Social Center)	DREDD	Direction Régionale de l'Environnement et du	
CFAM	Corridor Forestier Analamay Mantadia (Analamay-Mantadia Forest Corridor)		Développement Durable (Regional Directorate of Environment and Sustainable Development)	
CHRD	Centre Hospitalier de Référence de District (District Reference Hospital Center)	DREN	Direction Régionale de l'Education Nationale (Regional Directorate of National Education)	
CI	Cobalt Institute	DRT	Direction Régionale de Tourisme (Regional Directorate of Tourism)	
CIREDD	Circonscription de l'Environnement et du Développement Durable (District for Environment and Sustainable Development)	EDBM	Economic Development Board of Madagascar	
CLP	Classification, Labeling and Packaging	EGOC	External Grievance Oversight Committee	
		EITI	Extractive Industries Transparency Initiative	
CNaPS	Caisse Nationale de Prévoyance Sociale (National Social Security Fund)	EN	Endangered Species	

List of Acronyms

EPFI	Equator Principles Financial Institution	INGO	International Non-Governmental Organization
ERT	Emergency Response Team	IRM	International Raw Materials
ESIA	Environmental and Social Impact Assessment	ISO	International Organization for Standardization
ESG	Environment, Social and Governance	IT	Information Technology
ESU	Evolutionary Significant Unit	IUCN	International Union for Conservation of Nature
FIMIAM	Fikambanambe Mivondrona Ampitambe Mahatsara (Federation of Formal Entities of Ampitambe)	JICA	Japanese International Cooperation Agency
		kg	Kilogram
GEF	Global Environment Facility	km	Kilometer
GEM	Groupement des Entreprises de Madagascar (Madagascar Business Association)	KOMIR	Korea Mine Rehabilitation and Mineral Resources Corporation
GERP	Groupe d'Etude et de Recherche sur les Primates	KPI	Key Performance Indicator
	(Primate Study and Research Group)	kt	Kiloton
GHG	Greenhouse Gas	LGIM	Loi sur les Grands Investissements Miniers
GRI	Global Reporting Initiative		(Law on Large Scale Mining Investments)
На	Hectare(s)	LME	London Metal Exchange
HEM	Heavy Equipment Maintenance	LPG	Liquid Petroleum Gas
HIV /	IV / Human Immunodeficiency Virus /		Lost Time Injury
AIDS	Acquired Immune Deficiency Syndrome	LTIFR	Lost Time Injury Frequency Rate
НМЕ	Heavy Mobile Equipment Operation	LWA	Local Watch Association
HS	Health and Safety	MBG	Missouri Botanical Garden
HSEQ	Health, Safety, Environment and Quality	MECIE	Mise en Compatibilité des Investissements
IBC	Intermediate Bulk Container		avec l'Environnement (Rendering Investments Compatible with the Environment)
ICMM	International Council on Mining and Metals	MFG	Madagascar Fauna and Flora Group
IFC	International Finance Corporation	Min	Minimize
IFM	Institut Français de Madagascar	MoU	Memorandum of Understanding
IGA	Income Generating Activity	NGO	Non-Governmental Organization
ILO	International Labor Organization	NI	Nickel Institute
IMO	International Maritime Organization	NNL	No Net Loss

List of Acronyms 5

ОСНА	Office for the Coordination of Humanitarian Affairs
OECD	Organization for Economic Cooperation and Development
ONE	Office National pour l'Environnement (National Office for the Environment)
ONIFRA	Oniversity FJKM Ravelojaona
ОРР	Ore Preparation Plant
ORN	Office Régional de Nutrition (Regional Office of Nutrition)
ORTALMA	Office Régional de Tourisme d'Alaotra Mangoro (Regional Tourism Office of Alaotra Mangoro)
OSCIE	Organisation de la Société Civile sur les Industries Extractives (Civil Society Organization on Extractive Industries)
PAL	Pressure Acid Leach
PAP	People Affected by the Project
PGEDS	Plan de Gestion Environnementale et Développement Social (Environmental and Social Development Management Plan)
PI	Predicted Impact
PPE	Personal Protective Equipment
PPI	Plan Particulier d'Intervention (Particular Plan of Intervention)
PSHP	Private Sector Humanitarian Platform
QAQC	Quality Assurance Quality Control
QMS	Quality Management System
REACH	Registration, Evaluation, Authorization and Restriction of Chemical Substances
RMI RMAP	Responsible Minerals Initiative Responsible Minerals Assurance Process
RoW	Right of Way
Rs	Restore
RUTF	Ready-to-Use Therapeutic Food
SAM	Severe Acute Malnutrition

SCC	Scientific Consultative Committee	
SCM	Supply Chain Management	
SDGs	Sustainable Development Goals	
SDS	Safety Data Sheet	
SIF	Social Investment Fund	
SIM	Syndicat des Industries de Madagascar (Madagascar Industries Union)	
SME	Small and Medium-sized Enterprise	
SMIMO	Service Médical Inter-entreprise de Moramanga (Inter-enterprise Medical Service of Moramanga)	
soc	Species of Concern	
SOP	Standard Operating Procedure	
STI	Sexually Transmitted Infection	
TMF	Tailings Management Facility	
ТоТ	Training of Trainers	
TRIFR	Total Recordable Injury Frequency Rate	
TU	Technical Unemployment	
UDHR	Universal Declaration of Human Rights	
UN	United Nations	
UNAIDS	Joint United Nations Programme on HIV and AIDS	
UNDP	United Nations Development Programme	
UNICEF	United Nations Children's Fund	
USAID	United States Agency for International Development	
VSLA	Village Savings and Loan Association	
VPSHR	Voluntary Principles on Security and Human Rights	
WASH	Water, Sanitation and Hygiene	
wcs	Wildlife Conservation Society	
WHO	World Health Organization	
WIMR- Mada	Women in Mining and Resources – Madagascar	
WUA	Water Users Association	

6 List of Acronyms





## Message from our President



Gus Gomes President

"Following the unprecedented challenges we faced due to the Covid-19 pandemic, our focus in 2021 was to safely re-start our operations ...

Ambatovy is amongst the top responsible producers of nickel and cobalt in the world, supplying high-quality briquettes to the market."

Dear Readers,

I am very pleased to share with you Ambatovy's twelfth annual Sustainability Report covering our objectives, approaches and performance over the course of 2021. This report reflects the importance that Sustainability plays in our operations.

Following the unprecedented challenges we faced due to the Covid-19 pandemic, our focus in 2021 was to safely re-start our operations. We were able to resume operations at the end of March 2021 and surpassed our projected yearly production levels set for the year. We remained committed to our goal of becoming a cost-competitive nickel and cobalt producer that creates lasting prosperity for all stakeholders and that contributes significantly to sustainable development in Madagascar.

Despite nearly a year under Care and Maintenance, we were able to resume operations safely. We recognize that there is still a long journey to stability, and are counting on the efforts of everyone to transform Ambatovy into a local champion, a global successful player.

We also retained over 99% of our workforce. Through the application of strong health measures and a focus on zero-harm culture, we welcomed employees safely back to work and achieved our best health and safety performance to-date, with an all-time low Total Recordable Injury Frequency Rate (TRIFR) recorded for 2021.

Throughout the year, Ambatovy continued to uphold our commitments to the Government of Madagascar, our stakeholders and lenders while striving to meet the world's best practices in operational efficiency, environmental management, and social engagement. Despite the challenges we faced, Ambatovy is amongst the top responsible producers of nickel and cobalt in the world, supplying high-quality briquettes to the market.

Some of our performance highlights in 2021 include:

 Ambatovy's objectives for air, water, waste, noise and Pipeline monitoring are amongst our key compliance commitments. In 2021, all physical environment activities were successfully carried out despite constraints imposed by the ongoing Covid-19 pandemic. The completion of thirdparty stack testing at the Plant Site and the drilling of new groundwater monitoring wells at the Mine Site served to further enhance monitoring capabilities.



- In November 2021, a meeting with members of the Scientific Consultative Committee (SCC) was held virtually in order to review activities carried out as part of Ambatovy's Environment and Social programs. At the conclusion of its meeting, the SCC presented a series of strategic recommendations for our review.
- Ecological reforestation is one of Ambatovy's most important commitments. In 2021, Ambatovy surpassed our restoration target, rehabilitating an area of 25.87 ha with indigenous species over the Mine footprint. Since 2007, a cumulative area of 175.38 ha has been rehabilitated.
- For the fourth consecutive year, viable populations of the Golden Mantella frog (Mantella aurantiaca) were observed at receiving marshes in Ambatovy's conservation area, following the successful reintroduction of first-generation frogs from the Toby Sahona breeding center in Andasibe.
- Ambatovy has been combating the spread of the Asian toad (*Duttaphrynus melanostictus*) since this invasive exotic species was first discovered in Madagascar in 2014. We are providing support to the national Asian Toad Control and Mitigation Program, formally launched by the Government of Madagascar and the Madagascar Fauna and Flora Group (MFG) during the year.
- We continued to make donations to help in the fight against Covid-19 in Madagascar, including critical medical equipment and supplies, power generators for local treatment facilities, and ready-packed meals to support medical personnel and frontline workers. To protect employees, their families and the community, Ambatovy also implemented extensive preventative measures within the workforce and facilitated vaccinations and testing for our employees and contractors.

 To support local education, Ambatovy completed the construction of five new school buildings, donated school kits to 6,145 primary school children, and resumed school nutrition programs at six local school canteens. We also developed a new merit scholarship program, supporting the education of 42 girls from vulnerable families from Brickaville and Toamasina, a program we will expand next year.

In 2022, we will continue to focus on striving to meet the highest standards, having a strong safety culture, demonstrating responsible environmental stewardship and maintaining a robust social engagement program. This will help to ensure we have significant, positive and lasting impacts in the communities where we operate and to contribute to our goal of being a producer of high quality nickel and cobalt that creates lasting value for all stakeholders.

We acknowledge and sincerely appreciate the continued support, commitment and dedication of all our stakeholders as we work to meet these goals. We look forward to future constructive collaboration in our shared quest for the development of Madagascar.

Thank you for your interest in Ambatovy. We hope that you enjoy the report and welcome any feedback you may have.

Sincerely,

Gus Gomes President

Message from our President 9

## **About This Report**

## Report Profile

For the twelfth year in a row, Ambatovy is publishing our annual Sustainability Report. This report was prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option, and gives performance data for January through December 2021, following our eleventh annual Sustainability Report covering 2020 that was published during the first quarter of 2022.

The report provides information on Ambatovy's sustainability performance during 2021 and focuses on key areas of interest for Ambatovy's stakeholders. The accuracy of Ambatovy's Sustainability Report is validated through internal controls and internal approval processes. This 2021 Sustainability

Report has not been externally assured; however, we submit annual reports to Malagasy authorities and to our national regulator (the National Office for the Environment or ONE) with information on our sustainability performance, and our work in the field is closely monitored and regularly reviewed by the ONE and Independent Engineers sent by our lenders.

No significant changes regarding size took place during the reporting period, nor did we significantly diverge from our last report in terms of scope, boundary, or measurements that would affect the comparability of previous reports or require a restatement of major disclosures.

## Reporting Boundary, Materiality and Scope

Unless otherwise noted, this report discloses material information for the calendar year 2021 (January 1st – December 31st). Our report addresses a wide range of economic, social, environmental and governance issues that Ambatovy considers to be of material importance, as this term is used in the GRI guidance on materiality and completeness. The GRI guidance specifies that sustainability reports should cover topics and indicators that reflect a company's significant economic, social and environmental impacts or those that would substantively influence the assessments and decisions of stakeholders.

This report includes information about our operations (located fully in Madagascar) and covers Ambatovy and the departments and initiatives directly under our control. As a Joint Venture private entity, there are no other groups, subsidiaries, leased facilities, joint ventures, suppliers, or other bodies that fall under Ambatovy's jurisdiction. The report has drawn the majority of data from internal sources, but, when relevant or necessary, we have included data from external sources. The scope of the report reflects not only the GRI Standards but also the expectations of our stakeholders to cover the topics material to them and to our business. Statements from previous years' reports may appear again in this report in order to provide context and background information for new readers and for those unfamiliar with our operations.

There were two key considerations that stood out for us during the process to determine what is included in the report and how we prioritize content and its organization.

- Organizational commitments: In view of Ambatovy's obligations to our national regulator and our commitment to the International Finance Corporation (IFC) Performance Standards and other international standards and codes, we have internal programs in place to ensure coherence with these standards.
- Materiality of data for internal and external stakeholders: When selecting amongst the various GRI disclosures for our report, Ambatovy chose those that could be considered relevant, important and meaningful to our stakeholders at all levels. We also provided additional information not required in the GRI guidelines that we felt was relevant to our operations and important in light of our mandatory and voluntary commitments to national and international regulatory bodies, associations, and programs. The report therefore gives stakeholders essential information on our structure, strategy and performance with specific information that relates to the sustainability challenges of our industry. For a list of our material topics, please refer to the GRI Content Index in the appendices.

We intend this report to be used as a reference for a variety of stakeholders, particularly government authorities, local communities, civil society groups, employees, international organizations, partner companies, financial institutions, suppliers, customers, and other members of the business and media community. More in-depth information on our stakeholder identification process and our engagement activities can be found in the Stakeholder Engagement section of this report.

We welcome comments and questions related to this report. Please contact us at media@ambatovy.mg for further information. Please note, all monetary values in the report are in \$ US Dollars unless otherwise noted.

10 About This Report



## **About Us**

Ambatovy is a large-scale nickel and cobalt mining enterprise in Madagascar, comprised of a lateritic mine near Moramanga and a processing plant in Toamasina. The two sites are linked by a pipeline of approximately 220 km in length. An auxiliary office in Antananarivo provides administrative, legal, and communications support to both locations and serves as a liaison with government offices and international organizations as well as the media and business sectors.

#### **Our Vision**

Ambatovy will be recognized as the most successful nickel laterite operation in the world.

#### **Our Mission**

Together in Madagascar, we sustainably deliver value, producing high quality nickel and cobalt.

#### **Our Values**

#### Respect

• We treat others with dignity and respect, regardless of the situation.

#### Integrity

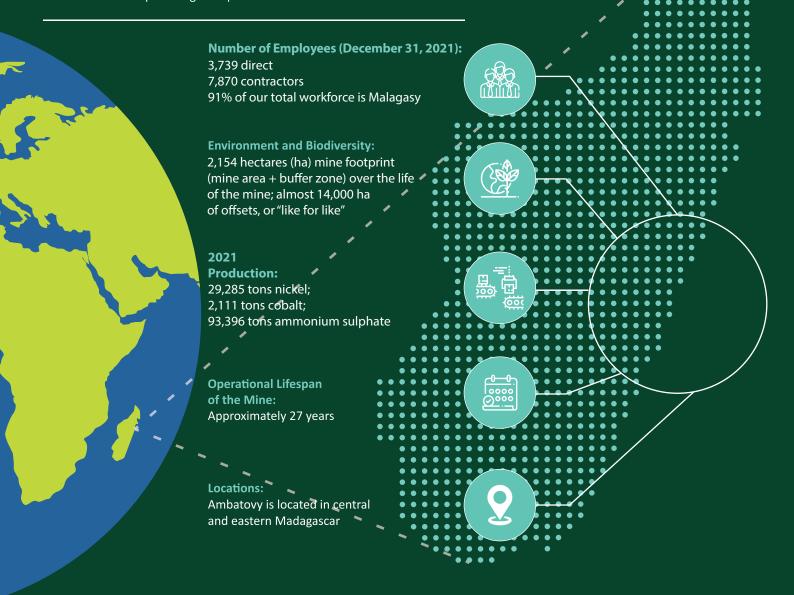
• We are true to our word and are ethical in all that we do.

#### Responsibility

• We take responsibility for our choices, our words, and our actions.

#### **Excellence**

• We never stop seeking to improve our business.



## **Our Operations and Facilities**



#### **Mine Site**

Our Mine Site is located near the town of Moramanga, in the Alaotra Mangoro Region, 80 km east of Madagascar's capital. The ore body at the Mine consists of two lateritic nickel deposits: the Ambatovy and the Analamay deposits, with a total footprint of 2,154 ha, including our actual mine area of 1,616 ha and a buffer zone. Ore is surface-mined and turned into slurry for transportation to the Plant Site via a pipeline.



#### **Plant Site**

Ambatovy's main operations are located at our Plant Site, approximately ten km south of the Port of Toamasina, in the Atsinanana Region. It is an industrial complex covering more than 320 ha. The facility was designed and built to operate in accordance with Malagasy regulations and the IFC Performance Standards. The site's main components include a pressure acid leaching area (PAL), a refinery, and a utilities area to support the process. Site facilities also include a medical clinic, a training center, several canteens, warehouses, workshops, a laboratory, offices, and living quarters.



#### **Tailings Management Facility**

Ambatovy's Tailings Management Facility (TMF) is located approximately ten km west of the Plant Site and will be constructed over the life of the project in three phases, with the continuous raising of the perimeter dams to meet our tailings containment needs. The tailings – residue with no commercial value left over after mining, processing, and refining – are neutralized and pumped from the Plant Site through a 15 km pipeline to the Tailings Site, a secure, stabilized area where the treated residue is deposited for permanent safekeeping. Excess water from the Tailings is discharged into the ocean through a diffuser system designed to minimize localized impacts. A portion of this water is available to be reused at the Plant Site. When the Tailings Site has been filled, it will be reclaimed and drainage systems will be re-established. Ambatovy's TMF was built to specifications consistent with the requirements of the IFC and the site was chosen for its relatively low environmental sensitivity.



#### **Pipeline**

Ambatovy's Pipeline, which is approximately 220 km, runs from the Mine to the Plant Site in Toamasina. The route selected for the Pipeline makes some significant deviations to avoid sensitive environmental areas, cultural sites, and local populations. It is buried for the majority of its route, avoiding critical wildlife habitats and residual forest fragments. Deep rooting vegetation was planted along the length of the Pipeline to stabilize steep slopes, prevent erosion, and assist in rehabilitation.



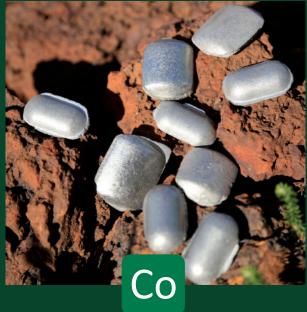
#### **Support Facilities**

Ambatovy also has support facilities located near the Plant Site, including the port, railway, road, ammonia storage tanks and the marine outfall. Ambatovy installed a substantial extension of Pier B at the Port of Toamasina, which includes a new fuel terminal, as well as equipment for handling the importation of bulk raw materials such as limestone, coal, sulphur and ammonia. We also installed a 12 km railway and financed the upgrade of an 11 km road linking the port to the Plant Site. Ambatovy imports ammonia and stores it, first at a large storage tank located four km north of the Plant Site, and then at the Plant Site's ammonia storage tanks. The marine outfall is a pipeline that extends 1.5 km offshore within a rock-filled breakwater structure. Installed in 2011, it is used to dispose of excess reclaimed water from the TMF.

## **Our Products**

Ambatovy uses a hydrometallurgical process to produce finished nickel, cobalt, and ammonium sulphate. We supply a global portfolio of industrial customers located primarily in Asia, Europe, and the United States. Our products are mainly used as inputs for the production of stainless steel, chemicals for the manufacture of battery products, and specialty high-performance alloys for turbine components in both aerospace and land-based power generation equipment. They are also consumed in the production of a wide range of other specialty industrial products.





The majority of nickel produced worldwide goes into the manufacturing of stainless steel. Nickel is often also combined with other metals to create super alloys. It is found throughout our modern environment, from jewelry and silverware, to rechargeable battery systems for hybrid and electric vehicles, cell phones and other portable electronics and devices, and in jet turbines and other high-end and high performance applications. Ambatovy produces Class I nickel briquettes of 99.9% purity for the world market and Ambatovy nickel is a registered brand on the London Metal Exchange (LME). In 2021, we produced 29,285 tons of nickel.

Cobalt has been used for centuries to add vivid blues to glass, glazes and pottery. In modern times, it is used in hundreds of chemical, metallurgical, and industrial products and is an indispensable component of rechargeable batteries used in a variety of devices including cellphones and tablets, power tools and other portable devices, as well as in hybrid and electric vehicles and other technologies. Ambatovy produces cobalt that is of 99.9% purity. It is sold in briquette and in powdered form. In 2021, we produced 2,111 tons of cobalt.



As a by-product of the hydrometallurgical process, Ambatovy also produces ammonium sulphate, an inorganic, highly water-soluble salt. The primary use of ammonium sulphate is as a fertilizer for soils, as part of a complete agronomic improvement plan. Ambatovy's ammonium sulphate is produced in crystallized granules and is sold mainly on the international market, with a portion of our product also sold locally. In 2021, we produced 93,396 tons of ammonium sulphate.



Distribution of school kits benefiting



6,145 students

from

18 public primary schools and 4 community schools



All-time low **Total Recordable Injury Frequency Rate** (TRIFR) of

Malagasy workforce



female workforce (direct)



of seasonal fruit and vegetables produced by farmers' associations and sold to our catering contractor



merit scholarships granted to girls from Toamasina and Brickaville More than

local suppliers and contractors provided goods and services

More than



\$ 225.3 million

in local purchasing, with approximately

65.7 million

of goods and services from "local-local" suppliers More than

200,000



seedlings produced at village nurseri<u>es</u>

**47** interns enrolled in a newly launched internship program

15 2021 Highlights

## Corporate Governance

Ambatovy is a joint-venture enterprise held by two shareholders: Sumitomo Corporation (54.17%) and Korea Mine Rehabilitation and Mineral Resources Corporation (KOMIR), formerly known as KORES (45.83%). Both partners are fully committed to transparent, sustainable and responsible business practices. Indeed, central to Ambatovy's record as a trusted operator is our commitment to ethical business practices and high standards of corporate governance. We recognize the importance of having an integrated approach to managing our operations, risks and relationships.

Ambatovy is comprised of two companies: Ambatovy Minerals S.A. (AMSA) and Dynatec Madagascar S.A. (DMSA), which, together, are responsible for day-to-day operations. AMSA is the holder of the mining title and operates the Mine Site, and DMSA manages the Pipeline as well as the Plant Site and all the activities related to it. Both AMSA and DMSA are subject to the laws of Madagascar, and each has a Board of Directors. In practice, AMSA and DMSA act in parallel under the purview of Ambatovy's Executive Committee, which consists of members from each of the two partner companies.

At the end of 2021, the Executive Committee was comprised of eight individual voting members who are responsible for overseeing the direction and execution of Ambatovy's activities. The Committee meets at least quarterly or as circumstances require, providing appropriate governance of the company.

In addition to the Executive Committee, there are three subcommittees whose members are also employees of each of our partners:

- Audit
- · Environment, Health and Safety, Sustainability
- Marketing

The Environment, Health and Safety, Sustainability subcommittee oversees our policies, practices, programs and disclosures in the areas of environment, tailings management, sustainable development, climate change, health and safety, social performance, community relations, human rights and security. The sub-committee seeks assurance that Ambatovy consistently promotes ethical, transparent and responsible behavior, and meaningfully engages our stakeholders and communities. The sub-committee receives detailed quarterly reports for all sites and works with Ambatovy's leadership team to suggest directives for Senior Management to pursue. The Executive Committee, including members of the subcommittee, periodically visits our sites in Madagascar for first-hand viewing and interactions with our team.

After four and a half years of leading the company, Stuart Macnaughton left Ambatovy in late 2021 to pursue new opportunities. During his time as President of Ambatovy, which included the incredibly difficult Covid-19 pandemic, Stuart provided a compelling vision and a strong sense of leadership, and was key in establishing an organizational culture committed to stabilizing and securing the long term sustainability of our business. We are very appreciative and grateful for all his hard work and contributions.

The Ambatovy family is very pleased to have welcomed Gus Gomes as our new President. Through his thirty-year career, Gus has gained extensive experience working in various commodities, regions, and value chains. He brings extraordinary value to our team!





16 Corporate Governance

## **Our Sustainability Commitment**

Ambatovy believes that our long-term sustainability is directly linked to the quality of our relationships with our stakeholders, along with our resilience to external and internal crises and our ability to weather negative cycles within the mining industry.

In the conduct of our business, we are committed to engaging with our stakeholders and earning their support by operating ethically, creating a rewarding workplace, demonstrating environmental excellence and submitting to external controls.

To meet this commitment Ambatovy will:

- Effectively engage stakeholders in order to understand their expectations, to build trust, to foster employee pride and community ownership, to maximize economic benefits to the community and country, and to reinforce national and international acceptance of Ambatovy;
- Demonstrate strong governance ensuring that our internal governance and compliance is flawless, that the country and our neighboring communities receive their fair share of benefits from Ambatovy, and that we operate ethically within our zero tolerance policy and with uncompromising respect for human rights as defined by international standards;
- Comply with national environmental regulations and international standards in order to ensure no net loss of biodiversity via Ambatovy's Environmental Management

System (AEMS); to adequately fund and staff the AEMS; to ensure the legal protection, long term management and financing of Ambatovy's land offsets; and to consistently use clear metrics to measure loss and gain of biodiversity;

- Ensure external controls of our activities through continued use of third party expertise and sound science-based programs, as well as open and transparent collaboration with authorities charged with supervising our environmental and social activities;
- Create a rewarding workplace that attracts the best industry talent, emphasizes skills development, and develops pride and ownership in our workforce;
- Maintain the safety and security of our surroundings by committing to Zero Harm in order to build a safe working environment, by ensuring the security of our employees and assets in accordance with the guidance of the Voluntary Principles on Security and Human Rights, and by supporting a Safety Culture within Ambatovy's areas through effective risk management, active communication, training and awarenessraising, and ongoing community engagement.

This commitment is not only internalized within Ambatovy's activities but is also expected of our suppliers and contractors. In this way, we hope to further increase the positive impacts we have in the country and extend our best practices across the industry.

## The Sustainable Development Goals

The United Nations' Sustainable Development Goals (SDGs), a follow-up to the Millennium Development Goals, consist of 17 ambitious targets to address global issues and to ensure a sustainable and resilient future for the world by 2030. The success of the SDGs depends on the participation of a range of actors — governments, communities, non-governmental organizations and corporations.

The nature of the work of the natural resources sector has economic, social and environmental impacts on the jurisdictions where projects and operations are located. As a responsible company working in both a low-income country and a biological hotspot, we aim to ensure that the potential negative impacts of our activities are minimized and mitigated to the greatest extent possible while also focusing on actions that positively impact local communities and the country at large. To this end, the SDGs serve as a reference for us to gauge how and to what extent we are contributing to Madagascar's development and to its achievement of these globally recognized sustainability targets.

More information about how we are contributing to the achievement of the 17 SDGs can be found in Appendix 1.





## Key Impacts, Risks and Opportunities

In recent years, environmental, social and governance (ESG) issues and sustainability considerations, while certainly not new, have become increasingly prominent, both broadly and in the mining and metals sector in particular. ESG principles are increasingly being adopted by companies in the mining and metals sector in response to stakeholders' expectations for stronger engagement, transparency, and accountability in areas such as:

- Environment: biodiversity, ecosystem services, water management, tailings, air, noise, energy, climate change (carbon footprint, greenhouse gas), hazardous substances, mine closure.
- Social: human rights, land acquisition and use, resettlement, local procurement, community investments, diversity, labor practices, health and safety, security, artisanal miners, mine closure / after use.
- Governance: legal compliance, ethics, anti-bribery and corruption, transparency.

ESG can be used as a lens to gauge a company's exposure to environmental, social and governance risks as well as to assess its performance in these areas. For example, companies need to consider whether there are environmental, social or governance risks that may affect their ability to raise capital; to obtain authorizations and permits; to work with communities, local authorities and civil society groups; and to protect assets from impairments. There may also be opportunities to better manage energy use, improve operational performance, and enhance community and regulatory relationships.

The increased awareness of ESG issues is a challenge yet it also presents a big opportunity for our industry. It is enabling companies like ours to explore and develop ways to reduce their environmental footprint and to benefit society far and wide. It engages not only mining companies and their communities, but also governments, other businesses and partners.

At Ambatovy, we have always understood that in order to work in Madagascar, we must be mindful of the unique economic, social and environmental context of the island. Most of the impacts related to our activities are positive, such as the creation of jobs, contributions to the local economy, and improved industrial capacity in the country. However, it is necessary to be aware of not only our positive impacts but also any potential or actual negative ones, so that we can develop and implement strategies to minimize, manage, and remediate them.

We are aware that we are working in a country that has high biodiversity and that faces challenging socio-economic issues. If we do not carefully manage our activities, there are risks that we may negatively affect the delicate ecosystem surrounding our activities and worsen the poverty that already exists in Madagascar. These risks were carefully considered before we even broke ground and we continue to assess risks and impacts as they arise. Each year we identify sustainability-related impacts and opportunities and work to ensure that these impacts are minimized to the extent possible. While each challenge is weighed from within its specific context, in general, we prioritize them based on impacts on stakeholders and the environment, as well as on our ability to operate safely and efficiently. In recent years, our focus has shifted beyond simply establishing a presence in the country and communities, to engaging stakeholders in a meaningful and respectful way, building partnerships, and maintaining the sustainability of our actions and investments.

#### **Economic**

Many extractive companies in sub-Saharan Africa have chosen to refine their minerals in Asia, Europe, or North America. Ambatovy's decision to refine our products in-country brings important local benefits including the creation of thousands of additional jobs (and the subsequent professional training and career development opportunities that come with them), significant earnings for the Government of Madagascar, local spending on goods and services, technology transfer and capacity building, and the construction of important infrastructure. These are all generating substantial economic returns for Madagascar and will continue to do so for many years.

There is enormous potential for extensive positive financial benefits for the communities and the country through wages and supply contracts. There is also the potential to improve capacity to deliver goods and services of international quality.

We work to maximize these positive impacts through targeted programs to increase local supply, promote local employment and support income generating activities for community members. Identified negative impacts include the potential for price inflation and increased strain on municipal services as people move into the communities surrounding our operations looking for economic opportunities. However, these are more than compensated for by the aforementioned economic benefits.

In recent years, our industry has seen a growing requirement from manufacturers and consumer-facing companies to demonstrate responsibility in their supply chains, which is subsequently putting pressure on upstream mining companies to provide evidence of social and environmental responsibility at their operations, with a particular focus on human rights, labor rights and occupational health and safety. Customer expectations for mining companies today are growing with regards to demonstrating high standards for environmental, economic and social performance, while also mining and processing safely and efficiently. An increasing number of customers, potential customers and industry groups want to know how we conduct our business, and are requesting risk readiness assessments, due diligence reviews and third-party audits of Ambatovy's operations. We are preparing ourselves to support our customers and the industry groups in this endeavor by aligning with international standards (such as ISO 14001, ISO 45001 and the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas), conducting internal audits on responsible supply chain requirements, providing training for our suppliers and sub-contractors, doing gap assessments, and leveraging industry associations for insight and support. Our customers can be confident that Ambatovy produces high-quality nickel and cobalt in accordance with applicable laws, regulations and the highest ethical standards.

The emergence of the electric vehicle market has created optimism about the nickel and cobalt markets since both metals are key components in current battery technology. As a low-cost, high purity producer of Class I nickel, Ambatovy is poised to take advantage of growing demand given that our production is primarily in briquette form — a type ideally suited to battery production.

World-wide demand for nickel and cobalt is expected to grow over the coming years. Indeed, batteries, which rely on nickel and cobalt, are becoming increasingly important for storing renewable energy and supporting the global goals of sustainability and action on climate change.

The last three decades have seen extraordinary changes in how batteries are made and used. New applications – from storing solar energy to powering electric vehicles – have emerged. These new applications, in turn, are pushing the limits of battery capacity and power, resulting in greater demands for higher purity metals, such as Class I nickel. Unlike pig iron which is high in iron content, Class I nickel is purer and amenable to battery production – particularly for the fast-growing electric vehicle market. Ambatovy is a producer of Class I nickel.



#### Social

In a country with significant poverty and social needs, great expectations can be placed on large companies to solve many, if not all, of the area's inherent socio-economic challenges. Indeed, now more than ever, stakeholders – from local communities and civil society organizations to regional authorities and the national government – expect to experience tangible benefits and improvements in their standard of living from natural resource extraction and processing.

Managing the expectations of our stakeholders is therefore paramount, especially as we struggle with a volatile commodity price environment. We are obligated to be fully compliant with both Madagascar's national regulations and the IFC Performance Standards, and a key focus over the past several years has been avoiding, minimizing, and mitigating negative social impacts and maximizing the positive ones. We are committed to helping improve the lives of people near our operations, but we rely on the government to fulfill its obligations regarding basic services, particularly in the areas of health, education and infrastructure. Moreover, Ambatovy seeks to establish partnerships with other groups in a manner that taps each partner's strengths so as to address stakeholder issues and opportunities and to have a greater and more sustainable impact, but that does not substitute for the government, does not foster dependency, and does not create unrealistic expectations of what we can do.

Currently, the mining sector creates millions of jobs around the world. However, many employees are aged 45 years or older and the sector runs the risk of missing out on skilled, capable workers if it fails to find a way to make mining more attractive to future generations. Demonstrating strong ESG performance could play a key role in ensuring that young, talented people are drawn into establishing and retaining their careers in the sector.

#### **Environmental**

The Mine lies at the southern end of the eastern rainforest so protection of the biodiversity in surrounding areas has been a key priority since the early planning stages. The partially degraded forests around the Mine have undergone considerable human-induced pressures for many years, often prior to our arrival to the area, including hunting and gathering, selective logging, slash-and-burn agriculture, uncontrolled fires, and species collection for trade and consumption. Operating in such a highly sensitive ecosystem therefore obligates us, as an environmentally and socially responsible member of our community, to design and implement extensive avoidance, mitigation and conservation measures to ensure that we continue to minimize our impacts. Ambatovy has devoted considerable time and resources to ensuring these measures are incorporated into our business plans and operational processes. Local communities have also been included in our environmental management and stewardship activities to preserve the long term sustainability of Madagascar's diverse flora and fauna.

We are also obliged under the laws of Madagascar and our financing agreements to meet stringent environmental criteria. Aside from those obligations, we have committed ourselves to multiple voluntary compliance and monitoring programs, such as the Business and Biodiversity Offsets Program (BBOP) for which Ambatovy was a pilot project (please see the section on Environment for more on this initiative) in order to achieve no net loss. Compliance with these criteria requires a substantial commitment on our part, in terms of both financial and human resources. We have carefully budgeted funds to ensure that we meet or exceed the targets that have been set.

As at many mining companies globally, due to dam failures in Brazil and elsewhere, Ambatovy is reviewing and evaluating our tailings management monitoring systems and risk assessments in order to ensure that our approach is more than robust and current. Our tailings facilities undergo continuous upgrades and construction based on our containment needs and are managed and monitored 24/7 by a dedicated engineering team.

As demand increases for exploration, mining, and processing of raw materials critical to the clean energy transition, companies such as Ambatovy have an opportunity to integrate and enhance environmental policies, congruent with global initiatives.

#### Governance

We commit to conducting all activities with integrity and the highest standards of responsible conduct. This includes avoiding actual and perceived conflicts of interest, having zero tolerance for corruption of any form, and respecting the rights of all people with whom we interact. We do this by vigorously implementing our Business Ethics Code, Anti-Corruption Policy and Human Rights Policy. We strive to be as transparent as possible and take an active part in the Extractive Industries Transparency Initiative (EITI) process in Madagascar, which includes disclosure of our financial and operational information, as required under the EITI standard. By implementing the Voluntary Principles on Security and Human Rights (VPSHR), we are also able to align our policies and security operations with the highest international standard for security and human rights.

Sustainability-related risk management is the responsibility of the Executive Committee and the Environment, Health and Safety, Sustainability sub-committee. This sub-committee meets quarterly to discuss issues that have arisen over the period and to authorize any significant changes to our plans and management strategies. We remain committed to managing these impacts, risks and opportunities, and to improving our ESG performance. We are proud of what we were able to accomplish during the year, especially given the unprecedented challenges we faced with Covid-19.

On April 19<sup>th</sup>, 14 containers carrying 280 tons of nickel briquettes successfully left our Plant Site to be shipped to our customers overseas. This was an important milestone for Ambatovy, and for Madagascar, marking our first shipment of nickel since resuming operations, almost a year after entering Care and Maintenance due to the outbreak of Covid-19.

Following a progressive restart of our various plants, Ambatovy produced our first nickel briquettes on March 23<sup>rd</sup> and our first cobalt briquettes two weeks later. We are proud to say we achieved our objective of restarting production in the best possible conditions thanks to an exceptional company-wide effort that included over 20 major projects and extensive maintenance across all of our sites.

The deployment of our first shipment of nickel, following a safe and efficient restart of operations, was an achievement celebrated by Ambatovy, our stakeholders and Madagascar, a country that has and will continue to reap the benefits associated with supplying the world with high-quality nickel and cobalt.





## Stakeholder Engagement

Ambatovy has a responsibility and a commitment to engage internal and external stakeholders who are directly or indirectly affected by the company's activities, as well as those who may have interests in the company and/or the ability to influence matters, either positively or negatively. We engage and collaborate regularly with stakeholders where common interests and concerns exist.

The purpose of our stakeholder engagement is fourfold:

- To establish and maintain constructive relationships with our stakeholders and to maximize the shared benefits of our activities;
- To contribute to Ambatovy being a successful, resilient and sustainable company;
- To enhance and strengthen our reputation, both domestically and internationally;
- To maintain both our regulatory and social licenses to operate in Madagascar.

We recognize that effective stakeholder engagement is critical for establishing mutual understanding of one another's needs, interests, aspirations and concerns, for making decisions to support business objectives related to growth, risk management and operational excellence, and for collaborating to address local stakeholder priorities. In other words, constructive stakeholder relationships are essential to securing and maintaining our social license to operate and creating mutually beneficial outcomes.

Identifying and understanding who our stakeholders are is an important part of our work. Stakeholder influence can vary, from minor to significant, and this influence may change over the course of the different phases of our operations.

Stakeholder engagement is therefore an ongoing process, one that encompasses a range of activities and approaches, and that will span the entire life of the Mine. Like other Ambatovy business functions, our stakeholder engagement is guided by a well-defined strategy with clear objectives, priorities, methods for engagement, concrete activities and assigned responsibilities. Our approach is systematic so that we can track and manage stakeholder issues and risks more effectively.

Stakeholder engagement entails building robust, productive relationships through communication, consultations, ongoing dialogue and working partnerships. We want our stakeholders to understand why and how we operate. We especially want input from relevant stakeholders when a particular aspect of our operations directly affects them.

Our stakeholder engagement is guided by the following principles:

- Through our actions and behaviors, Ambatovy actively strives to earn the respect, trust and cooperation of all stakeholders. We create and maintain relationships that are inclusive, honest, transparent and mutually beneficial. These relationships are a tangible, valuable asset and integral to the company's business outcomes.
- Ambatovy is committed to sustainable development, i.e., meeting the needs of the present without compromising the ability of future generations to meet their own needs. As such, Ambatovy creates long-term value and benefits for our stakeholders while seeking to understand and respond to their issues and interests.
- Ambatovy recognizes that we need to be accountable for our actions and impacts. If our operations are not managed appropriately, they have the potential to impact local communities and the environment negatively. Thus, the company attempts to minimize the impact of our operations by operating our facilities to the appropriate industry and international standards, and by working collaboratively with stakeholders to identify and mitigate negative impacts, and to maximize positive ones.
- All Ambatovy employees and contractors have a responsibility to conduct meaningful stakeholder engagement as "ambassadors" for the company. Ambatovy understands that to achieve success in stakeholder engagement, we must integrate the principles of stakeholder engagement within all aspects of our business.



Stakeholder Engagement 21

Through our various stakeholder engagement activities, the following topics and/or concerns were raised in 2021:

- Health, safety and security issues, specifically regarding Covid-19 but also related to our installations and operations
- Restart of Ambatovy's operations after the temporary shutdown due to Covid-19 and resumption of production activities
- · Livelihoods development
- Access to resources
- Royalties
- Employment and business opportunities
- Impacts of our operations on the environment, human health, the economy and society
- Compliance with national regulations and international standards
- Good governance and responsible sourcing
- Mining sector in Madagascar and revision of the Mining Code
- Opportunities to collaborate and to partner on various initiatives
- Global nickel prices and the electric vehicle market

Each of these topics has been raised by several of our stakeholder groups (indicated below), signaling to us that these are the key topics of interest and concern. We regularly engage, report and communicate on these topics with the relevant or concerned stakeholders. As described below, our engagement tactics vary depending on the type of stakeholder group involved, the nature of the interaction, and the topics and issues raised.

Ambatovy's stakeholders are identified as those who have been directly or indirectly impacted by our activities, who have an interest in the company and/or who have an ability to influence matters, be it positively or negatively. Through our stakeholder identification process, we have identified ten groups of national and international stakeholders:

- Malagasy Government and Regulatory Bodies
- Regional and Local Authorities
- Local Communities and People Affected by the Project (PAPs)
- Malagasy General Public
- International Community
- Civil Society Organizations and Local Non-Governmental Organizations (NGOs)
- Press and Media
- Private Sector/Business Community
- Our Employees and Contractors
- Our Shareholders and Lenders

# Malagasy Government and Regulatory Bodies

Ambatovy strives to have an open and transparent relationship with the Government of Madagascar at all levels as well as with regulatory bodies that are authorized to oversee our operations. This transparency is achieved through ongoing engagement and reporting that frequently go beyond what Ambatovy's legal obligations require. We meet with relevant ministries and authorities at national, regional, and local levels and often host members of these institutions for site visits to help them better understand Ambatovy's operations, approaches and challenges. In 2021, Ambatovy engaged with government officials on a wide range of important matters and policy issues specifically related to Ambatovy, and hosted several key authorities at the Mine and Plant Sites. We also had extensive engagement with officials on issues related to the evolving Covid-19 pandemic including health measures taken at our sites, the re-start of our operations after the temporary shutdown, and donations for the fight against Covid-19. Close collaboration was also required to coordinate travel and obtain the necessary authorizations for expatriate employees facing travel restrictions. As in previous years, we continued to work closely with the ONE with regards to our environmental and social commitments.

## Regional and Local Authorities

As with counterparts on the national level, Ambatovy collaborates with regional and local authorities in many aspects of our operations. In order to encourage transparency through continuous and open communication, Ambatovy regularly offers informational visits and tours to regional and local authorities. In 2021, Ambatovy worked closely with regional authorities to help in the continued fight against Covid-19 with donations of equipment, materials, supplies and meals for health workers and patients. We also organized a stand at the Regional Economic Fair in Toamasina and engaged with relevant regional authorities on opportunities to partner and collaborate on activities such as WASH¹, technical assistance for farmers, reforestation programs, eco-tourism initiatives and construction of school classrooms.

# Local Communities and People Affected by the Project (PAPs)

We understand that individuals who reside in communities near our sites are the very people who can be most impacted by our activities. They are therefore very important to us and we aim to build enduring relationships with our neighbors to make sure we manage our operations in an open, respectful and transparent manner. The Sustainability team continues to maintain constructive dialogue with various actors in the communities, ranging from traditional local authorities

<sup>&</sup>lt;sup>1</sup>WASH stands for Water, Sanitation and Hygiene. Universal, affordable and sustainable access to WASH is a key public health issue and is the focus of Sustainable Development Goal 6.

to representatives of the *fokontany*.<sup>2</sup> In 2021, Ambatovy continued to engage local communities near our sites, along the Pipeline and near our conservation zones by organizing information-sharing and awareness-raising sessions, promoting income generating activities (IGAs), developing forest stewardship initiatives, strengthening local capacity for resource management, facilitating partnerships with farmers' organizations, and collaborating with Local Watch Associations (LWAs) on community monitoring of Pipeline infrastructure.

and joined a series of consultations on best practices in corporate social responsibility and sustainability performance in Madagascar, held by the Ministry of Environment, the Economic Development Board of Madagascar (EDBM), and USAID's *Hay Tao* Program (four of Ambatovy's programs/approaches were cited as "best practice"). We also participated in and/or sponsored several other events throughout the year.

## Malagasy General Public

Ambatovy's stakeholder engagement focuses not only on the local communities around our sites but also on the general public in Madagascar. We organize a range of events and activities to allow the public opportunities to exchange with Ambatovy employees in order to obtain information on the nature of Ambatovy's activities, to get a better understanding of the mining industry and the international standards we follow, and to dispel rumors. During the second half of the year, we were pleased to be able to gradually resume visits to our sites, organize some mini open-door events and conduct community field trips — which had all been curtailed, scaled back or held virtually since the onset of the pandemic. We still, however, prioritized phone conversations and virtual meetings over face-to-face encounters for much of the year, and careful protocols were put in place at any public events.

Ambatovy also participates in local and national fairs as well as conferences and workshops, especially in the domains of sustainability, employment, the environment, health and safety, good governance, local content, and socio-economic development — areas that we consider key to sustainable development and responsible mining. In 2021, Ambatovy actively took part in the sixth edition of the Conference on Corporate Social Responsibility and Sustainable Development Initiatives; made a presentation on our commitment to sustainable development at a workshop organized by Women in Mining and Resources-Madagascar (WIMR-Mada); participated in a national workshop on HIV/AIDS in the workplace hosted by the International Labor Organization (our HIV/AIDS program was cited as a model for other companies);



## **International Community**

Ambatovy engages with the international community in Madagascar, including diplomatic missions, UN agencies, donors and international non-governmental organizations (INGOs). This engagement helps create and reinforce synergies between Ambatovy and other international groups, and provides valuable opportunities to establish a climate of trust, respect and openness, to exchange information, to develop best practices and to establish partnerships. Such partnerships are extremely important for Ambatovy to maintain our social license to operate, to ensure that Ambatovy's interventions are complementary with other groups, to tap each partner's strengths and expertise in order to have a greater and more sustainable impact, and to share experiences and lessons learned. In 2021, Ambatovy participated in the National Committee of the GloFouling Partnerships Project, an international initiative led by the International Maritime Organization (IMO), the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) in order to prevent the transfer of harmful and invasive aquatic species through biofouling; provided support for the Asian Toad Control and Mitigation Program, under the aegis of the Ministry of Environment and the Madagascar Fauna and Flora Group (MFG), which had its official launch during the year; and continued consultations with the African Development Bank (AfDB) to share our ALBI experiences and to discuss opportunities and challenges for big companies like Ambatovy to work with small and mediumsized enterprises (SMEs) in their supply chain, as part of the African Development Bank's Business Linkage Program. We also welcomed representatives from diplomatic missions to visit our sites, and engaged closely with various embassies, consulates and INGO partners.

## Civil Society Organizations and Local Non-Governmental Organizations (NGOs)

We engage actively with civil society organizations where common interests and concerns exist, whether these are broad policy issues with a national scope or local issues that affect communities around our operations. Consistent with our approach to all stakeholders, we respect the views of civil society groups and seek to build dialogue in a constructive manner. We are pleased to partner with a number of civil society organizations that collaborate with us on the implementation of programs that fulfill our commitments to

Stakeholder Engagement 23

<sup>&</sup>lt;sup>2</sup>In Madagascar, the *fokontany* is a political subdivision equivalent to a village or group of villages.

our stakeholders and that help meet our objectives. In 2021, we continued our collaboration with the local association Mitsinjo on the special conservation program for the Golden Mantella frog near the Mine Site as well as our collaboration with Asity Madagascar, an affiliate of BirdLife International, for the management of the Torotorofotsy offset site. We also continued our partnership with the local NGO SAHA³ in Phase II of the support and accompaniment of communes that receive royalty payments from Ambatovy. In addition, we engaged regularly with civil society groups such as the OSCIE and Transparency International to inform them about Ambatovy's approaches and activities, about the mining sector in Madagascar, about the nickel market, etc.

SDG 17 calls for a global partnership for sustainable development. When we work together in partnership, built upon respect and collaboration, we have the chance to achieve great goals. Indeed, Ambatovy recognizes that working in constructive partnerships with other stakeholders can help expand, broaden and deepen our overall contributions to social and economic development in Madagascar.

Ambatovy is pleased and proud to collaborate with many different partners, including the Malagasy Government, developmentagencies, non-governmental organizations, civil society groups, and local communities in order to address and drive progress on important issues, to ensure transparency, to broaden our networks and perspectives, and to have greater and more sustainable impacts. More information about our partnerships with both international and local organizations can be found in Appendix 2.

#### **Press and Media**

The press community constitutes one of Ambatovy's most important stakeholders and is a key partner in informationsharing with the general public. Collaboration with the press and media occurs on a regular basis and is especially important in disseminating clear and timely information and in dispelling rumors. Our engagement focuses on broadening public understanding of Ambatovy's activities and providing a more holistic view of our objectives and responsibilities as part of the wider mining industry. Ambatovy regularly issues press releases and newsletters and offers site visits to journalists in order to cultivate a truthful public record of our activities. Throughout 2021, Ambatovy shared updates about our activities with the press via news articles, press releases, and briefings. We also worked to expand our presence across social media platforms to more fully engage local and international audiences and to further distribute information on Ambatovy's actions and interventions. We now have over 27,000 LinkedIn followers, 134,000 Facebook followers and 1,000 followers on Instagram. We also re-launched our corporate website in 2021 with refreshed content and a new look.

## **Private Sector/Business Community**

Ambatovy has an extensive supply chain, and our suppliers are integral stakeholders for us. While we have a range of suppliers around the world, Ambatovy emphasizes local procurement through the Ambatovy Local Business Initiative (ALBI) as part of our commitment to support the Malagasy economy. ALBI offers technical support to local enterprises, thereby allowing them to supply a range of goods and services while meeting our high standards, such as caustic soda, workers' uniforms and raincoats, wooden pallets and windsocks. Our focus on local procurement remained in place in 2021, with more than US\$ 225 million US in goods and services purchased from more than 350 local businesses throughout the year and with approximately US\$ 65.7 million US of goods and services purchased from "local-local" suppliers, i.e. from our zones of operations. More information about our commitment to local procurement can be found in the section on Economic Performance.

We also engage regularly with the wider business community in Madagascar to discuss issues of mutual interest or concern. We are a member of the Chamber of Mines of Madagascar as well as the Madagascar Business Association (Groupement des Entreprises de Madagascar, GEM), the Madagascar Industries Union (Syndicat des Industries de Madagascar, SIM) and the Private Sector Humanitarian Platform (PSHP). Through our engagement with the wider business community, our goal is to contribute to promoting exchanges and learning, strengthening the voice of the private sector, enhancing the business climate in Madagascar, and demonstrating responsible business practices. This engagement was particularly important in 2021, as many businesses across the country and in different sectors continued to be affected by the pandemic, in order to discuss impacts, mitigation measures and potential recovery efforts post-Covid-19. For example, in 2021 along with other companies, Ambatovy participated in the Assises du Secteur Privé, organized in order to prepare a White Paper for the country's post-Covid economic recovery.

## **Our Employees and Contractors**

At Ambatovy, we aim to recruit national employees whenever possible and are committed to developing a skilled local workforce. Indeed, recruiting, developing and retaining talented and motivated employees helps us to be more productive, to deliver better business results and to be an employer of choice in Madagascar. As of December 2021, Ambatovy's total workforce was made up of 11,609 personnel, including 7,870 contractors and 3,739 direct employees, 91% of whom are Malagasy nationals. Thousands of Malagasy employees and contractors have, over the years, received technical, operational, leadership and administrative training. Investing in such training provides them with the skills required to assume roles with increasing responsibility during the life of our operations. Moreover, the partnerships we maintain

<sup>&</sup>lt;sup>3</sup>SAHA stands for "Sahan'Asa Hampandrosoana ny eny Ambanivohitra", meaning Rural Development Program.

with local technical schools ensure capacity building for our workforce and the local population.

In 2021, our objective was focused on keeping employees safe, engaged and informed as they returned to work after the temporary shutdown of our operations due to Covid-19, and on supporting preventative measures to curb the spread of Covid-19 both within and beyond the workplace. To further boost engagement, Ambatovy also revitalized our employee group "We are Ambatovy". More information about our Employee Engagement can be found in the section on A Safe and Rewarding Workplace.

#### Our Shareholders and Lenders

Our shareholders and lenders play an integral role in supporting our operations. In 2007, Ambatovy partners reached a financing agreement with a consortium of 14 lending institutions. This consortium is comprised of government-sponsored export credit agencies, international development banks, and commercial banks from around the world. We report regularly to the lenders on a wide range of sustainability issues and we communicate through our partner companies to financial and industry analysts who assess commodity markets.

Ambatovy is always looking for new ways to support local growth and maximize economic value-added to local communities. During the global health crisis, many Malagasy businesses, including our local suppliers, faced unprecedented economic challenges in light of Covid-19. To support the potential of local Malagasy companies, Ambatovy implements the Ambatovy Local Business Initiative (ALBI) and continuously works to identify new and unique opportunities to promote local purchasing, especially during these challenging times.

Our partnership with the *Vonjy* Garment Workshop is one example of the kind of "local-local" supplier

base we are building within areas directly affected by our operations. The *Vonjy* Garment Workshop is a Toamasina-based SME that was awarded a contract to supply locally produced washable cloth face masks distributed by Ambatovy to our employees as part of our Covid-19 prevention efforts. Since March 2000, we have ordered over 43,000 masks. Partnerships like these create local jobs and economic returns while supporting our company goal of contributing to improved health and social welfare for vulnerable populations through social and economic integration and sustainable employment.



Stakeholder Engagement 25

<sup>&</sup>lt;sup>4</sup>Ambatovy received US\$ 2.1 billion in financing from this consortium. Please see www.ambatovy.com for a complete list of these 14 lending institutions.



















## Governance and Human Rights

## **Objectives**

- Endeavor to meet and, when possible, exceed the mandatory and voluntary compliance requirements of our agreements with the Government of Madagascar, our lenders and other stakeholders.
- Ensure that our employees and contractors comply with Ambatovy's standards of ethical behavior, good governance and human
- · Contribute to good governance in the mining sector within Madagascar.

## **Approach**

Our commitment to working with integrity, transparency, respect and the highest ethical standards provides the framework to ensure that Ambatovy is an organization that respects our communities, our partners, and our employees. Ambatovy is committed to taking into consideration the interests of our stakeholders in our decision-making, and to respecting culture, customs, values and human rights in our interactions with all those affected by our activities. This includes avoiding actual and perceived conflicts of interest, having zero tolerance for corruption of any form, and respecting the rights of all people with whom we interact. We do this by rigorously implementing our Business Ethics Code, Anti-Corruption Policy and Human Rights Policy, and by ensuring we have the systems and programs in place to realize our expectations.

We hold all employees, regardless of their position, responsible for respecting both their fellow employees and the communities around our operations. We also expect that the companies with which we work maintain the same level of ethical behavior. Our suppliers and contractors are required to sign a Supplier Code of Conduct and to fulfill certain labor requirements if they wish to do business with us. Our Supply Chain Management (SCM) team is responsible for educating our suppliers and ensuring their compliance with our standards.

Human rights issues are an inherent risk to all mining sites around the world. To manage this risk, we are aligning with international best practices and expectations regarding human rights, and we take human rights very seriously, in line with our commitment to minimizing actual and potential negative impacts of our operations on local communities. Human rights protection and awareness have been integrated into our operational and sustainability strategies. We have a formal Human Rights Policy that affirms the commitment of Ambatovy to operate in a way that respects human rights as set forth in the Universal Declaration of Human Rights (UDHR). Human rights are addressed through the IFC Performance Standards, with which we are obliged to comply, and we adhere to the Voluntary Principles on Security and Human Rights (VPSHR) in all of our areas.

We believe that human rights are everyone's responsibility and, as a major purchaser of goods and services in Madagascar, we have worked to ensure that human rights violations are not present in our supply chains. Both employees and external stakeholders have access to Ambatovy's Grievance Management and Whistleblower Systems for filing grievances on any subject, including unethical behavior and human rights violations. We are committed to investigating any violations and ultimately aim to prevent such violations before they take place by informing our employees and key stakeholders of our expectations with regards to respect, honesty and integrity.

# 







## Compliance to External Initiatives (Mandatory and Voluntary)

Ambatovy strives to maintain the highest ethical standards, to respect local culture and traditions, and to comply with the laws and regulations of Madagascar. We endeavor to meet and, when possible, exceed the mandatory compliance requirements of our agreements with the Government of Madagascar, our lenders and other stakeholders. We are also committed to several voluntary measures that go beyond our legal obligations. More information about each of these mandatory compliance and voluntary commitments can be found in Appendix 3.

#### **Mandatory Compliance**

BEPORUSAT MADABASKARA Policy II Valid Mala Polisiona	Law on Large Scale Mining Investments (Loi sur les Grands Investissements Miniers, LGIM)
ONE ONE ON A STANDARD OF THE ONE	Decree on Rendering Investments Compatible with the Environment ( <i>Décret sur la Mise en Compatibilité des Investissements avec l'Environnement</i> , MECIE)
International Finance Corporation WORLD BANKGROUP	International Finance Corporation (IFC) Performance Standards
EQUATOR PRINCIPLES	Equator Principles

#### **Voluntary Commitments**

VOLUNTARY PRINCIPLES ON SECURITY OHUMAN RIGHTS	Voluntary Principles on Security and Human Rights (VPSHR)
EITI	Extractive Industries Transparency Initiative (EITI)
9001:2015	International Standard ISO 9001 <sup>5</sup>
SESPONSION SINTERPORTED IN THE PROPERTY OF THE	Responsible Minerals Initiative (RMI)
ICMM International Council on Mining & Metals	International Council on Mining and Metals (ICMM)

Some highlights in our work with regards to these standards in 2021:

- Ambatovy organized 18 sessions on the VPSHR to more than 700 private and public security providers as part of their orientations for working at the Mine and Plant Sites. Special training was also offered to 17 Security Controllers at the Plant Site, covering topics such as risk analysis and management, principles of an intervention, methods of interrogation, and training in the use of telescopic batons, among other topics (similar training for Security Controllers at the Mine will be held in 2022).
- Ambatovy continued our active participation on the National Committee of EITI Madagascar. Important work during the year included: progressing on the annual work plan, advancing on the 2019 and 2020 EITI reports following

- the "flexible reporting" option proposed to implementing countries by EITI International due to challenges faced as a result of Covid-19, and participating as a guest panelist at EITI International's peer learning workshop on advancing gender equality in the extractive sector.
- In May 2021, the first annual audit to confirm compliance
  of our QMS with ISO 9001 requirements was conducted
  after we received the renewal of our certification in 2020.
  Ambatovy achieved zero non-conformities, three strong
  points, three areas of concern and one opportunity for
  improvement. This maintenance of our certification
  demonstrates Ambatovy's commitment to quality and to
  our customers.
- As part of our strategic directions and to be in line with LME responsible sourcing requirements, Ambatovy is also working towards certification against the ISO 14001 standard (environmental management system) and the ISO 45001 standard (occupational health and safety management system) by December 2023.
- In 2021, Ambatovy became engaged with the Responsible Minerals Initiative's Responsible Minerals Assurance Process (RMI RMAP). The RMAP offers companies and their suppliers an independent, third-party audit that determines which smelters and refiners can be verified as having systems in place to responsibly source minerals in line with current global standards, including the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Ambatovy is now on the RMI's "active list" which includes those cobalt refiners that are currently engaged in the RMAP, at any point from scheduling the initial assessment to implementing corrective actions. We are working towards being conformant to the RMAP Standards and expect to have our first audit during the second quarter of 2022.

#### **Business Ethics**

Ambatovy's core values require that we conduct our business in a moral and ethical manner and that our employees comply with all applicable laws. To support this conduct and to provide clear guidance on what it means to act with integrity, Ambatovy has a Business Ethics Code, an Anti-Corruption Policy, a Code of Conduct, a Zero-Tolerance Policy and a policy against discrimination and harassment in the workplace. The requirements of our Anti-Corruption Policy have been established in compliance with the Malagasy law on the fight against corruption as well as other applicable international legislation, and our Code of Conduct and Zero-Tolerance Policy outline the company's commitment to ethical conduct, compliance with the law, and avoidance of conflicts of interest. All Ambatovy employees are sensitized on our Anti-Corruption Policy and Code of Conduct upon being hired and compliance is compulsory. Refresher courses are given to our employees each year. All new employees (national and expatriate) are required to complete the SkillMine anti-corruption module

28

<sup>&</sup>lt;sup>5</sup>The International Organization for Standardization (ISO) is an independent, non-governmental organization and developer of voluntary international standards. It facilitates world trade by providing common standards across nations. Use of these standards ensures that products and services are safe, reliable, and of good quality. ISO 9001 certification is based on quality management principles, including strong customer focus, motivation and commitment of Senior Management, the use of a process and risk-based approach to managing the business, and continuous improvement.

as part of their onboarding program, within six months of their employment commencement date.

Our contractors are also required to comply with these policies and codes. A requirement to comply with Business Ethics, Anti-Corruption, and Code of Conduct Policies, such as Ambatovy's Environmental Code of Conduct, is included in all contracts awarded to new contractors to ensure they comply with our expectations in these areas; these policies and codes are regularly renewed and updated. Ambatovy also systematically reaches out to our contractors and provides Training of Trainers (ToT) workshops at each of our sites, where contractor representatives acquire the necessary information with the expectation that they will return to their respective companies and share the knowledge and skills they have acquired with their co-workers.

Ambatovy also requires contractors to disclose familial relationships with Ambatovy personnel and to sign an antinepotism agreement to prevent the risk of familial interference and influence during the bidding process and throughout the business relationship.









Ambatovy's core values – Respect, Integrity, Responsibility and Excellence - are fundamental characteristics of ethical corporate behavior and are meant to guide employees and contractors in their work at Ambatovy. Indeed, all of Ambatovy's employees and contractors must, in the performance of their duties, comply with all laws, rules and regulations, and governmental requirements of the country where we operate: Madagascar. Ambatovy is also intent that all of our employees and contractors base their conduct on the principles of honesty and integrity and on the highest ethical standards. These requirements, principles and standards have been set out and disseminated over the years in several policies and codes, notably our Anti-Corruption Policy, Business Ethics Policy, Reportable Concerns Policy, etc. In order to facilitate employees' and contractors' understanding and application of these various policies and codes, in December 2021, Ambatovy released the Integrity Guide, which gathers them all in a single document, so that we can better fight fraud, bribery and corruption and ensure our compliance.

#### **Human Rights**

#### Protection of Children's Rights

Madagascar is a signatory to the Convention on the Rights of the Child (CRC) and the Government has shown a commitment to respecting children's rights. The legal system includes legislation on child labor, human trafficking, sex tourism, birth registration, etc. Unfortunately, despite the existence of these laws and although the country has made meaningful efforts in relevant areas, public awareness and understanding is limited and enforcement is often weak. Moreover, the particular vulnerability of Madagascar's children might put them at further risk of not having their rights respected and upheld, such as by being forced into unsupervised and dangerous working conditions.<sup>6</sup> Our Human Rights Policy articulates our commitment to the CRC and the entire workforce must sign our Zero-Tolerance Policy for child exploitation. All of our contractors are also required to adhere to our policies on child and forced labor and fundamental human rights. For example, when a local business is being considered as a potential future supplier or service provider, human rights considerations are part of the assessment process. For our existing suppliers, audits are carried out sporadically by staff from ALBI and our Quality Management System (QMS) team. In the event there is an actual or potential violation of human rights, the contractor is immediately suspended from our supplier list as a human rights violation is considered a breach of our mandatory Code of Conduct.

As part of this commitment to human rights, Ambatovy has had a longstanding partnership with UNICEF. This has included work in the areas of education, youth development and child protection. As an extension of this work and in collaboration with UNICEF, the local NGO Penser and the Ministry of Industry and Trade, Ambatovy developed and rolled out a training program for our contractors and suppliers on the Children's Rights and Business Principles (CRBPs). The CRBPs are ten principles, developed by UNICEF and the international NGO Save the Children, to help companies identify pragmatic actions to support children's rights in their activities and operations and to put a child rights lens on their work. This work has become more important and relevant in recent years because the mining industry has seen a growing requirement from manufacturers and consumer-facing companies to demonstrate responsibility in their supply chains, which is subsequently putting pressure on upstream mining companies to provide evidence of social and environmental responsibility at their operations, with a particular focus on human rights, labor rights and occupational health and safety.

Governance and Human Rights

<sup>&</sup>lt;sup>6</sup>According to UNICEF, approximately a third of children between five and 14 in Madagascar are involved in economic activities. The problem is more acute in rural areas where children work with their families in agriculture and fishing. 25% of these children perform jobs that are considered the worst forms of child labor, endangering their health and safety, or physical, mental, spiritual and moral development: sexual exploitation, domestic help, work in rock quarries and in gemstone and mica mines (artisanal mining), and other dangerous work. In many instances, children are sent to work before or after school, or are removed from school altogether. Unfortunately, with the increased risk of poverty and hardship that families have faced due to the Covid-19 pandemic, some families may have had to resort to harmful coping strategies.

In line with the commitments laid out in the Environment and Social Development Management Plan (PGEDS), Ambatovy is also dedicated to the national campaign against child exploitation and works with a range of key stakeholders to broach child protection issues in local communities. In 2021, Ambatovy continued to partner with the Moramanga Child Protection Network (CPN) in order to support the implementation of its 2021 Annual Work Plan. To this effect, Ambatovy ran capacity building sessions for network members and held nine community awareness sessions, reaching over 3,500 attendees. Awareness raising was also carried out through a drawing competition carried out with the Moramanga school district, through a football tournament organized in collaboration with Oniversity FJKM Ravelojaona (ONIFRA), during the distribution of school kits to over 6,000 students and during celebrations held by the CPN in honor of Word Children's Month and International Day of the African Child. To further broaden awareness of child protection issues, Ambatovy also facilitated the broadcasting of radio awareness programs in 21 municipalities of the Moramanga District thereby meeting the outreach objectives outlined by the CPN.

Ambatovy rewarded the winners of a children's drawing contest on the theme of "In the face of the spread of Covid-19, together, let's respect children's rights." This contest was open to schoolchildren ages seven to 15 from schools located in the six communes of the District of Moramanga, and was organized in collaboration with the Child Protection Network. The drawings were on display for public viewing at the Ambatovy Information Center in Ambarilava, Moramanga.



# Voluntary Principles on Security and Human Rights (VPSHR)

We are committed to safeguarding our people, assets, reputation and the environment, while respecting the rights of the public. Our security policy outlines our principles for creating a safe and secure business environment and for conducting security operations in compliance with local, national and international legal requirements, security standards and law enforcement principles. Our management approach to site security involves identifying, understanding and minimizing security threats and risks; working with local law enforcement authorities to respond appropriately to security incidents; reporting and investigating security-related incidents and complaints and taking actions to minimize the probability of recurrence; and implementing relevant international principles, including the VPSHR.

Ambatovy has taken a series of proactive steps to bring our sites into greater conformance with the VPSHR. When our operations were first getting underway approximately ten years ago, Ambatovy conducted third-party rights risk assessments that mapped out human rights and security-related risks to both our company and our stakeholders. The results of the risk assessments were used to strengthen existing policies and procedures as well as to develop new systems and programs to prevent and mitigate the identified risks. In 2019, as a follow-up to the initial baseline assessment and in the spirit of continuous improvement, we commissioned an independent assessment to review relevant policies, procedures, and practices put in place at our sites, to verify whether Ambatovy complies with the requirements of the VPSHR and UNICEF's Child Rights and Security Checklist, and to make recommendations.

We have incorporated VPSHR-related requirements into our agreements with both private and public security providers. Such requirements include pre-employment screening and comprehensive training on security, human rights and the use of force. Human rights awareness is also a requirement of security companies submitting or resubmitting proposals in our contract tender process.

In 2021, Ambatovy organized 18 sessions on the VPSHR to more than 700 private and public security providers as part of their orientations for working at the Mine and Plant Sites. Special training was also offered to 17 Security Controllers at the Plant Site, covering topics such as risk analysis and management, principles of an intervention, methods of interrogation, and training in the use of telescopic batons, among other topics (similar training for Security Controllers at the Mine will be held in 2022). There were no security incidents involving allegations or claims of human rights abuses at Ambatovy during the year. Our Security Manager, or his designate, continued to hold regular meetings with the Commandant of the Gendarmerie during which the Voluntary Principles were discussed. We also continued to engage with security forces, donor agencies and diplomatic missions, civil society organizations, other extractive companies and other groups that are interested in security and human rights issues at workshops, conferences and seminars.

#### The Ambatovy Grievance Management System

According to the Guiding Principles on Business and Human Rights (often referred to as the "Ruggie Principles"), there is the state duty to protect human rights and the corporate responsibility to respect human rights; there is also the need to provide access to remedy for victims of business-related abuses. As such, an important aspect of engaging with our stakeholders and building our social license is listening and responding to community concerns and incidents. Our ongoing community relations activities are designed to capture and resolve most of these issues before they escalate. However, for those issues that cannot be resolved through direct consultation, it is important to provide a credible, confidential and formal mechanism to receive and address grievances. Grievance mechanisms are processes to receive, classify, acknowledge, investigate and respond to community complaints. These are valuable early warning systems that can resolve sources of friction between stakeholders and companies, and can, over time, build trust.

At Ambatovy, remedies for complaints, up to and including potential human rights violations, are provided through our Grievance Management System. Since it was established in 2012, Ambatovy's Grievance Management System has provided our communities with a transparent, participatory channel through which anyone can raise an issue of concern and be assured of receiving fair and thorough consideration. The system has incorporated best practice guidance from a number of sources in order to ensure it is practical and credible. It includes, for example, an External Grievance Oversight Committee (EGOC), comprised of respected members of local communities, that meets regularly to review the overall grievance management process (the response time, the fairness of the system, the relevance of resolutions, etc.) and to provide feedback and suggestions for improvement. The system also includes a team of local Grievance Registry Officers that handle complaints at the local level first-hand.

In 2021, Ambatovy made several improvements to the Grievance Management System, following an extensive review carried out over the past two years involving a series of public consultations, interviews with stakeholders and an internal evaluation of policies and procedures. Files received since 2010 have been digitalized, archived and categorized by areas; and Standard Operating Procedures have been updated to facilitate greater efficiency and more systematic processing at the operational level. Grievance Registry Officers were coached on a simplified guide to managing complaints, completed performance evaluations and capacity building, and saw their contracts renewed for an additional two-year period. The MoU with the EGOC members was also renewed and extended.

In terms of processing grievances, Ambatovy made great strides in closing out outstanding files in 2021. 79 outstanding files were processed during the year, and compensation was paid to 77 villagers to settle outstanding claims. Additionally, 69 new grievances were received this year, predominantly in relation to rice field restorations, concerns with compensation, and perceived infertility of soil. Three of these grievances have already been resolved and the remainder are in the process of being thoroughly investigated. The average resolution time in 2021 was 106 days.

In 2020, a new Whistleblower System was launched in order to replace and upgrade the one originally established in 2017.

The system allows employees to anonymously report issues of concern relating to health, safety and security; theft and fraud; violation of laws, policies and procedures; harassment; manipulation or falsification of records and contracts; unethical conduct and conflicts of interest. The confidential system offers employees the opportunity to report issues which they are not comfortable discussing with their supervisors or with Ambatovy's Senior Management. A toll-free hotline telephone number has been established and callers can speak in Malagasy, French or English; they can also make contact through a web-site. This system is in line with our commitment to respect human rights and with our efforts to create a healthy organizational culture. If we identify adverse human rights impacts, we will take steps to address them promptly (although, to-date, no human rights-related grievances have been reported).



In 2021, 30 reports were received through the Whistleblower System, an increase from the previous year which can be attributed, in part, to a special campaign that was organized to inform and sensitize employees about the new system and to explain how it works. The 30 reports, received via the hotline telephone number and the website, mainly related to concerns of bribery, corruption and kickbacks; equity and conflicts of interest; interpersonal relations or Code of Conduct. Seventeen of the reports have been investigated, handled and closed accordingly; four were considered invalid (hotline calls with no message left); and nine cases remain open, either not formally closed or with ongoing investigations.







i





-----





## **Economic Performance**

## **Objectives**

- · Position Ambatovy as amongst the most successful nickel laterite operations in the world, with a real competitive advantage, in order to secure long-term company sustainability for the benefit of our employees, the country of Madagascar and our shareholders.
- Maximize the economic returns of our operations to local communities, to the extent possible.
- Prioritize local procurement and invest in local capacity to be able to participate in our supply chain.

## **Approach**

Ambatovy is aware that our presence in Madagascar has had, and will continue to have, considerable economic impacts at the national, regional and local levels. Our vision is to significantly contribute to Madagascar's development and to maximize the economic return of our operations to local communities. Our decision to refine our products in-country brings important valueadded for Madagascar, including the creation of thousands of additional jobs, increased earnings for the local communes, regions and the country, and the construction of local infrastructure, to name but a few. At the national level, with Ambatovy's exports beginning in 2012, nickel has become one of the top exported products for the country. Nickel and cobalt export earnings have helped to curb the external current account deficit, maintain the value of the local currency (Ariary), and build up adequate foreign currency reserves. Locally, significant economic returns have already been seen in the form of salaries, wages and employment benefits, improved infrastructure, and business opportunities.

In recognition that an operation of this size can create both positive and negative economic impacts, Ambatovy has implemented a number of mitigation measures to counterbalance any undue results. For example, to help control inflation, to facilitate purchasing procedures and to ensure good quality, we buy our products from bulk purchasing centers which source from local farmers for fruits and vegetables. We have also dedicated ourselves to improving the capacity of local companies to deliver goods and services of international quality through regular support and training. Ambatovy also recognizes that with an investment of this size, there is a responsibility to ensure that funds are managed ethically and transparently and that we do our due diligence to lessen the chance of corruption in all of our transactions.

# Performance 4





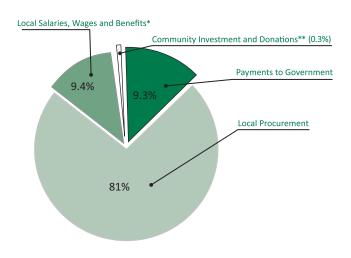


## **Economic Benefit Footprint**

When evaluating the overall economic impact that our presence delivers at national, regional and local levels, we track our

"economic benefit footprint", which includes payment of taxes, royalties and fees to the Government; the procurement of local goods and services; payment of local salaries, wages and employment benefits through our local recruitment efforts; and community investment and donations spending that goes above and beyond our obligations and commitments. In 2021, our economic benefit footprint was more than US\$ 278 million, broken down as follows:

#### **Economic Benefit Footprint**





<sup>\*</sup>For direct employees.

<sup>\*\*</sup>Our Community Investment and Donations reporting reflects all community spending above and beyond our legal requirements.

#### Payments to Government

In 2021, Ambatovy made approximately US\$ 25.8 million in payments of taxes, royalties and fees to the Government, including US\$ 2.9 million in royalties to the decentralized territorial collectivities. There were no fines related to environmental or product compliance infractions during the year.

#### **Local Procurement**

Approximately 81% of our economic benefit footprint in 2021 resulted from the purchase of goods and services from local suppliers, reflecting our commitment to maximizing the economic returns to local communities. We have implemented a range of programs and have made support tools available to local businesses and entrepreneurs so that they can provide Ambatovy with goods and services that meet our standards of procurement and quality. The Ambatovy Local Business Initiative (ALBI) was established several years ago to support this commitment and to uphold our local procurement policy of "buy locally, hire locally." As of the end of 2021, almost 5,200 potential vendors had been vetted and registered in our database. During the year, Ambatovy conducted 36% of our purchasing from over 350 local suppliers across 40 sectors of business including construction, transportation, cleaning and catering services, consumables and materials. Examples of locally-sourced materials include the pallets and barrels used for our shipments of nickel and cobalt as well as uniforms and raincoats distributed to our employees. These suppliers, in turn, create much-needed job opportunities. The exact number of jobs created to indirectly support Ambatovy's procurement needs is difficult to calculate – however, we know that almost 500 jobs have been created to build wood pallets, produce uniforms, and recycle plastic, tires and wood.

Ambatovy continues to remain dedicated to local procurement and has seen success in emphasizing local sourcing whenever it is possible. Since the start of our operations in 2012, Ambatovy has spent more than US\$ 2.8 billion in local purchases; in 2021 alone, this number was approximately US\$ 225.3 million.

Our vendors continue to have access to training modules and mentoring support in areas such as quality, health and safety, environment, the labor code and financial analysis. In 2021, for example, the ALBI team collaborated with CNaPS (National Social Security Fund) to organize a training workshop for some of our Toamasina-based suppliers and sub-contractors on CNaPS' obligations and benefits. The workshop focused on employees' affiliation to CNaPS and various benefits, contribution payments, declaration of work accidents and occupational diseases. In total, 106 persons from 62 local businesses participated in this training.

Audits are conducted periodically to verify our vendors' capacities to safely and reliably deliver goods and services, in compliance with legal, regulatory and tax requirements in Madagascar, as well as with Ambatovy's policies and standards with regards to quality, health and safety, our environmental code of conduct, business ethics and human rights. The ALBI team provides coaching to audited companies to help them address and take corrective action for any identified non-conformities; if companies are not able to do so within an agreed timeframe, Ambatovy will re-assess the continuation of the partnership. In 2021, 16 local vendors were audited (remotely, due to Covid-19), making a total of 592 audits carried out since 2011.

Ambatovy has been developing a "local-local" supplier base from within areas directed affected by our operations (i.e. inside the Districts of Toamasina I, Toamasina II, Moramanga and Brickaville). During 2021, we purchased approximately US\$ 65.7 of goods and services from 261 "local-local" suppliers, including 290 tons of fruits and vegetables, 230 tons of chickens, and 1.3 million eggs! These "local-local" purchase agreements not only create job opportunities and bring important economic returns, but they also support Ambatovy's goal of contributing to improved health and well-being for vulnerable populations through social and economic integration and sustainable development.



### Local Salaries, Wages and Benefits

Local salaries, wages and employment benefits for our direct employees accounted for approximately 9.4% of our economic benefit footprint in 2021. This reflects our commitment to maximizing employment opportunities for the Malagasy population and our contributions to raising the standard of living and creating wealth in communities near our operating sites through competitive wages and working conditions. For more information on recruitment and training, please see the section on A Safe and Rewarding Workplace.

## **Community Investment and Donations**

We endeavor to achieve maximum local impact with the funds we spend on community investment and with the donations we make. An important portion of our community investment spending in 2021 continued to be through the Social Investment Fund (SIF), a US\$ 25 million allocation established in 2012 in partnership with the Government of Madagascar. The SIF supports several projects, such as rehabilitating public infrastructure, like schools and electric generators, and building new ones, like markets and roads. In order to be eligible for SIF funding, projects require support from communities, the Government of Madagascar and Ambatovy. In 2021, Ambatovy continued delivering on our commitments for the SIF projects, notably through:

- Construction of five primary schools during the year, as part
  of the Post-Cyclone Infrastructure Rehabilitation Project.
  The schools were officially handed over to the Ministry of
  Education and are currently operational.
- Completion of the construction of the ONE laboratory in Toamasina, with the technical handover during the third quarter of the year. The purchase and delivery of equipment

- and materials for the laboratory is expected to take place in 2022; likewise, for the final handover of the laboratory.
- The start-up of the second phase of our partnership with the local NGO SAHA on the preparation/update of Communal Development Plans and Inter-Communal Spatial Development documents, as part of the *Tsara Tantana* (Good Governance) Project.

Most of the SIF projects are now completed and two are ongoing.

In addition to the implementation of projects supported through the SIF and as described further in the section on Communities and Social Relations, Ambatovy also carries out extensive activities in livelihoods development, community health and safety, work with resettled families, and cultural heritage.

Every year, Ambatovy also sets aside funds to respond to requests for donations and sponsorships. In 2021, Ambatovy continued to support the fight against the spread of Covid-19 at both national and regional levels, in particular in communities and urban centers near the Mine and Plant Sites. These contributions included:

- Donation of medical equipment, disinfectant products, Personal Protective Equipment (PPEs), office supplies and a six KVA silent generator to the Operational Command Center (CCO) of the District of Moramanga.
- Donation of two oxygen concentrators to the Inter-Enterprise Medical Service in Moramanga (SMIMO).
- Donation of Covid-19 kits to the communities of Ankazotokana and Ampangadiantrandraka, located within the Mine lease area (including cleaning products, water distribution devices, PPEs and posters summarizing health and safety protocols).
- Donation of hygiene kits and PPEs (including hydro-alcoholic solution, gloves and surgical masks) to the Brickaville District Health Service.
- Donation of 369 Intermediate Bulk Containers (IBC) to the Regional Directorate of Water, Sanitation and Hygiene (DREAH) in Toamasina in order to provide a means of storing clean, treated water for hospital use.
- Provision of 3,825 dry-pack meals to regional health authorities in Toamasina and Moramanga, to the Gendarmerie and to the Toamasina prison in order to support medical personnel, patients, and frontline workers in their efforts to control Covid-19.

Some examples of other donations that Ambatovy made during the year include:

- Donations of kitchen equipment, sewing machines and agricultural materials to several women's associations to help support their income generating activities for the production of jams and confit, the production of artisanal handicrafts, and small livestock breeding initiatives.
- Donation of school kits to 6,145 students from 18 public primary schools and four community schools in the Districts of Toamasina I and II, Brickaville and Moramanga.

 Donation of rust-resistant fencing to the Ivoloina Park in Toamasina to support their captive lemur breeding program. The Ivoloina Park has a world-class lemur breeding program and is operated by the non-profit organization Madagascar Fauna and Flora Group (MFG), an international consortium of zoos, botanical gardens, and universities dedicated to the conservation of Madagascar's rich biodiversity. Ambatovy also made a significant financial contribution to support the national Asian Toad Control and Mitigation Program which was formally launched by the Government of Madagascar and the MFG during the year.

More information on our community investments (including a complete listing of all the projects supported through the SIF) and our donations can be found in the section on Communities and Social Relations and in Appendix 4. It should be noted that Ambatovy does not make any donations to political parties, politicians or related institutions.

The Southern part of Madagascar has suffered from chronic drought and food insecurity for many years, but in 2020, the region faced the worst drought in the last ten years, resulting in a major nutritional and food security crisis with almost 1.3 million people in need of humanitarian assistance to get through the lean season. In support of national relief efforts and in response to the UN Flash Appeal for the Grand Sud, in 2021, Ambatovy made a donation to UNICEF to contribute to the life-saving treatment of severely acutely malnourished children affected by the drought. The donation allowed UNICEF to purchase Readyto-Use Therapeutic Food (RUTF), often referred to as Plumpy Nut®, a product specially designed for the treatment of Severe Acute Malnutrition (SAM). The therapeutic food was delivered to the targeted districts in the South, where it was used in hospitals, clinics and health centers for the treatment of 1,950 children under five years of age.



Excellence, one of the four Ambatovy values, reminds us to never stop seeking to better our business and to strive for constant improvement in everything that we do. Indeed, our commitment to excellence is backed by a dedicated Business Improvement (BI) department whose objective is to create value, drive change and have impact throughout the organization by solving problems, eliminating inefficiencies, and optimizing processes. Through various training programs (such as Practical Problem Solving), strategic improvement initiatives (namely 5S<sup>7</sup> and Leadership Routines), optimization projects, and coaching, the BI team works to instill a continuous improvement culture in our daily operations.

As part of our commitment to excellence, the BI team launched a new training program in 2021 based on the Lean Six Sigma: a data-driven process improvement methodology that uses a structured approach, named DMAIC (Define – Measure – Analyze – Improve – Control) to eliminate waste and optimize processes. Nine national BI project managers were trained as Lean Six Sigma Black Belts and have been using their expertise to lead various strategic improvement projects across the business. The team has worked on 18 full length optimization projects that require up to four months to be completed. The

projects have generated value in the tens of millions of dollars and their completion has created a range of important impacts, such as:

- A 50% reduction in lead times for repairable spares
- A reduction in OPP internal stoppages by 30%
- A reduction in H2S emissions from our PAL area
- Extended tire life for our fleet of 100-ton haul trucks
- A reduction in shipment lead times from ten to seven days
- Increased discharge rates and productivity at the Port
- Increased nickel recovery from PAL (95% to 95.4%)
- A reduction in the amount of nickel recycled through the refinery process
- Optimization of processed nickel concentrations to enhance production and safeguard equipment

Our Black Belts are now identifying new innovative projects to help optimize and sustain our business. They will continue to act as agents of change championing a culture of continuous improvement throughout the organization.



 $<sup>^{7}</sup>$ 5S Improvement: Sort, Straighten, Shine, Standardize, Sustain.



#### **Communities and Social Relations**

#### **Objectives**

- · Develop a climate of mutual trust, transparency and open dialogue between Ambatovy and neighboring communities.
- Promote positive and sustainable impacts within communities and contribute to improved living conditions of the local population.
- Mitigate the potential negative impacts on affected populations and their surroundings.

#### **Approach**

Now more than ever, local stakeholders—from local communities to civil society organizations — expect to experience tangible benefits and improvements in their standard of living and quality of life from natural resource extraction and processing. This is particularly true in places where socio-economic development has been lagging, infrastructure is lacking and human development indices are low. Within the industry, there is recognition that mining and energy companies have a role that extends beyond the simple provision of returns to shareholders. For a company to be truly sustainable, it must build broad social license and demonstrate that it delivers a net-positive benefit to local communities and to society as a whole. It is for this reason that benefitting people and helping to catalyze the development of sustainable communities is so important to us.

Ambatovy's activities have significant potential to impact the communities where we operate. The process of how we handle these impacts and the end results, both positive and negative, affect our relationships with local communities. A planned, transparent and constructive approach to community engagement and development is therefore critical to maintaining our social license to operate and ensuring that communities benefit from our presence. We are also conscious of the need to balance government and community expectations against our ability to deliver benefits throughout the life of the Mine, and to ensure that we do not foster dependency or substitute for government services. Our goal is to leave communities no worse off, but ideally much better, than when we arrived.

Community engagement is critical for establishing mutual understanding of one another's needs, interests, aspirations and concerns; for making decisions to support business

objectives related to growth, risk management and operational excellence; and for collaborating to address local priorities.

Constructive relationships with community stakeholders are essential to securing and maintaining our social license to operate, creating mutually beneficial outcomes and ensuring that being our neighbor is a globally positive experience. Our approach to community engagement continues to emphasize open, transparent communication with local communities concerning our activities. Since major extractive operations of Ambatovy's magnitude are still relatively new in Madagascar, we have seen a need to increase community interactions and face-to-face consultations (limited since the onset of Covid-19) in order to counter wide-spread rumors, fears and misunderstandings.

An important aspect of engaging with our stakeholders and building social license is listening and responding to community concerns and incidents. Our ongoing community relations activities are designed to capture and resolve most of these issues before they escalate, but for those issues that do, it is important to have a credible community grievance mechanism in place. As described in the Governance and Human Rights section earlier in this report, Ambatovy has established a Grievance Management System.

Our Communities and Social Relations (CSR) program focuses primarily on livelihoods development, support for education, improvement of community infrastructure through donations and the Social Investment Fund (SIF), community health and safety, work with resettled families, community engagement and cultural heritage. Collaboration with local authorities and partnerships with NGOs and other civil society groups continue to play a key role in our approach to Communities and Social Relations.

#### Performance













As noted earlier in this report, due to the ongoing Covid-19 pandemic, Ambatovy was obliged to adapt our approaches and the way we worked throughout much of 2021. For example, in order to respect health protocols, hygiene measures and social distancing requirements, teams scaled back face-to-face meetings to the extent possible and held virtual meetings instead; they met with fewer people in smaller groups; there were limitations on traveling to or visiting Ambatovy sites, etc.

#### Livelihoods Development

The Livelihoods Development component of our work reflects Ambatovy's commitment to improving the living conditions of people who reside in proximity to our sites. The Livelihoods Development program aims to enhance food security for these community members as well as to ensure and increase their sources of income, develop greater self-reliance and promote long-term development. Our Livelihoods Development activities include capacity building, organizational support, the provision of agricultural inputs, partnership development, and opportunities to network and gain access to markets.

Ambatovy remains committed to monitoring erosion and restoring impacted land along the Pipeline, and continues to work with farmers whose rice fields were affected during the construction phase or whose fields may be impacted during maintenance activities. Towards that end, we have invested in technical training, the provision of inputs and small agricultural tools, the dissemination of improved cultivation methodologies, the preparation of demonstration plots, the organization of exchange visits, and the establishment of partnerships with external NGOs and enterprises in order to develop new livelihoods and market opportunities for local villagers.

In 2021, we worked with agricultural cooperatives, farmers' associations, NGOs and the private sector to support income generating activities (IGAs) and to facilitate new marketing opportunities. Some examples of our livelihoods activities during the year include:

- Farmers' cooperatives near the Plant, Tailings and Mine Sites produced and sold 290 tons of seasonal fruits and vegetables to Newrest, Ambatovy's catering contractor. Newrest provides catering services to approximately 10,000 people per day, representing a very important market for farmers near our facilities.
- Four new village nurseries were established in the villages
  of Sahapetraka, Ambonidobo, Maromahatsinjo and Berano.
  Ambatovy now supports a total of fourteen community
  nurseries. These nurseries provide Ambatovy with over
  200,000 native plants each year, bringing a significant source
  of income to participating villages while supporting various
  reforestation activities.
- Ambatovy collaborated with the Regional Tourism Office of Alaotra Mangoro (ORTALMA) to support the training of vulnerable youth in community tourism management. We also donated materials to support the construction of an

- eco-lodge/guest house, as part of our efforts to promote youth employment.
- Farmers that are engaged in small livestock breeding near the Mine Site and in our Pipeline areas received over 200 chickens, 1,425 kg of feed, 3,945 kg of fertilizer and 2,000 kg of seed to plant rice, corn and ginger. Livestock equipment, veterinary products and materials used to construct chicken coops were also donated to support these activities.
- Ambatovy supported a pilot project in beekeeping with two villages located within the Mine lease area.
   Participants received beekeeping equipment and training from our technicians. Ambatovy also continued to support beekeeping initiatives underway in the resettlement village of Vohitrambato and assisted farmers in marketing their honey.
- Four new farmers' associations were established in our Pipeline areas resulting in the production of 8,000 kg of ginger, 6,000 cinnamon seedlings and 420 kg of beans. Demonstration plots were also set up along the Pipeline Right of Way where community members received training in maize production and produced more than eight tons of maize in the project's first year.
- Ambatovy supported the creation of ten new Village Savings and Loan Associations (VSLAs) in areas located along the Pipeline and provided equipment, supplies and training to six existing VSLAs. These community-managed associations provide communities with an important means of supporting entrepreneurship and increasing their financial autonomy. Ambatovy now supports 33 active VSLAs.

To promote gender empowerment and improve the living standards of vulnerable women in our intervention areas, Ambatovy supports a range of women's associations in the areas near our operations. In 2021, Ambatovy made donations of kitchen equipment to the Ambavaniasy Kanto Association for use in the production of jams and chicken confit; donated sewing machines to the Torotorofotsy Menalamba women's association to help improve their production of handicrafts sold on the local market; and supported a small livestock breeding initiative for women from the Vehivavy Miara-Miezaka Association through the donation of laying hens, piglets, fertilizer and feed. In honor of International Women's Day, Ambatovy also made donations to support women prisoners in Toamasina and partook in reforestation events in Moramanga and Toamasina.



#### Education

Providing educational opportunities to the children in local communities has been a priority of our social engagement activities since the construction period. Through these initiatives, Ambatovy hopes to advance the capacity of local schools and to improve the ability of families to send their children to school. Actions to support local education in 2021 included the following:

- Ambatovy provided school kits to 6,145 students from 18 public and four community schools in Toamasina I, Toamasina II, Brickaville and Moramanga. The school kits helped lessen the financial burden of school fees on families, especially during these challenging Covid-19 times, and helped maintain children's enrolment rates.
- Five public schools were constructed as part of a postcyclone project funded by the SIF. Each school was furnished with tables, benches and desks before being handed over to Ministry of Education officials.
- 42 young girls from vulnerable families in Toamasina and Brickaville were granted scholarships for the 2021-22 school year as part of a new merit scholarship program developed through collaboration with regional educational authorities (DREN) and the Brickaville school board. The program aims not only to provide vulnerable girls with a better education, but also to alleviate parents' financial burdens by fully covering each student's registration fees, monthly tuition and other schooling expenses. These scholarships will be renewed every school year (providing that students meet the required criteria) until recipients obtain their Junior High School Certificates.
- Activities resumed at six school canteens in Toamasina as part
  of a school nutrition program run in collaboration with the
  Regional Office of Nutrition (ORN). As part of this program,
  Ambatovy supported the development of five school gardens
  and provided training to parents and teachers from each of
  the targeted schools.



#### Social Investment Fund (SIF)

In 2012, Ambatovy, in partnership with the Government of Madagascar, created the SIF, with a total value of US\$ 25 million to be used for social and infrastructure projects for the benefit of the local population. These projects have been identified in collaboration with local communities and Malagasy authorities and are managed in accordance with Ambatovy's procurement

and purchasing policies. In 2021, Ambatovy continued delivering on our commitments. We completed the construction of five primary schools in Toamasina and Moramanga, as part of a post-cyclone project, and completed the construction of a new laboratory for the National Office for the Environment (ONE). All five schools have been handed over the to Ministry of Education and are now operational. The final handover of the ONE laboratory is scheduled for 2022 following delivery of laboratory equipment. The second phase of the Tsara Tantana (Good Governance) project is also underway in collaboration with the NGO SAHA. Through this project, we are working to build the capacity of local leaders and helping them to prepare effective Communal Development Plans that promote the equitable, transparent and accountable use of mining royalties received from Ambatovy. In 2021, SAHA continued to work with Communes to update/finalize Communal Development Plans and Inter-Communal Spatial Development documents. The project is expected to be completed next year. By the end of 2021, most of the 17 SIF projects were completed or closed, with two still in progress (please see Appendix 4 for a full listing of the 17 SIF projects).

#### Community Health and Safety

As good neighbors, it is critical that we ensure that our operations, transportation activities and other business practices avoid unintended or adverse effects on the public. We follow the regulations of our operating jurisdiction, strive to meet the expectations of nearby communities, and regularly engage and collaborate with local stakeholders on health and safety-related risk awareness and emergency preparedness.

#### Public Health and Safety

There are natural links between public safety and effective community engagement. Through engagement, we work to understand public concerns and safety risks, evaluate steps we can take to reduce those risks, help clarify misunderstandings and dispel misinformation, and, when appropriate, collaborate with communities on initiatives that make all of us healthier and safer. Through these efforts, we contribute to building a strong safety culture in the workplace and in the communities near our operating sites.

In 2021, our focus was on curbing the spread of Covid-19 and supporting front line workers. To this effect, we made donations of hygiene kits, major medical supplies and PPEs to various hospitals, treatment centers, government offices and local villages. We also provided nearly 4,000 meals to patients, hospital staff and health personnel operating checkpoints along the national highway; donated two oxygen concentrators to the Inter-Enterprise Medical Service in Moramanga (SMIMO) and delivered a generator to the Operational Command Center (CCO) of the District of Moramanga in order to ensure that treatment centers have a stable supply of electricity. More than 360 Intermediate Bulk Containers (IBC) were donated to the Regional Directorate of Water, Sanitation and Hygiene (DREAH) in Toamasina in order to provide a means of storing clean, treated water for hospital use.

In the workplace, Ambatovy also implemented stringent and rigorous preventative measures, in order to protect our employees, their families and the community from the spread of Covid-19. All employees returning to work were required to complete specific Covid-19 management training and adhere to new policies on mask-wearing, social distancing and hygiene measures. A complete description of the various Covid-19 prevention measures we took at our sites is included in the section on A Safe and Rewarding Workplace (Health and Safety).

#### HIV/AIDS

Madagascar has a relatively low prevalence of AIDS (with an adult prevalence estimated at below 0.3%) and the country has fortunately thus far been able to escape the worst of the pandemic that has hit much of Sub-Saharan Africa. However, the limited access to health and social services, the high rates of other Sexually Transmitted Infections (STIs) plus risky behaviors and other vulnerability factors amongst the population suggest that if HIV/AIDS were ever to gain a foothold in Madagascar, it could spread rapidly, especially in urban areas. HIV/AIDS prevention and awareness therefore remain an integral part of Ambatovy's social commitment in the field of health. Our objective is to avoid any undesirable social and cultural impacts that could result from our operations, specifically in regard to the spread of infectious diseases, and to contribute to the national goals of keeping the HIV/AIDS prevalence rate low in the general population and of "getting to three zeros": zero new HIV infections, zero discrimination and zero AIDS-related deaths.

To uphold this commitment, Ambatovy carries out awareness-raising campaigns and prevention programs on HIV/AIDS and STIs in the workplace and in surrounding communities. Our HIV/AIDS efforts target employees and communities using a participatory approach through collaboration with Government (particularly the Ministry of Public Health and the National Committee for the Fight against AIDS or CNLS), civil society, youth groups, international agencies and community members.

Within the workplace, the Employee Peer Educator Program has been a key element in both our Zero-Tolerance and HIV/AIDS campaigns. Since 2011, Ambatovy has invited interested employees to serve as volunteers in the program, to receive training and then, in turn, to educate fellow employees and raise awareness of preventive measures. In 2021, 120 new Peer Educators were recruited and trained to fight the spread of HIV/AIDS.

Despite restrictions faced during the Covid-19 pandemic, Ambatovy also continued to carry out awareness-raising and prevention activities for HIV/AIDS on a limited scale. Activities focused on raising employee awareness through Peer Educator-led sensitization as well as through internal communications and activities (TV screens, intranet, health quizzes). Events were held at the Mine and Plant Sites to mark World AIDS Day in early December and, through collaboration with the District Public Health Services, employees were offered voluntary HIV/AIDS screening. In addition, Ambatovy participated in a national workshop hosted by the International Labor Organization (ILO) on HIV/AIDS in the workplace where Ambatovy's HIV/AIDS program was cited as a model for other companies.

#### **Emergency Preparedness and Response**

One of the most important ways we protect both communities and our business is through effective emergency preparedness and response planning. At our sites, we develop plans, grounded in scenario/risk assessments, to protect the public, the environment

and infrastructure in the event of a significant incident. We also implement actions to limit the severity of impacts, should an incident occur. We coordinate closely with emergency responders in both preparedness and response activities, and we regularly conduct joint training exercises with them. Our work in this area is informed by international practices, including the United Nations Awareness and Prevention of Emergencies at the Local Level (APELL) program.

In accordance with international standards for industrial risk management, Ambatovy works in partnership with regional authorities to reinforce local capacity in emergency preparedness and response. In 2021, our activities focused on carrying out disaster management simulation exercises, and raising public awareness about industrial, fire and Pipeline safety. We continued to work closely with the Regional Committee for Disaster Risk Management (CRGRC) and the National Office of Disaster Risk Management (BNRGC) on the preparation of our Particular Plans of Intervention (PPIs); aided in the response to a community fire at the Moramanga District Reference Hospital Center (CHRD); and worked to strengthen company-community relations in order to address emerging security and encroachment issues. Community preparedness exercises included three school practice evacuations in the Ammonia pipeline corridor, a cyclone simulation exercise, and five village simulation evacuations near the TMF. Awareness raising sessions on blasting safety, overhead power lines, bushfire prevention, and encroachment issues were also carried out to sensitize communities near our operations about industrial risks.

Key accomplishments in 2021 with regards to emergency preparedness and response include:

- To improve emergency preparedness in the event of an incident at the TMF dams, simulation exercises enacting a dam failure were carried out with five villages within the dam's influence zone. A cyclone simulation exercise was also carried out with villagers from Ambodisaina, and an evacuation exercise was carried out with the same village during the enactment of a water contamination event. To strengthen community security around the TMF, Ambatovy also introduced a new access system that requires local villagers (living upstream of the TMF) to carry access badges when passing through the TMF. So far, 665 badges have been issued.
- Ambatovy imports anhydrous ammonia as a liquid in refrigerated tank ships. It is pumped via an underground pipeline from the Port to a large storage facility four km north of the Plant Site, then is transferred as needed via an underground pipeline to the Plant Site's ammonia storage tanks. In 2021, Ambatovy organized three school practice evacuation exercises within the pipeline corridor. The exercises targeted 1,349 students and teachers who enacted an evacuation following a gas leak alert. To reinforce evacuation procedures, a capacity building program was also developed for teachers, and billboards displaying safety instructions were installed throughout the ammonia pipeline corridor. Siren tests were also regularly performed.
- Ambatovy uses a 220 km Pipeline to transport slurried ore from the Mine to the Plant Site. To secure infrastructure along the Pipeline, Ambatovy conducts regular monitoring in collaboration with disaster management authorities and local stakeholders. In 2021, Ambatovy completed over 2,000 mandays of rehabilitation work along the Pipeline, treated six sites impacted by general Pipeline maintenance, and carried

out 25 collaborative monitoring operations with community associations. Ambatovy also continued to carry out awareness raising activities with communities living along the Pipeline. Two meetings with local authorities and 13 community awareness sessions were carried out. New collaboration agreements were also signed with 11 Local Watch Associations (LWAs) to strengthen surveillance in areas prone to theft and vandalism.

#### **Resettlement Communities**

#### Vohitrambato and Marovato

To facilitate construction, Ambatovy had to resettle villagers living in the vicinity of the Tailings Management Facility and Plant Site. From December 2007 to February 2008, Ambatovy relocated 261 households living at these sites to two resettlement villages, Vohitrambato and Marovato, where they received a range of services and benefits aimed at restoring their livelihoods and improving their quality of life. The construction of the physical infrastructure, such as homes, water points and a school, is long complete but has been only part of our commitment to the two resettlement villages. Our task over the past 13 years has been to carry out a resettlement program following the World Bank's principles on involuntary resettlement, the IFC's guidelines for resettlement action plans, and guidelines set by Madagascar's national regulatory body, the ONE. Our work aims to provide support to these communities while also promoting self-reliance, empowerment and long-term sustainable development. Our activities focus on livelihoods (vegetable gardening, handicrafts, small animal husbandry, etc.), health and hygiene, education and sustainable forestry. Communities have demonstrated an active desire to partake in these activities and to invest in their own development.

Collaboration with partners such as NGOs, civil society organizations, local technical schools and private sector groups is extremely important to help facilitate our work in the resettlement villages. These partners have the skills, knowledge and understanding of the local context to effectively respond to community needs without promoting dependency.

Microfinance provides an important means of supporting entrepreneurship and alleviating poverty in developing communities. Towards that end and as noted in our previous Sustainability Reports, Ambatovy has played an active role in supporting the creation of self-managed Village Savings and Loan Associations (VSLAs) which have become a core activity of communities and have proven to be very successful. The VSLAs provide members with the opportunity to increase their capital and financial autonomy, and allow them to invest in income generating activities (vegetable gardening, handicrafts, small animal husbandry, etc.), to market their products, to cover health and education expenses for their families, and to meet certain social obligations. Members of the VSLAs have received training in the principles of microfinance, the culture of savings and credit, and organizational governance.

In addition, Ambatovy supports the management of 36 ha of forest and 69.5 ha of forest plantations near the resettlement villages. Known as the Analabe Forest and comprised of primary and degraded forest, this area is located near Vohitrambato. It not only provides critical habitat for flora and fauna, but it is also an essential source of natural resources for the local

communities. The forest is managed in partnership with the local NGO *Miarintsoa* and village-level forest management committees (*Fehizoro* Federation). To further encourage forest conservation and to promote sustainable income generating activities, Ambatovy and our partners have been working on an eco-tourism project within the Analabe Forest that will promote conservation while simultaneously providing new livelihood opportunities for villagers. The project has been validated and endorsed by the Regional Directorate of Environment and Sustainable Development (DREDD), the Regional Directorate of Tourism (DRT) and the Suburban Municipality of Toamasina. In 2021, the *Fehizoro* Federation completed invasive plant clearing within the Analabe Forest. Other activities were put on hold until 2022 due to ongoing impacts related to the Covid-19 pandemic.

As part of our commitment to resettled families and their hosts in Vohitrambato, Ambatovy has agreed to contribute 50% of the school fees for the children under the age of 13 in the village over a 15-year period. The 2020-21 school year marked the twelfth successful year of the program, with 212 students benefitting. Ambatovy also continued to cover the tuition of a university student from Vohitrambato and continued to support a student intern at Ambatovy in order to help her gain professional experience and broaden her horizons.

In addition, Ambatovy continued to reimburse medications for vulnerable villagers and to support a nutrition project, implemented in partnership with the Regional Office of Nutrition (ORN), aimed at improving nutrition and school attendance rates at the Vohitrambato primary school through the provision of daily meals and support for a school garden managed by the Parent Teacher Association. In 2021, Ambatovy also helped the village secure a more reliable water supply in collaboration with the NGO *Zararano*. A new water tower and distribution network were put in place and a local management committee was established.

Ambatovy integrates our recycling needs with a commitment to support local businesses and to promote community development. In 2021, we renewed our partnership with the FIMIAM farmers' association based in Ampitambe Moramanga, through the donation of 228 m³ of used wood recycled from our mining operations. The association processes the used materials into furniture and livestock breeding equipment (beehives, pigsties, etc.) enabling members to improve their living conditions while ensuring the responsible management of used materials from Ambatovy's sites.



As Ambatovy nears the end of our 15-year commitment, we are working to develop a withdrawal strategy that will ensure a smooth transition and lasting benefits for resettled populations. As part of this strategy, Ambatovy finalized the resolution of outstanding grievances in 2021, paying crop compensation to 24 villagers and closing out the compensation process. Transition planning was also carried out with Vohitrambato's Resettlement Committee in order to realign its objectives under a new association title, the Vohitrambato Development Committee. This change was based on a shared vision of an association that champions community empowerment and collaboration over dependence. Ambatovy will continue to support the committee going forward to help them achieve their sustainable development goals.

There are still 159 households living within the vicinity of the TMF that have livelihoods affected by access restrictions to the site. Fourteen families continue to access the TMF area in order to collect wood and local materials to be used in charcoal production and other small income generating activities, and one family (comprised of four households) continues to live within the technical zone. Negotiations to resettle this family are progressing, despite delays faced during Covid-19, and are being handled by the CSR team. This process is being conducted with the same rigor and commitment to international best practice as the initial relocation program.

#### Ambolomaro

An "economic resettlement" of 29 families in Ambolomaro, near the Mine Site, was also initiated in 2008. The resettlement involved households that live outside the Mine lease boundary, but that had cultivated their rice fields within the Mine lease zone and therefore needed to relocate their fields. Alternative farming sites were provided to these households and, through ongoing technical support from Ambatovy, rice yields of the Ambolomaro farmers have progressively increased, surpassing targets for the past three years. In 2021, Ambatovy responded to farmers' concerns regarding the need for a more permanent irrigation source and provided support that will enable the development of a canal linking their fields to the Marovoay River. Ambatovy has now begun the withdrawal from this process and, as per our commitments, has sought to obtain and transfer ownership of these lands to the farmers. We commenced the process of land acquisitions and registrations several years ago and have maintained close collaboration with the farmers throughout.

#### **Community Engagement**

A robust stakeholder engagement program takes place at the community level with dedicated CSR and Communications teams. Ongoing dialogue through several channels, in both formal and informal settings, with PAPs, community members, local authorities, traditional leaders, representatives of civil society groups and the general public has been, and continues

to be, important for building mutual understanding, managing expectations, and earning and maintaining our social license.

In 2021, communications focused on sharing key news and regular updates on topics including: the resumption of Ambatovy's operations, the evolving Covid-19 situation within the country, fluctuations in the global nickel market, the electric vehicle market, the mining sector in Madagascar, and the arrival of Ambatovy's new President, Gus Gomes. Internally, Ambatovy continued to engage our employees, contractors and subcontractors on a range of issues pertaining to a safe and healthy return to work and relaunched a number of new and improved communications tools including corporate videos, radio news and a 24/7 employee telephone hotline. Externally, Ambatovy held 3,146 information sessions and over 300 meetings with key stakeholders from communities near our sites. For health reasons, face-to-face meetings, open-door events and site visits were suspended, scaled back or held virtually in order to mitigate the risks of Covid-19. To expand community reach in light of these restrictions, new approaches were developed to extend the public's access to information through virtual tours, 3D models, a redesigned corporate website and an ever-growing presence on social media.

#### **Cultural Heritage**

Ambatovy's commitment to communities includes our respect for local culture, history, and traditions. To preserve cultural heritage, Ambatovy implements a comprehensive archeology program, which involves respecting and protecting cultural heritage sites, artifacts, and archeological remains found in Ambatovy's intervention areas between Moramanga and Toamasina. Ethnological surveys are carried out in parallel to our archaeological work in order to understand and preserve the cultural heritage of local communities. An archeological museum, opened in 2020, also preserves and showcases over 1,800 objects discovered by Ambatovy at our sites. In 2021, no new artifacts were discovered, nor were any ethnological surveys carried out.





#### **Environment**

#### **Objectives**

- Achieve no net loss in biodiversity, and preferably a net gain, throughout our impacted sites.
- Support and empower local communities to reduce pressure on conservation areas.
- Manage waste, emissions and water to minimize Ambatovy's overall environmental impact and footprint.

#### Approach: Biodiversity

One of Ambatovy's key goals is to avoid environmental impacts wherever we reasonably can, and to minimize the impact of our mining operations on Madagascar's environment. With regards to biodiversity, the aim is to achieve no net loss (NNL) and preferably, a net gain. We plan to accomplish these goals with rigorous mitigation techniques such as avoidance, minimization of risks, timely restoration of a sustainable landscape and the offsetting of residual impacts.

The main impacts on biodiversity from our activities are related primarily to forest clearance at the Mine (1,614 ha) and around a two km strip of forest along the initial portion of the Pipeline. Prior to construction, the forests of the Mine area were threatened by human impacts such as agricultural clearing, illegal timber harvesting and hunting. The Plant and Tailings Sites were specifically located on modified degraded coastal scrubland habitat with low biodiversity. Nevertheless, impacts on all sites were taken into account in the development of Ambatovy's comprehensive biodiversity program, which applies to all sites. The program's strategy is founded on the following core objectives:

- No net loss of biodiversity and preferably, a net gain.
- No species loss and no net reduction in the population of any endangered species.
- Minimization of impacts on flora, fauna and aquatic resources.
- An increase in conservation of critical habitats.
- Priority habitat viability ensured by maintaining or increasing ecosystem connectivity.
- Integration of biodiversity activities with other regional initiatives on biodiversity.

In order to achieve these objectives, Ambatovy applies the mitigation hierarchy, as required by the IFC Performance Standard 6 and the BBOP Standard on Biodiversity Offsets.<sup>8</sup> This includes: avoid impacts where possible, minimize any unavoidable impacts, restore or repair any damage, and provide offsets for any residual impacts (e.g., through conservation and protection of ecologically comparable conservation areas). Additional conservation actions may further compensate for the impacts on biodiversity.

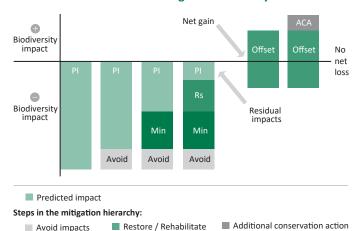
In line with the IFC Performance Standard 6 and with BBOP guidance, Ambatovy has developed a multi-faceted offset program comprising several conservation sites and associated activities. This was deemed necessary given the large scope of our operations, part of which fall within sensitive high-biodiversity areas. In addition to direct habitat offsets, Ambatovy is currently evaluating the possible need for priority species offset areas, particularly for the Golden Mantella and endemic fish species. Ambatovy's four offset sites currently include the Mine Conservation Forests, the Analamay-Mantadia Forest Corridor (CFAM), the Ankerana Forest, and the Torotorofotsy Wetlands Ramsar Site. Combined, these areas come to a total of almost 14,000 ha, or roughly 9 times the size of the area disturbed through our mining activities, an area of approximately 1,600 ha.

More information about our offsets program, including descriptions of the sites, can be found in Appendix 6 and on our website.

<sup>&</sup>lt;sup>8</sup>The Business and Biodiversity Offsets Program (BBOP), initiated in 2004, is a partnership of some 80 leading organizations, companies, financial institutions, governments and civil society groups from around the world. The aim is to develop and test best practices for conservation and biodiversity offsets by following the mitigation hierarchy. It is a best practice approach to reducing the negative impacts of public and private sector development projects on biodiversity and ecosystem services. The BBOP officially ended in December 2018; however, its principles have been adopted by international standards to which Ambatovy adheres, including the IFC Performance Standards and the Equator Principles.

<sup>&</sup>lt;sup>9</sup>Entered into force in 1975, Ramsar is the oldest modern global inter-governmental environmental agreement negotiated by countries and non-governmental organizations concerned about the increasing loss and degradation of wetland habitat for migratory water birds.

#### The Mitigation Hierarchy



Source: "Working towards NNL of Biodiversity and Beyond: Ambatovy, Madagascar – A Case Study (2014)", by Forest Trends and Ambatovy, p. 23.

■ Minimize impacts ■ Offset residual impacts

Following these standards has resulted in a comprehensive approach to ensure that our impacts, as well as some that existed prior to our involvement, are controlled through cooperation with local communities, the Government of Madagascar and other conservation and development NGOs. The program has several focal areas including flora, fauna, aquatic and marine ecosystems. Each area has specific actions for the construction, operations and Mine closure phases. In addition, we have specific management plans for the Mine, Pipeline, Plant, Tailings and port facilities that include biodiversity elements as well as a separate overall Biodiversity Management System that governs all our programs in this area.

Our biodiversity program is governed by the Ambatovy Environmental Management System (AEMS). This quality assurance – quality control (QAQC) style management system is aligned with ISO 14001 principles in order to comply with IFC requirements for good practice. The AEMS provides for:

- Continuous improvement and an adaptive management process;
- A monitoring and evaluation plan for all activities;
- Indicators against international, national, and internal compliance requirements, scientific conformance requirements and performance standards;
- Real-time updating and management of non-conformities.

The system includes 20 management plans covering the entirety of the Ambatovy environmental program, including plans for each category of fauna and flora identified in our areas. The goal of our biodiversity program is to ensure the continued viability of the fauna and flora populations in Ambatovy's areas of operations. For fauna, this includes pre-clearing inventories, rescuing and relocation from mining areas to our conservation zones. Our fauna programs are focused on five groups of animals: lemurs, micromammals, birds, fish, and amphibians and reptiles. Each of these groups has its own set of management plans and SOPs (standard operating procedures) that are based on the principle of adaptive

management. Species that are characterized on the IUCN Red List<sup>10</sup> as endangered or critically endangered are considered as Species of Concern (SOCs) and receive specific management actions. For example, our Lemur Management Plan closely monitors and collects data on all lemur species found within our zones but we focus our long-term monitoring and biomedical surveys on five specific species of lemurs within our program areas – the Diademed sifaka, the Eastern woolly lemur, the Weasel sportive lemur, the Furry-eared dwarf lemur and the Indri – chosen for their status according to the International Union for Conservation of Nature (IUCN), for their ecological niche and for the number of individuals available for study.

The same can be said for our resident birds, of which there are 111 species, which includes four endangered species (*Anas melleri*, *Ardea humbloti*, *Ardeola idea* and *Sarothrura watersi*) as well as four vulnerable species and seven near-threatened species. Only the Golden Mantella frog differs in its treatment as it is also the recipient of a breeding program in addition to the salvaging and monitoring program activities. Once an animal has been relocated to one of our conservation zones, they are monitored for population viability and specific needs, the end objective being that of eventually being able to recolonize the Mine area once mining activities and rehabilitation are complete.

The process is similar for our flora populations, which are salvaged and relocated, some to our plant nurseries for cataloging, identification and seed collection, before being used for rehabilitation or propagation. Ambatovy's flora management activities are framed within the Flora Management Plan, which addresses the three main topics: Species of Concern, Orchid Management and the Herbarium.

For our flora SOCs, Ambatovy's mitigation measures include inventories, identification and rescue. Missouri Botanical Garden (MBG) has, since the conception of the project, assisted in these activities. 109 SOCs are located within our conservation areas and four in our clearing area. Of these species, three have been identified as "Red SOCs", meaning that they are only found globally in one specific site, our conservation zone. As a precautionary measure, Ambatovy's rescue program consists of whole plant rescuing (including trees), seed collection, plant propagation, and the development of living collections suitable for use in progressive mine rehabilitation. Ambatovy has two orchid parks that house our rescued orchids as well as an herbarium where individual plants are identified and samples collected for taxonomic research.

In addition to our efforts to conserve and support population viability for key species, Ambatovy also works in removing invasive species, one of the most significant potential threats to areas of high biodiversity, from both our aquatic and terrestrial habitats. For fauna, this includes targeted campaigns to eradicate Louisiana crayfish, the Asian toad and three species of exotic rats. For flora, the invasive *Lantana camara* and *Eucalyptus robusta* are removed through targeted clearing and followed by immediate restoration of the cleared area with indigenous plants.

<sup>&</sup>lt;sup>10</sup>The IUCN Red List of Threatened Species is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species. The goal of the IUCN Red List is to provide information and analyses on the status, trends, and threats to species in order to inform and catalyze action for biodiversity conservation.

For all of our biodiversity impacts and interventions, specific biodiversity goals have been established to ensure we meet our vision of operating a sustainable and responsible business in Madagascar. These goals and associated key performance indicators (KPIs) are periodically assessed and adapted based on consultations and data gathered from monitoring programs. The KPIs are directly linked to the requirements of Madagascar's regulator, the ONE, and to international standards, including the IFC Performance Standards on Environmental and Social Sustainability (IFC 2012 version) and the BBOP standard.

In 2009, Ambatovy established a Scientific Consultative Committee (SCC) on biodiversity as part of our commitment to apply international conservation expertise and to bring transparency to our environment program. The Committee includes national and international independent scientists renowned for their expertise in biodiversity, conservation and environmental management. The SCC convenes every two years in order to review our environmental and social programs, to provide impartial advice and to make important recommendations. The SCC met in November 2021. The committee members were extremely satisfied and recognized that Ambatovy's activities have yielded outstanding results. The next meeting is scheduled for 2023.

## Performance: Biodiversity





In 2021, Ambatovy resumed our monitoring and surveillance activities following interruptions caused by the outbreak of Covid-19. Various biodiversity programs were adapted in accordance with subsequent measures put in place while others remained on hold until 2022.

#### Lemur and Small Mammal Management

Ambatovy's Lemur Management Plan, within the overall AEMS program, includes a series of mitigation measures to protect lemur species within our sites. There are, in total, 11 species of lemur that frequent the Mine area, of which five are considered near-extinction based on the IUCN Red List (2012). A fundamental aspect of our biodiversity management is utilizing a paced directional clearing technique in order to allow mobile fauna to freely migrate away from clearing zones and into surrounding conservation areas via forest corridors. Manual rescue is conducted 48 hours later for those animals that are unable to move freely and for key flora species. In 2021, 183 observations of lemurs were noted during the periodic monitoring of the forest corridors and another 256 lemur individuals were observed during monitoring in our conservation zones.

During the year, 71 individuals were observed in clearing zones, a relatively low number that can be attributed to the topography of the area being cleared. Four individuals required manual rescue from areas designated for mining or clearing.

As part of our Lemur Management Plan, Ambatovy uses radiocollar surveillance as part of our spatial monitoring program. Currently this includes 12 groups of lemurs. Due to the ongoing pandemic, tagging activities have been on hold since 2020, but a total of 1,148 lemurs have undergone capture, biomedical analysis and tagging since 2007. Group census activities, carried out on our tagged lemur groups, observed 961 lemur individuals and two lemur births throughout the year.

Ambatovy also monitors and mitigates impacts on other species of mammals besides lemurs including endemic micro-mammals and carnivore species. The Ambatovy-Analamay forest complex is home to 38 species of small carnivores and mammals other than lemurs, of which 31 are endemic to Madagascar and seven are exotic (introduced species). Since 2007, Ambatovy has collaborated with the University of Antananarivo in the implementation of conservation strategies for these mammal species. During 2021, 70 individuals belonging to seven species were inventoried in the clearing areas and two small mammals, a white-tailed antsangy<sup>11</sup> and a tail-less tenrec, were manually rescued. 546 individuals from 15 species were also inventoried in our conservation areas.

#### **Amphibians and Reptiles**

Ambatovy's areas are home to 92 species of amphibians and 69 species of reptiles. There are 12 species of amphibians and reptiles (nine and three species, respectively) that have been identified by Ambatovy as requiring specific mitigation efforts due to their IUCN status: one that is critically endangered (CR) and 11 that are endangered (EN). Please see Appendix 5 for a complete list of Priority Species.

Non-native invasive species are one of the most significant potential threats to areas of high biodiversity, none more so than the exotic Asian Toad, believed to have arrived in Toamasina from South-East Asia. Ambatovy has been combating the spread of this invasive species since it was discovered in Madagascar in 2014 and has progressively enhanced control strategies through scientific study, experimental light and sound trapping, breeding site identification and manual capture. In 2021, Ambatovy led our most effective capture campaign to-date, eradicating over 51,800 toads, 188,000 tadpoles and 50,000 eggs. Ambatovy is also supporting the national Asian Toad Control and Mitigation Program, formally launched by the Government of Madagascar and the Madagascar Fauna and Flora Group (MFG) during the year. To-date, a total of over 141,800 toads and 228,500 tadpoles have been captured as a result of Ambatovy's efforts.



 $<sup>^{11}</sup>$ The white-tailed antsangy is a species of rodent in the family Nesomyidae. It is found only in Madagascar.

Since 2007, the amphibian and reptile program has manually rescued 11,670 amphibians belonging to 74 amphibian species and 32,510 reptiles belonging to 64 reptile species from clearing areas. These rescue activities have enhanced scientific knowledge on the amphibian and reptile world in Madagascar and on the populations of endangered species. As Ambatovy continues to clear forests for the Mine footprint, rescue and translocation activities will continue. Twice a year Ambatovy undertakes ecological monitoring to monitor reptile population densities and trends within the conservation areas. In 2021, 989 reptiles belonging to 27 species and 1,767 amphibians belonging to 35 species were identified.

The Golden Mantella frog is one of Ambatovy's flagship species. To ensure the conservation of this species, Ambatovy has adapted a three-pronged approach that includes:

- · manual rescue from clearing zones,
- · monitoring in conservation ponds, and
- · captive breeding for release into natural marshes.



The program is carried out in collaboration with the Mitsinjo Association, EcoFauna, the General Directorate of Sustainable Development (DGDD), the Regional Directorate of Environment and Sustainable Development (DREDD), and the IUCN's Amphibian Specialist Group. It includes breeding activities as well as monitoring, manual recue and physical inventories. In 2021, Ambatovy continued to monitor the progress of the original 1,500 individuals released from the *Toby Sahona* breeding centre in 2017 and released an additional 354 juveniles into the wild. 125 individuals were also transferred from marshes that were disturbed by clearing to the breeding center where subsequent generations of individual frogs continue to be recorded and prepared for release.

#### Fish

Sixteen species of fish belonging to nine families have been identified in the aquatic ecosystems of the Ambatovy-Analamay forest complex. These species are classified into three categories depending on their characteristics: seven exotic (introduced) species, three native species, and six endemic species. Among the endemic species are five that are potentially unknown to science; they are considered and managed by Ambatovy as priority species. The population size of these priority species is very limited and, as local endemic species, they are vulnerable. Please see Appendix 5 for a list of Priority Species.



In 2021, 1,557 priority fish individuals (1,026 *Ratsirakia* and 531 *Rheocles*) were salvaged from river portions bordering our mining activities and relocated to one of our release sites, where habitat has been specifically restored to accommodate endemic and priority fish species.

#### Bird Monitoring and Mitigation

There are 111 species of birds found in the Ambatovy-Analamay Forest Complex, 65 of which are endemic to Madagascar. The objectives of the bird program are to gain knowledge about trends in bird occurrence and abundance and to monitor trends in the population size of migratory species as well as endangered water birds following the construction of a series of large sediment control dams at the Mine Site. In addition to the inventories in the forests and clearing areas, the preservation of active bird nests is the main mitigation measure.

Once active nests are identified, they are kept safe from clearing activities until the eggs hatch and the chicks leave the nests by themselves. Future efforts will be made to better understand the food and habitat requirements of species so that they may better recolonize the mining area once it has been rehabilitated.

In 2021, inventories conducted across our sites identified the presence of 87 bird species. In clearing areas, 66 species and no active nests were observed. Three endangered bird species are regularly found at Ambatovy's dams: the Malagasy pond heron (*Ardeola idae*), Meller's duck (*Anas melleri*), and the Madagascar grebe (*Tachybaptus pelzelnii*). Inventories conducted during the year noted 1,793 water birds from 18 species observed around the lakes, dams and marshes around the Ambatovy Mine Site.

The Malagasy pond heron (scientifically called *Ardeola idae*) is a rare species classified as endangered by the International Union for the Conservation of Nature (IUCN) and monitored by the African-Eurasian Migratory Waterbird Agreement. It has only three breeding sites in Madagascar: the Botanical and Zoological Garden of Tsimbazaza, the Tsarasaotra Alarobia Park and the Ambatovy-Analamay forest.

Ambatovy's sedimentation dams have created a favorable breeding habitat for aquatic species like the Malagasy pond heron, which has seen significant growth in its population size since it began nesting in one of Ambatovy's dams. In 2021, over 684 active nests were observed at the Ambatovy-Analamay dam of which 48 belonged to the Malagasy pond heron.



#### Flora Management

During 2021, we continued to practice manual salvaging and were able to rescue 16,310 plants and flowers from 20 priority species in clearing zones. Following rescue, rescued orchids undergo a one-year acclimatization period in the Ambatovy shade house before being transferred to one of Ambatovy's two orchid parks. 154 orchids were successfully hand-pollinated in these parks over the course of the year, bringing the total number of orchids protected by Ambatovy to 12,338 individuals. We also continued an expansive survey of IUCN-listed flora within our conservation areas, identifying more than 4,445 individuals during the year.

Ambatovy collects seeds from within our clearing and conservation areas, community forests and the Ambatovy-Analamay complex that are used in Ambatovy's nurseries or distributed to local village nurseries. In 2021, Ambatovy collected 5,227 kg of raw seeds from 106 species. We continued to work with local village nurseries, distributing 25.6 kg of seeds during the year. Over 1,546 kg of seeds were also sown at the Ambatovy nurseries.

Ambatovy is aligning our revegetation methods with the results of eight years of successful rehabilitation trials. As part of our reforestation methods, we use fast growing plants called pioneer species that prevent erosion while serving as shade for forest species. In order to establish a multi-functional replacement forest, we also prioritize plants that are high in both economic and ecological value. These include plants with high resilience to disturbance, that serve as habitat to specific wildlife, or that can provide local communities with tangible benefits such as a sustainable source of timber. 42.5% of the species grown in our industrial nurseries have high economic and trade values, 28% have medicinal virtues, and 24% serve as food for lemurs and habitat for micro-mammals.



#### Offsets

As we cannot effectively accomplish the sustainable management of our offset areas without the support and participation of the local population, we work closely with local communities to implement a range of alternative income generating activities (IGAs). These are designed to reduce local dependence and pressure on neighbouring forests through the development of other income generating activities such as fish farming,

eco-tourism, poultry and livestock breeding (small animal husbandry), improved rice-growing and spice cultivation. In 2021, over 1,900 villagers participated in IGAs. Participants received inputs (such as seeds, fertilizer, farming equipment and feed) and/or technical assistance, agricultural training, coaching and monitoring. Over 200,000 native seedlings were also produced at village nurseries established by Ambatovy near our offset sites. These nurseries bring a significant source of income to participating villages while supporting various reforestation efforts.

We have also been working with local authorities and grassroots community-based associations, or COBAs, to promote stewardship of forest segments by undertaking regular patrols to deter illegal wood cutting, hunting, trapping, artisanal mining and clearing associated with slash and burn agriculture. In 2021, we increased our surveillance efforts, completing over 9,270 man-days of patrols, and effectively reduced forest clearing across our protected sites. Ambatovy, and the NGO partners that we work with, also conducts regular awarenessraising and education sessions in the local communities in order to reinforce their understanding of the law, of the need for the responsible use of local natural resources, and of the importance of sustainable forest management. In 2021, 37 monitoring and coaching sessions were carried out with COBAs and over 600 community awareness sessions were held reaching more than 7,440 individuals. To further involve local communities in conservation, COBAs also participated in ecological monitoring and in a contest to determine the best fire management strategies, leading to a significant reduction in incidents. Environmental education programs were also carried out with five public schools near the Torotorofotsy wetlands.

During the year, Ambatovy signed a Management Transfer (used to delegate management of forest segments to COBAs) with the COBA *Ala Mivoatra* to manage 500 ha of forest, and expanded the Management Transfer with the COBA *Fitama* to include an additional 4,375 ha of land. More information about our Offset Sites can be found in Appendix 6.

#### Restoration to a Sustainable Landscape

Ambatovy plans to restore cleared land to a multi-functional forest through progressive reclamation and reforestation. Our annual objective is to reforest 24 ha of land per year. Ambatovy currently has an Orchidarium, a research nursery and a production nursery and has supported the creation of seven community nurseries that supply us with about 200,000 plants per year for these restoration activities. These plants also support calls by local and national government agencies to support reforestation campaigns in-country.

In 2021, Ambatovy restored 25.87 ha of land over the Mine footprint and 4.22 ha at the Plant site. Revegetation trials were also launched at the TMF to determine the best techniques to re-vegetate the area in preparation for rehabilitation work that will take place as part of Ambatovy's long-term closure plan. To support our revegetation efforts, Ambatovy doubled production at our industrial nursery, producing over 608,400 native seedlings from 176 species in 2021. Ambatovy plans to increase the genetic diversity of our nursery even further with the goal of producing 450 native species over the next two-three years.

Since 2011, Ambatovy has been working closely with grassroots community-based associations (COBAs) and supporting their activities in the protection and conservation of the environment around the Mine Site. In 2021, the company supported three COBAs, namely Ezaka sy Fandrosoana Ambohitranivo, Ambohimanarivo Ala Maintso and Miaro ny Tontolo lianana Ambatomanty, in the performance of ecological fauna and flora monitoring in the forest areas they manage. Over 130 COBA members actively participated in this activity. Ecological monitoring enables COBAs to monitor the presence and the evolution of protected species in the conservation areas and to see the results of their sustainable management efforts.



Ambatovy Net Impact of Mining Activities on Forested Areas						
Forest/Land Areas Land to be Impacted (ha) Land to be Reclaimed (ha) Land to be Conserved						
Mine Footprint* (disturbance area of 1,600 ha + buffer zone)	2,154	2,154	0			
Slurry Pipeline	600	600	0			
Roads/Infrastructure	100	0	0			
On-Site, Adjacent or Nearby Offsets						
Mine Conservation Forests	0	0	3,582			
Analamay-Mantadia Forest Corridor (CFAM)	0	0	3,490			
Ankerana Forest	0	0	4,879			
Torotorofotsy Wetlands Ramsar Site	0	0	1,597			
Totals (ha)	2,854	2,754	13,548			

<sup>\*</sup>The Mine footprint includes the Mine area plus a buffer zone.

#### Approach: Emissions, Effluents and Waste

Our environment program has defined objectives for air, noise, and water that stem from the Environmental Impact Assessment and approved Environmental Management Plans and that are built into our environmental monitoring activities. For each component, objectives have been established taking into account existing background levels, Malagasy regulations, and published international standards. A rigorous monitoring program continuously reads information from instruments throughout our facilities that provide real-time data and gives us the ability to analyze and mitigate issues as soon as they occur. The program is reviewed and updated in response to observations, project development, consultations and experiences gained.

The goal of our air quality monitoring is to ensure that changes in ambient air quality resulting from Ambatovy's activities are both well understood and compliant with air quality standards, which are based on international and local criteria for air emissions. Ambatovy monitors air quality around the Plant, Mine, and ancillary structures through fixed continuous air monitoring stations as well as mobile perimeter multi-gas detectors which continuously collect live meteorological and air quality data.

The release of greenhouse gases (GHGs) related to our operations and the transportation of our personnel and freight are, unfortunately, unavoidable in a project the scale of Ambatovy. However, for those GHG emissions which we can control, as is the case in the transport of our personnel and our commodities, we have put in place multiple initiatives to reduce them wherever possible. This includes the location of our sites, the design of our Pipeline to maximize gravitational pull and to minimize equipment needs, and a fleet of electrical vehicles to transport our workers around our Plant Site.

Another aspect of air quality, ambient noise, is monitored on the periphery of our operations as well as in our neighbouring communities. The purpose of our noise monitoring is to ensure that the ambient noise created by our operations stays within the IFC's guidelines for community noise and to ensure there is no effect on the behaviour of the local biodiversity.

Water is central to our metallurgical process for producing nickel and cobalt, and we manage it carefully. At both the Mine and Plant Sites, we conducted baseline studies, continue to assess risks, and have ongoing engagement with stakeholders to inform them of our water management planning. Our comprehensive Water Management Plans are therefore designed to:

- · Ensure that all phases of our operations do not adversely affect surface and groundwater quality and that any wastewater complies with environmental standards.
- Monitor the flow rate and quality of surface and groundwater downstream of mining activities to detect any abnormalities.
- Ensure that Torotorofotsy Wetlands and sensitive aquatic ecosystems are not adversely affected by the activities at the Plant, Mine or along the Pipeline.

- · Communicate with downstream users to ensure their water needs are met and propose solutions if problems arise.
- Ensure that domestic water supply and sewage treatment meet the criteria of applicable water quality regulations and guidelines.

To handle the waste created by our facilities, process and employees, Waste Management Plans have been developed. These Plans include measures and procedures for correct collection, transportation, storage and disposal of waste. They also emphasize minimizing waste production and continuously improving our recycling efforts. Waste material ranges from industrial waste, such as scrap metal and wood, to domestic waste, such as food or office scraps. All waste is sorted, processed and treated at the waste management facilities in order to reduce its volume and minimize disposal needs.

Ambatovy also operates an integrated reporting system for all environmental, health and safety, and security incidents (the Ambatovy Incident Management System, AIMS). Spills and incidents are tracked and documented as part of the internal compliance reporting process using the guidelines below.

Level	Consequence
Minor	On-site: Near-source confined and promptly reversible impact (typically a shift).
Medium	<ul> <li>On-site: Near-source confined and short-term reversible impact (typically a week).</li> <li>Off-site: Near-source confined and promptly reversible impact (typically a shift).</li> </ul>
Serious	<ul> <li>On-site: Near-source confined and medium-term recovery impact (typically a month).</li> <li>Off-site: Near-source confined and short-term reversible impact (typically a week).</li> </ul>
Major	<ul> <li>On-site: Impact that is unconfined and requiring long-term recovery, leaving residual damage (typically years).</li> <li>Off-site: Near-source confined and medium-term recovery impact (typically a month).</li> </ul>
Catastrophic	<ul> <li>On-site: Impact that is widespread-unconfined and requiring long-term recovery, leaving major residual damage (typically years).</li> <li>Off-site: Impact that is unconfined and requiring long-term recovery, leaving residual damage (typically years).</li> </ul>

## Performance: Emissions, Effluents and Waste







Waste Treatment 2019-2021							
2019 2020 2021							
Disposal to Landfills							
Ash (m³)	3,612	611	600				
General Waste (m³)	1,740	25,803	18,514				
Industrial Waste (m³)	28,306	33,788	31,448				
Wood (m³)	424	361	471				
Scrap metal	393`	637	385				
Other (m³)	58	322	1,474				
Incineration (t)	5,854	3,755	4,539				

<sup>\*</sup>Incineration data from 2019 and 2020 has been updated to reflect our most recent waste calculations combining data from multiple sites. As a result, slight variations can be observed in comparison to the data presented in the 2020 Sustainability Report.

#### Recycling

Ambatovy strives to minimize our waste production through reuse and recycling programs. We integrate our recycling efforts with a commitment to support local businesses and to promote community development. In 2021, Ambatovy renewed and expanded partnerships with local recycling companies following interruptions caused by Covid-19. Approximately 750 m<sup>3</sup> of used wood was distributed to local farmers' associations and the Cultural and Social Center (CCS) where it was used to build furniture and livestock equipment and to support education programs for disadvantaged youth. Nine tons of compost and over 40 tons of fruit and vegetable waste were also delivered to the local NGO, Arovy ny Aina, to be used at a community garden established on a vacant plot of Ambatovy land. The project supports school feeding programs for vulnerable children at several public primary schools in the Toamasina area. Ambatovy also signed MoUs with five new recycling partners. These collaborations will enable the local reuse of plastic, drums, IBCs, tires and used cooking oil starting in 2022.

Recycling and Composting Program 2019-2021					
2019 2020 2021					
Fly ash for cement (t)	48,682	24,163	52,545		
Wood (m³)	435	0	752		
Plastics (m³)	627	172	755		
Cooking oil (I)	2,301	3,285	4,285		
Composting (m³)	3,803	4,413	14,066		

<sup>\*</sup>Composting data from 2019 and 2020 has been updated to reflect our most recent waste calculations combining data from multiple sites. As a result, slight variations can be observed in comparison to the data presented in the 2020 Sustainability Report.

Ambatovy is always looking for new and innovative ways to expand our recycling program and to reduce waste production at our sites. In 2021, we joined with STAR Madagascar, the country's largest beverage manufacturing company, to facilitate the recycling of plastic bottles through their Kopakelatra Project. Since 2019, STAR Madagascar has been collecting plastics for reuse through the installation of specially designed bottle collection units stationed in strategic locations across the country. In July 2021, Ambatovy installed five Kopakelatra bins at our Mine Site and, in November, installed another 11 at our Plant Site. These specialized bins will facilitate the collection of water bottles for reuse from our employees who are encouraged to drink enough water as part of the health and safety requirements at the company. Since their installation, Ambatovy has already collected over 250 m<sup>3</sup> of bottles for reuse, a number that is certain to grow in the coming years.



#### Hazardous Waste

Ambatovy does not ship any waste out of the country. Chemical waste is neutralized on site. Paints, hydrocarbon waste and batteries are recycled and treated by local companies. The waste management facilities at the Plant Site handle dismantling and neutralization of hazardous waste. In 2021, 27 tons of chemical waste and solvents as well as 1,386 batteries were treated and stored. Seven tons of hazardous chemicals were also encapsulated in concrete this year, enabling their neutralization and disposal at the landfill.

#### Overburden

Overburden is composed of waste rock and soil with uneconomic concentrations of nickel and cobalt. At Ambatovy, ore is delivered from open pits to the Ore Preparation Plant (OPP). This is designed to separate waste material from the ore and to produce a concentrated metal-containing slurry. In 2021,

approximately 12 million tons of dry ore, waste and sheeting were mined from the Ambatovy and Analamay deposits.

Material Extracted in 2021			
Material	Amount (in thousands of tons)		
Ore	7,897		
Waste	2,140		
Sheeting (quarry)	1,988		
Total	12,025		

#### **Materials**

In addition to ore, the operation of the process plant in Toamasina requires four key raw input commodities: limestone, coal, sulphur and ammonia. The amounts of these commodities, plus naphtha, consumed during 2021 are as follows:

Bulk Commodities Consumed in 2021			
Material	Total (tons)		
Limestone	1,060,693		
Coal	430,845		
Sulphur	407,652		
Ammonia	28,995		
Naphtha	20,768		

Accidental spills, noise and dust resulting from bulk handling operations are the greatest potential contributors to pollution at the Port. Any accidental spills are cleaned up immediately and sent to the landfill to prevent contamination at the Port.

#### **Tailings**

The Tailings Management Facility (TMF) was designed to meet international good practice standards including the requirements of the Canadian Dam Association and the International Commission on Large Dams. It is managed and monitored 24/7 by a dedicated engineer who is supported by an in-house team with access to independent consulting engineering advice. An independent engineer of record carries out quarterly inspections, undertakes an annual audit of the TMF, and produces a report for Management. In addition, an independent Geotechnical Review Board inspects the Facility on an annual basis and reviews operational reports, policies and procedures. The Facility is also inspected annually by the Malagasy government regulator, the ONE. Construction work planned for TMF Phase 3 commenced during the first quarter of 2021 and was completed as planned. Preparation for the next wall lift has also started with wall buttress work continuing during 2021.

Our Facility is designed to receive the neutralized waste materials following the extraction of nickel and cobalt. Once the solids settle to the bottom of the tailings area, the clarified supernatant liquid is pumped and discharged into the ocean through a diffuser. The diffused water is similar in composition to the surrounding sea water.

Although greatly improved from previous years, there were instances in 2021 when manganese levels in seepage from the dam exceeded water quality standards. All incidents of noncompliance were attributed directly to the lack of rainwater dilution and high evaporation rates during the dry season. Work continued on a number of initiatives aiming to control the source of elevated manganese levels and to identify potential alternatives for long-term remediation. To increase the accuracy of our groundwater predictions so that we can further understand and manage impacts, Ambatovy is upgrading our hydrogeological groundwater model at the Plant and the TMF. The engineering design of a new water filtration system that uses oxidation and nano-filtration to remove manganese from surface water was also completed and will be piloted in 2022.

#### Water

Ambatovy's Water Quality Monitoring Program covers the analysis of surface water, ground water and seawater. We conduct semi-annual monitoring programs throughout the

Plant and monitor key areas weekly. Downstream from the TMF, water monitoring is performed daily. All of our water quality standards are established through reference to Malagasy regulations, IFC environmental health and safety guidelines for mining, and the World Bank's Pollution Abatement Manual.

The Mine's Operational Plan is designed to ensure that runoff from mining excavations flows into sediment retention basins, lowering potential impacts on the sensitive watersheds around the Mine. Water run-off collection ponds and flow allowances are designed to meet the World Bank and Malagasy regulations on water quality. Indicators monitored at 19 sites around the Mine include such measurements as total suspended solids, pH, heavy metals, and coliform bacteria.

Annual water requirements for ore preparation at the Mine represent about 0.5% of the mean annual flow of the Mangoro River; during the dry season, Ambatovy's water withdrawal does not exceed 2% of the water flow. Water is mixed with ore to create slurry for transport down the Pipeline. At the Plant Site, water is recovered from the ore slurry and it is augmented with withdrawals from the Ivondro River. A portion of the effluent discharge from the Tailings Facility (up to 300 m³/hour or approximately 9% of our total estimated withdrawals) is available to be utilized in the process, if required. The use of processed water at the Plant is primarily for cooling water and boiler-feed water. All process water is discharged to the TMF and treated through neutralization.

Our total water consumption in 2021-24.4 million  $m^3$  — was comparable to previous years. Water for our processes is withdrawn from a variety of sources at the Mine, Plant and port facilities, including the Ivondro River, the Mangoro River, and groundwater wells; all withdrawals are monitored quarterly by our regulator, the ONE. At the Mine Site, minor water withdrawals also occurred from the Antsahalava Creek as a mitigation measure for increased chromium levels, especially prevalent during the wet season when there is heavy rainfall; and from the Sahaviara, Ankaja and Vondronina Rivers, for dust control purposes.

Water Withdrawals 2019-2021 (m³)					
Source	2021				
Ivondro River	15,530,417	7,343,058	13,621,234		
Mangoro River	8,384,260	3,931,760	8,572,946		
Antsahalava Creek	1,954,432	560,839	1,485,153		
Sahaviara River	48,429	8,190	78,282		
Ankaja River	36	_	4,928		
Vondronina River	_	-	13,870		
Groundwater	635,415	674,467	668,199		

#### Air Quality

We have selected the following five major inputs used in our operations that are sources of GHGs for monitoring: diesel, coal, naphtha, liquid petroleum gas (LPG) and limestone. These are contributors of carbon dioxide, methane and nitrous oxide emissions. Based on consumption data, GHG estimates are

calculated using conversion factors and specific coefficients of the reactions. In 2021, Ambatovy's overall GHG emissions for the Mine, Plant and port facilities were estimated at a combined total of 1,621 kilotons (kt) of  $\mathrm{CO}_2$  equivalent. At the Plant Site, coal, used for electrical power and steam generation, remained the primary source of GHGs. At the Mine Site, the main source of GHG emissions was diesel fuel. The total estimated emissions for 2021 reflect roughly 60% of Ambatovy's predicted annual emissions.

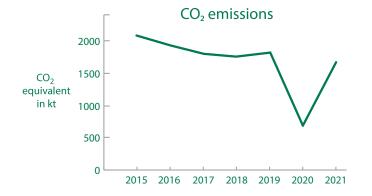
**Material Consumption 2021** CO<sub>2</sub> emitted Unit Material Consumption (in kt) Diesel Fuel 105.48 38,251,569 liters Coal 430,845 tons 985.32 Naphtha 20,768 66.25 tons LPG 5,065 15.25 tons Limestone 449.15 1,060,693 tons Total CO, Emission kt 1,621.45

Air quality data is collected from a fixed continuous air monitoring
station and static perimeter multi-gas detectors located along
the Plant Site boundary.

In 2021, no emission incidents or daily criteria exceedances were captured along the Plant perimeter all year. In December, third-party stack testing was successfully carried out at the power plant stacks, lime stack and the ammonia scrubber to better understand end-of-pipe emissions. Data collected from these stacks will be used as a reference during improvement planning for process efficiency.

Noise monitoring campaigns are done throughout the year at the Mine and Plant Sites, and in surrounding communities. The majority of noise pollution at the Mine comes from the heavy vehicle traffic and the power plant. At the Plant, there are a variety of sources of noise pollution, from vehicle traffic and operational activities to the facilities themselves. Although Ambatovy has no regulatory commitments to monitor noise, basic measurements are taken to ensure noise levels remain within reasonable limits. In 2021, there were no significant changes in noise pollution detected during the year.

Ambatovy Yearly Total GHG emissions					
CO <sub>2</sub> Equivalent (in kt) 2017 2018 2019 2020 2021					
	1,808	1,715	1,795	635	1,621







#### A Safe and Rewarding Workplace

#### **Objectives**

- Maximize local workforce composition in order to have 85% of positions held by nationals.
- Develop a highly skilled and committed Malagasy workforce.
- Provide a rewarding, safe and satisfying work environment for our employees.

#### **Approach**

Our business cannot operate nor thrive without a dedicated, experienced and engaged work force. Indeed, we recognize that our employees are our most valuable asset and that our performance depends on a skilled and committed work force, respect for our employees, effective teamwork and a culture of safety. For our operations phase, we need a team that can meet the engineering, maintenance, technical, administrative and program aspects of our business. We believe that we can create this team by ensuring that our workforce benefits from more than just a paycheck, by providing a rewarding and satisfying work environment. We have a number of policies and strategies for several core areas to ensure that Ambatovy is an employer of choice in Madagascar. These areas include local recruitment, training and capacity-building, internal communications, knowledge transfer, labor-management relations, performance management, health and safety, human rights, workplace discrimination and harassment, and diversity in the workplace. We also promote fairness and equity in the workplace through our company values, ensuring that our employees are represented through their employee representatives (Worker Delegates and the employee Work Council), as well as voluntary participation in four employee unions active within the company.

One of our core values is teamwork. We believe that in order for us to be a successful enterprise, all employees must work in a spirit of mutual respect, trust, and constructive relationships. In no other relationship is this as important as it is for labor-management relations. Four principles ensure that this relationship is indeed respectful and constructive:

- Treating every employee fairly and with respect.
- Exhibiting integrity in our work and amongst all employees.
- Respecting employees' privacy and confidentiality.
- Nurturing Malagasy talent.

Ambatovy aims to be an employer of choice. Towards that end, we offer a number of attractive benefits in order to promote a positive working environment and the well-being of our employees. Permanent employees<sup>12</sup> are eligible for:

- A social benefits program, which includes health, death, accident, and disability insurance.
- · A retirement program for employees.
- A Performance Incentive Program.
- The Daily Production Incentive Program: certain national employees are eligible to receive a variable monthly bonus based on achieving our daily production and safety goals.
- Support for career development: all employees are given bi-annual performance reviews to reinforce their skills and to suggest areas of improvement; training opportunities are also available for employees to strengthen or develop new skills valuable to the organization.

All employees and their families are eligible for medical coverage. In addition, the company provides accident insurance for all employees. The company will also cover expenses and repatriation services for funerals in the event of the death of an employee or their dependents, and will provide a traditional payment in the event of the death of a close relative.

We recognize that our company's impact on local human resources can be immense and can bring multiple positive improvements to the national economy through employment, capacity building, industrial experience, and payment of taxes and wages. Ensuring the right programs are in place to support employee development at all levels is crucial for Ambatovy's long-term success and succession planning. Continued investment in skills development and learning, therefore, remains a priority

 $<sup>^{12}\</sup>mbox{All}$  Ambatovy direct employees are full-time employees.

for Ambatovy. We offer training programs in safety, mining and processing operations, maintenance trades, mobile equipment, management, leadership and other general areas in order to ensure Malagasy employees have the skills needed to carry out their current work and to take on positions with increasing technical and leadership responsibility. We utilize a range of methodologies including computer-based learning (in our SkillMine system), classroom training, coaching and on-the-job instruction. Whenever possible, we leverage opportunities to bring different teams and groups together in order to strengthen our shared values and culture. In addition, expatriate team members are required to transfer specialist knowledge and skills to Malagasy team members to build their capacity and enable ongoing career progression. All Ambatovy employees are subject to an annual performance review and those who require development are assisted in a mentoring and evaluative process.

The impact of the presence of Ambatovy's workforce on local communities is inevitable. Overall, these impacts are positive, such as through contributions to the growth in the housing and construction markets and through increased expenditures in the local economy with more wage earners living in the areas. The impacts can potentially be negative as well, such as through an increased strain on local resources and municipal services that can occur with an influx of new inhabitants. However, to the extent possible, our recruitment process prioritizes local candidates who have the skills required for a position first, before extending to candidates from other regions, in order to promote local job creation and to try to lessen the inflow of people looking for work in our host communities.

The impact of Ambatovy's labor practices and hiring needs will contribute to uplifting the standards and skill sets of Madagascar's labor force and will provide incoming industrial entities with individuals that are trained and experienced, with up-to-standard qualifications and skills in industrial and technical trades. We also hold all of our contractors responsible to maintain their legal right to work as a business in the country and to follow the same codes of conduct and policies as our employees and our company. These policies address Health and Safety, Code of Conduct, Zero-Tolerance, Anti-Corruption and Human Rights. Regular audits of our active suppliers ensure their compliance with these contractual obligations.



### Performance







#### **Local Recruitment**

We have two employment commitments: to optimize national employment and to develop a highly-skilled workforce in Madagascar. By locating our processing facilities in Madagascar, we have chosen to invest in the long-term recruitment, employment, and development of human capital in the country. Our recruitment policy aims to attract and retain Madagascar's top talent through competitive compensation and benefits.

Our success will depend on recruiting a cohort of employees that are committed to our vision, values, and long-term operation.

Ambatovy is creating direct and indirect jobs as a result of our presence in Madagascar as well as our decision to extract and refine in country. After several months of Technical Unemployment (TU) due to the Covid-19 pandemic, Ambatovy was able to gradually remobilize our employees in the fourth quarter of 2020 and welcomed all of our employees back to work by January 2021, successfully retaining more than 99% of the workforce despite the extended TU period.

For the rest of the year, Human Resources Management focused on enhancing the company's people and our organizational capacity. Key achievements in 2021 included:

- Implementation of the Ambatovy organizational design which was reviewed by all departments during the Care and Maintenance period in 2020. The aim of Ambatovy's new organizational design is to have a sustainable, consistent and aligned organization model across the company.
- Introduction of a talent review process that allows for better understanding of where employees fit within their job family and how they are performing in their current job description. The process identifies employees who have potential to develop within the organization and facilitates their development through company support.
- Review of the Ambatovy performance management process set against one collective set of objectives. The new individual performance management process is focused on job descriptions, company-wide accountabilities and values, required qualifications, knowledge and skills, and employee engagement with continuous learning plans.
- · Launch of an internship program aimed at developing and training young nationals in order to integrate them into Ambatovy's core operations and fast track the localization of positions held by expatriate employees. The program will be rolled out over two years and focuses on trades such as technicians and operators. So far, 47 interns have been enrolled in the program, spread over four disciplines: 15 in Mechanical; ten in Electrical; ten in Instrumentation and 12 in Plant Operations.

As of December 2021, Ambatovy's total workforce was made up of 11,609 personnel, including 7,870 contractors and 3,739 direct employees, and was comprised of 91% Malagasy nationals.

Approximate Project Wide Manpower, December 2021				
National Expatriate Total				
Direct Employees	3,296	443	3,739	
Operational Contractors	7,268	602	7,870	
Total	10,564	1,045	11,609	

In 2021, Ambatovy adopted a more proactive recruitment approach that resulted in 173 positions being filled externally by Malagasy nationals. Internal recruitment focused on the new talent review process that aims to develop employee potential through the establishment of individual development plans. 84 talent review processes were completed during the year in order to fill 123 internal positions. It should be noted that 22 positions were filled internally before the implementation of the talent review process.

#### Diversity in the Workplace

Diversity has become a pertinent issue across society, and is particularly relevant to the natural resources sector because of the historically low proportion of women and people of differing backgrounds and abilities in our industry. We know that we will become a stronger, more innovative and resilient company as we continue to attract a spectrum of people of different cultural backgrounds, genders, ages and life experience to our company.

At Ambatovy, our policy is to find the right person for every job, regardless of gender, race, ethnicity, or religion. While we do emphasize local employment as a priority in our hiring practices, positions are filled by the candidate that best suits the required experience and necessary skills. Salary remuneration is directly tied to the position's responsibilities and accountability, and is not determined by gender or age. Although typically a male-dominated environment, Ambatovy has, over the years, seen a steady increase of women in traditionally male positions, including electrical technicians, geologists, forestry engineers, millwrights, truck drivers and electrical motor repair technicians. By the end of 2021, approximately 13% of our direct employee workforce was female.

#### Breakdown of Direct Employees by Age and Gender, December 2021 **Under 30** 30-50 Over 50 Male Female Male Female Male Female **National** 287 74 2,350 354 220 11 Expatriate 2 289 23 120 4

## Training, Capacity Building and Skills Transfer

Ensuring the right programs are in place to support employee development at all levels is crucial for Ambatovy's long-term success and succession planning. Continued investment in skills development therefore remains a priority for Ambatovy.

In line with our Strategic Plan, Ambatovy prioritizes skills development in order to ensure that employees are equipped with the skills required to carry out their duties and to take on positions with increasing technical and leadership responsibilities. In 2021, despite constraints imposed by the ongoing Covid-19 pandemic, Ambatovy's focus on people development enabled us to increase training hours by a three-fold in comparison to the previous year, reaching more than 168,700 man-hours.

Over the year, Ambatovy's training program focused on coordinating regulatory training, revalidating competencies, accelerating trade skills and developing leadership essentials. Training in these areas achieved the following results:

- Health and Safety and critical training: One of the major challenges for the Human Resources' Training Department in 2021 was the coordination and organization of regulatory training, especially during the extended shutdown. This training is crucial for operations to run safely and smoothly and is required by both employees and contractors. More than one hundred thousand training man-hours (101,914) were completed during the year resulting in 89% of employees meeting their defined qualification requirements.
- Trades training program: This program, launched in 2019, aims to accelerate the development of national technicians. Among the 323 technicians (electricians, instrumentation and mechanical) initially enrolled in the program: 323 have successfully completed Stage 1 (100%), 320 have completed Stage 2 (99%); 233 have completed Stage 3 (72%); and 116 have completed Stage 4 (36%). Program timelines were disrupted by the Covid-19 pandemic, delaying completion by six months, until June 2022.
- Process Operations training program: Following the extended operational shutdown, revalidation of competencies was carried out for operational staff to ensure a safe and efficient restart of the Plant. Nine trainers, 88 supervisors and 387 operators were formally assessed, re-trained and recertified in relation to their operational skills. 130 Plant Operators resumed their learning and development program as defined in their respective progression ladder, of which 82 successfully completed the Field Operator qualification.
- Mine training program: Training on Heavy Equipment Maintenance (HEM) resumed in April 2021 following disruptions caused by Covid-19. Of the 200 mechanics enrolled in this training, all have now completed Stage 1 training and 93% have completed Stage 2. Skill gap closure and Stage 3 training is currently underway. In addition, 390 reassessments were carried out in Heavy Mobile Equipment Operation Training (HME) following the TU period this year. In 2022, reassessments and newcomer training will continue. Simulator optimization and trainer development in both HEM and HME are also planned.
- Leadership development: A new Integrated Leadership Program that focuses on developing accountabilities for the Management "spine" in our organization continued to be rolled out in 2021. Remaining leaders, identified in 2020, and individuals new to leadership roles were enrolled in this program to ensure that every leader clearly understands their accountabilities.

The focus in 2022 will continue to be on the transfer of knowledge and skills from expatriates to locals. Ambatovy is also in the process of ensuring our artisan skills are in line with international standards; the first phase of this process will start in the first half of 2022 with Heavy Equipment Maintenance Trade. This is to ensure that our trades training, trainers, programs and facilities meet international criteria. Ambatovy is currently in the process of implementing an integrated Training and Learning Management System to ensure the accuracy, consistency and availability of training data required for reporting purposes by the business. Advancing the internship program for young nationals and progressing field qualifications for Operators will also be a priority.

#### **Labor-Management Relations**

Across our company, we have both unionized and non-unionized employees. We recognize and encourage the right to engage in free association and collective bargaining. Elections for employee representatives (Worker Delegates and Work Council) were completed by June 2021. The newly elected employee representatives started their two-year mandate after the completion of training on representative accountabilities and a basic refresher course on labor law in July 2021. Ambatovy also reviewed our internal regulations and updated some provisions in alignment with the collective bargaining agreement.

As with all of our relationships, we strive for productive and mutually beneficial outcomes in our discussions with employees and their organized labor representatives. When labor grievances do occur, we investigate and work to reach an acceptable solution for all parties concerned. Once grievances have been resolved, the Management team evaluates all of the issues that were raised and determines what process improvements, if any, can be made to ensure we can learn from each one. In 2021, 31 grievances related to working conditions were reported, of which 29 were resolved during the year, with two carried over for resolution in 2022.

#### **Employee Engagement**

Ambatovy recognizes our employees as our most valuable asset and relies on their capacity to represent the company to their friends, families, neighbors and the general public. In 2021, communications focused on keeping employees safe, engaged and informed as they returned to work, while supporting preventative measures to curb the spread of Covid-19 both within and beyond the workplace. To sensitize employees to behaviors and practices required to safely resume their respective tasks, communications were carried out via text message, postings and discussion groups held through social media. A 24/7 hotline was also set up to answer questions about Covid-19 and to provide practical advice about symptoms and how to proceed in the event of a suspected infection. With the resumption of operations, Ambatovy re-launched our weekly Ambatovy News (disseminated also by radio on our busses), released new additions of Lazan'Ambatovy and Banjina (the company's internal and external newsletters, respectively), launched the "Leaders' Corner" (a new communications platform for leaders to cascade information to their respective teams), and produced several new corporate videos.

To further boost engagement, Ambatovy also revitalized our employee group "We are Ambatovy" through a three-day event organized in Toamasina in September. "We are Ambatovy" is a social group formed by employees that consider themselves "ambassadors" for the company and that work to build solidarity within the workforce and the community through civic engagement and social events. In 2021, the club reached over 1,000 members across our sites and organized several actions including municipal street cleaning campaigns in Moramanga, generous donations to the pediatric unit at the Analakininina University Hospital Center in Toamasina, participation in tree planting events, and contributions to the prison in Moramanga.



 $<sup>^{13}</sup>$ These elections were supposed to take place in 2020 but were postponed until 2021 due to the Covid-19 situation.

#### Approach: Health and Safety

Ambatovy is committed to maintaining a healthy and safe workplace for all employees, contractors, visitors and neighboring communities, and health and safety is our top priority. We believe that all injuries are preventable. Our operations are built on a zero harm health and safety culture. We work hard to minimize operational risks to our workforce and nearby communities, and engage with these important stakeholders regularly on matters of safety, security and emergency response. For more information about our work to support health and safety at the community level, please see the section on Communities and Social Relations, earlier in this report.

Our Health and Safety (HS) team identifies hazards, assesses risks, implements controls, monitors performance, and assigns appropriate accountabilities. It also overseas training, work authorizations and reporting. We report health and safety performance on a regular, ongoing basis to Management in order to ensure continuous improvement. Our recording and reporting system is compliant with the International Labor Organization's Code of Practice on Recording and Notification of Occupational Accidents and Diseases.

#### Performance: Health and Safety



Ambatovy's zero harm and Health and Safety culture include Leadership in the Field, training, three-in-a-row, awarenessraising, standards development and inspection, and a business assurance program that validates conformance to Fatality Prevention Standards.

In 2021, curbing the spread of Covid-19 and ensuring a safe and healthy restart of operations was at the core of Ambatovy's Health and Safety priorities. Ambatovy implemented stringent and rigorous preventative measures to this effect, limiting direct contact transmission as much as possible in order to protect our employees, their families and the community from the spread of Covid-19. To ensure a safe and healthy restart of operations, employees returning to work were required to complete specific Covid-19 management training as well as competency assessments relative to their positions. In addition to the usual hygiene measures and strict health recommendations required from each of Ambatovy's employees and contractors, we also implemented a range of additional initiatives. These included:

- Strict polices on mask-wearing, social distancing and hygiene measures required by all employees.
- Provision of masks, hand sanitizer, disinfectant and other PPEs.
- Temperature screening and footwear disinfection of all personnel upon entering sites.
- A new uniform policy requiring employees to store work uniforms onsite and change outside clothing immediately upon arrival.
- · Facility upgrades including newly designed layouts of offices, control rooms, and locker rooms to reduce room occupancy and ensure social distancing.

- Installation of floor markings, plywood and plexiglass panels and desk dividers where employees work in a shared space.
- Regular disinfection and cleaning of work areas, canteens, vehicles and equipment.
- · Additional canteen facilities and schedules.
- · Reorganization of transport (new bus schedules, seatmarking, increased ventilation and air-circulation).
- Upgrades to the medical center including a dedicated Covid-19 treatment unit.
- Comprehensive Covid-19 tracking, testing and isolation protocols for confirmed and suspected Covid-19 cases and their close contacts.
- Development of a 24/7 Covid-19 hotline for employees.

In addition to these extensive measures, Ambatovy also worked closely with the Malagasy Government to access vaccinations for our employees and has facilitated the administration of doses to employees. Approximately 88% of national employees (based on personal choice) and 100% of expatriate employees were fully vaccinated as of December 2021 (this does not include national employees who may have opted to get vaccinated outside our International SOS clinic). Over 5,070 national contractors were also able to receive their vaccinations through Ambatovy. Ongoing awareness campaigns continue to promote vaccination awareness and reinforce the importance of remaining vigilant.

Ambatovy carefully monitors our health and safety performance against International Council on Mining and Metals (ICMM) standards and ensures continuous improvement and safe production through comprehensive auditing and reporting procedures. Any safety observation, near-miss, or safety incident is seen as a chance to continuously improve the company's processes in order to prevent the potential for future incidents. Ambatovy is currently working toward ISO 45001 certification for our safety management system: the highest international standard for occupational health and safety.

In 2021, Ambatovy achieved our best safety performance todate, with an all-time low Total Recordable Injury Frequency Rate (TRIFR) of 0.09 and an All Injury Frequency Rate (AIFR) of 0.47, both well below the targets set for the year. Lost Time Injuries increased slightly compared to 2020 but this is mainly attributed to the return of the workforce and restart of full-time operations following a long period of Technical Unemployment with very limited employees onsite. The Lost Time Injury Frequency Rate (LTIFR) was 0.04 in 2021.

Ambatovy Health and Safety Performance 2019-2021				
2019 2020 2021				
AIFR	.71	.42	.47	
TRIFR	.15	.10	.09	
LTIFR	.05	.00	.04	

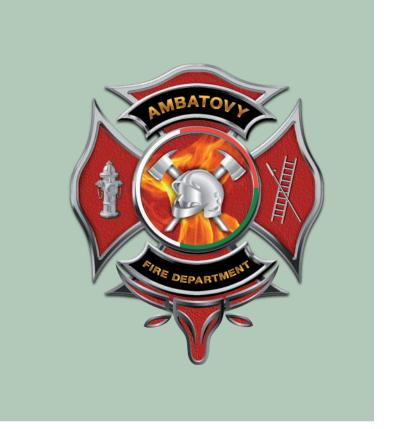
As an industrial enterprise, risk management is required on a daily basis in order to ensure an injury-free workplace and is one of Ambatovy's greatest challenges. To instill a safety culture that emphasizes prevention, Ambatovy has developed a Health and Safety road map based on three pillars (fatality prevention, injury prevention and catastrophic event prevention) and continues to implement new initiatives each year. In 2021, the following key actions were achieved:

- Fatality Prevention: Fatality Prevention Committees were established for each of the 12 Fatality Prevention Standards.
   The committees ensure the review of each standard and perform field audits to confirm the correct application of standards in the field.
- Injury Prevention: Injury prevention focused on promoting the right work methods, right tools and the "line of fire" concept while in the field. Specific awareness campaigns were carried out around hand injury prevention, eye injury prevention, trip and fall awareness, and fatigue management.
- Catastrophic Event Prevention: The process safety team collaborated with operational teams in each area to identify the worst-case scenarios, assess the controls in place, define the safety critical elements and communicate results to the workforce.

These three pillars were reinforced through daily routine Leadership in the Field. In addition, multiple new initiatives were implemented this year to further improve Ambatovy's safety culture. These included a recognition program to reinforce safety behavior, the introduction of contractor management performance monitoring, and a Planned Task Observation project focusing on the right application of Safe Operating Procedures during routine operations and maintenance activities in order to create a new working standard and improved safety across all sites and departments.

First created in 2010 with six firefighters, our Emergency Response Team (ERT) is now comprised of 32 professional firefighters and around 30 volunteers whose main mission is protecting Ambatovy's people, assets and environment and supporting business recovery. Based at the Plant and Mine Sites, the ERT is always ready to intervene in case of emergency. The Ambatovy Fire Department also provides monitoring support and advice during the completion of certain activities that require expertise, such as training, hot work, airport assistance, rescue plans, and rescue equipment installation. When required, the team also assists local firefighters in case of emergency in our neighboring communities. Such was the case when a fire broke out at the Moramanga District Reference Hospital Center (CHRD) this year.

In 2021, the Ambatovy Fire Department decided to create a new logo to better reflect the team's spirit and its connection to Madagascar. The new logo includes Madagascar's famous zebu with the traditional firefighter's axe and flame symbols. This new logo has been integrated into all fire trucks, ERT uniforms and other items associated with the Ambatovy Fire Department. We are very proud of and grateful for the team's service!





#### **Responsible Production**

#### **Objectives**

- Provide and promote products that are produced and consumed in a socially, ethically and environmentally responsible manner.
- Remain committed to implementing policies and management systems that are aligned with OECD requirements and with good industry practice and to ensuring supply chain due diligence for the responsible production of our minerals.
- Maintain ISO 9001-2015 certification to demonstrate our commitment to quality and to meet our customers' needs.

#### **Approach**

Society and markets are increasingly demanding responsibly and ethically produced goods. Downstream customers of Ambatovy are, in turn, increasingly requesting evidence of policies, management systems, and supply chain due diligence to ensure responsible mineral production and supply. Ambatovy is committed to extracting and producing minerals that meet our stakeholders' social, ethical, environmental and human rights expectations and to advancing that commitment with our partners, suppliers and customers.

The adoption of responsible sourcing obligations builds on a global shift in the extractives industry. Over the past several years, organizations and institutions, such as the International Council on Mining and Metals (ICMM), the Extractive Industries Transparency Initiative (EITI) and the Organization for Economic Cooperation and Development (OECD), have developed and refined various standards to encourage more sustainable and ethical practices. These initiatives have largely been driven by market participants' desire to reduce supply chain and operational risks; consumer demand for ethically sourced goods; and encouragement from the international community and investors to better align business practices with human rights and sustainable development principles.

In October 2019, the London Metal Exchange (LME) unveiled a new policy to promote the responsible sourcing of metals. The LME Policy on Responsible Sourcing sets out mandatory labor, environmental and supply chain due diligence requirements, and preventing conflict minerals from being sold on the exchange is a core tenant. The LME Policy requires that producers ensure that their brands are compliant with ISO 14001 (environmental

management system)<sup>14</sup> and ISO 45001 (occupational health and safety management system), and are compliant with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (CAHRAs). With our two LME-listed products, nickel and cobalt, Ambatovy has been working towards meeting these responsible sourcing and due diligence requirements by the LME's December 2023 deadline. We have established an internal Responsible Sourcing Committee comprised of members of Senior Management from our Marketing and Business Improvement, Sustainability, and Health, Safety, Environment and Security Departments to guide these efforts.

The Ambatovy Quality Policy is our formal commitment to supplying defect-free products to all our customers. In order to deliver on this commitment, we must:

- Understand the requirements as agreed with our customers;
- Communicate effectively with our customers and suppliers;
- Do our work correctly the first time;
- Supply products at standards that meet our customers' needs;
- Practice effective communications about safety and quality;
- Involve all personnel;
- · Continuously improve everything we do;
- Comply with applicable government laws and regulations.

A practical way to implement these strategies is to have a formal Quality Management System (QMS) in place. Our QMS was

Responsible Production 5:

<sup>&</sup>lt;sup>14</sup>Producers must be compliant with the ISO standards or with Equivalent Certification Programs.

certified in 2014 as compliant with International Standard ISO 9001-2008. This was a great milestone for the company and paved the way for us to achieve registration of our nickel and cobalt briquettes on the London Metal Exchange (LME). Since our original certification, Ambatovy has had yearly audits conducted to confirm the compliance of our QMS with ISO 9001 requirements. In 2017, our certification was renewed under the new and more stringent 2015 version of the ISO 9001 standard. In May 2021, the first annual audit was conducted after the renewal certification we received in 2020. Ambatovy achieved zero non-conformities, three strong points, three areas of concern and one opportunity for improvement. This maintenance of our certification demonstrates Ambatovy's commitment to quality and to our customers.

### 





#### **Responsible Sourcing**

In 2021, Ambatovy commissioned a robust, thorough CAHRA assessment to determine whether Madagascar should be considered a conflict-affected and high-risk area as per the OECD definition. The CAHRA assessment, which was carried out by an independent third party with expertise in ESG risks in Madagascar's mining sector areas, concluded that Ambatovy does not source from, produce in, or transit through CAHRAs. The methodology adopted for this assessment will allow Ambatovy to do regular updates on the status of Madagascar.

Ambatovy is currently pursuing a plan towards alignment with the LME's Track A that will require compliance with the Joint Due Diligence Standard for Copper, Lead, Nickel and Zinc and with the Cobalt Refiner Supply Chain Due Diligence Standard. We are working closely with the Responsible Minerals Initiative Responsible Minerals Assurance Process (RMI RMAP) in this regard and expect to have our first audit in April 2022. As noted in previous sections of this report, work is also well underway to meet the certification requirements of ISO 14001 and ISO 45001. Towards that end, during the second quarter of 2021, a HSEQ Management System Department was created to lead this process.

#### Material Stewardship

Ambatovy's nickel and cobalt are stable unreactive metals, widely used in the production of stainless steel, other metal alloys, specialty chemicals, and in a variety of other applications. However, Ambatovy's production process involves industrial and hazardous materials, such as chemicals and compressed gas. Ambatovy has developed detailed policies and procedures on handling, transporting, storing, recycling, and disposing of such items. We also maintain Safety Data Sheets (SDSs) from suppliers on all hazardous materials and commodities that we use, and produce SDSs for Ambatovy products and by-products. These data sheets are electronically accessible to employees and we provide our product SDSs to customers in a variety of languages. Training is provided on proper handling procedures and, where relevant, on appropriate Personal Protective Equipment requirements for safe handling and use. Our procurement and transportation handling procedures are based on regulations from the International Marine Organization, the International Air Transport Association, and the European Agreement Concerning International Carriage of Dangerous Goods by Road.

When possible, we try to procure goods and services that have a positive social or environmental return. ALBI continues to work with local businesses to procure a range of items for our operations, such as pallets made from Forest Stewardship Council-certified sources. Other examples of procurement initiatives can be found in the Economic Performance section.

#### Customer Relations, Health and Safety

Ambatovy nickel products are marketed and sold through our shareholder companies (Sumitomo and KOMIR) and onward to the end customer. Ambatovy cobalt products are marketed directly by Ambatovy, with exclusive distribution arrangements in Europe and the USA. In certain geographical areas including Asia and Africa, cobalt is marketed and sold by Ambatovy directly to the end customer. Ammonium sulphate, used mainly as a fertilizer for soils in the agricultural sector, is also marketed and sold through an exclusive distribution arrangement to local and global markets. Ambatovy and our partner companies are committed to ensuring that customers have relevant and reliable science-based information on hand regarding the health and environmental effects of Ambatovy products.

Ambatovy assesses the health and safety aspects of our products via membership in and participation in international industrial organizations established to provide sciencebased knowledge on the human health and environmental effects of the products and on product qualities. These organizations include the Nickel Institute (NI), the Cobalt Institute (CI) as well as consortia established for the purposes of complying with the requirements of the European Union's Registration, Evaluation, Authorization and Restriction of Chemical Substances (REACH) and Classification, Labeling, and Packaging (CLP) regulations. All Ambatovy products have comprehensive SDSs which provide the hazard classification as well as guidelines and recommendations for safe handling and use procedures. These SDSs provide information that adheres to regulatory standards according to the geographic area of sales.

Customers in the European Union have cooperated in the development of specific Generic Exposure Scenarios to assist with compliance with the REACH regulations. These scenarios provide guidance on the operating conditions that must be met in order to ensure the safe use of both nickel and cobalt with respect to potential impacts on workers handling Ambatovy products as well as guidance on the avoidance of any negative impacts on local populations in the vicinity of facilities producing or using these substances.

Ambatovy products comply with relevant rules and regulations, such as the REACH and CLP regulations, in countries of product destination. Careful attention is given to handling hazardous substances, and warning labels identify important instructions as guidance. Carriers of these substances use these labels as indication of the nature of the products they ship and ensure compliance with international standards such as the International Marine Dangerous Goods Code.

Both nickel and cobalt are sold directly to industrial end-use consumers; however, domestic customers who use the final

**Responsible Production** 

consumer products rarely come in direct contact with these refined substances. Industrial end-users are generally aware of the health and safety aspects that must be considered.

The international industrial organizations to which Ambatovy belongs promote appropriate and safe uses of nickel and cobalt, and advocate for appropriate science-based regulations. Environmental impacts of our products are considered and communicated in a variety of ways, including via SDSs, product labeling and guidance on safe use, environmental quality standards, and, under REACH, through a variety of exposure scenarios for industrial uses.

Ambatovy produces ammonium sulphate, an inorganic salt, as a by-product of our hydrometallurgical process. Most of our ammonium sulphate is sold on the international market where it is primarily used as a crop nutrient in the agricultural sector. However, Ambatovy is also working to broaden local awareness about the benefits of ammonium sulphate as an affordable and appropriate fertilizer for smallholder farmers. Indeed, since 2012, Ambatovy has been collaborating with International Raw Materials (IRM), our distributor of ammonium sulphate, to conduct rice and vegetable trials in Madagascar and to promote the benefits of ammonium sulphate, known locally as Madasul, as a means of achieving greater food security and increasing farmers' incomes. Production trials, carried out since 2012, have demonstrated a 50 to 100% improvement in rice yields when using our product, under certain conditions, and have found it to be more costeffective than similar fertilizers (such as Urea) when used in vegetable farming.

In 2021, in order to raise awareness about the economic and social benefits of Madasul, IRM organized field days for local farmers, facilitated affiliations with research organizations and technical partners, participated in national and regional fairs, and broadcast key messaging through local radio and social media. IRM also supported vulnerable families across Madagascar through the distribution of technical kits containing Madasul, rice seed and other fertilizers, as part of the Papriz Project led by the Japan International Cooperation Agency (JICA). Thanks to this enduring partnership, we have begun to foster a growing understanding of the socio-economic benefits of ammonium sulphate in Madagascar, significantly increase the demand for Madasul locally, and contribute to greater food security in the country.



Product Information Required			
Information required for product labeling	Yes		
Content, particularly with regard to substances that might produce an environmental or social impact	Yes		
Safe use of the product of service	Available on SDSs and on the NI and CI websites		
Disposal of the product and environmental/social impacts	A caution to dispose of materials and containers in accordance with the applicable national, regional and/or local environmental regulations is included on SDSs; due to the high value of nickel and cobalt, global recycling rates are significant		

Responsible Production 61

#### Letter from our Vice President, Sustainability

Dear Readers,

At Ambatovy, we consider our actions to be paramount to ensuring that we mine responsibly and believe we have a unique opportunity to create positive and lasting impacts on the environment and the communities touched by our operations. As you have just read, 2021 was an important year for Ambatovy, showcasing the resilience of not only our business but also of our Sustainability Program when faced with the rapid and enduring changes brought about by the global health crisis.

As we fully relaunched our social and environmental programs, we adopted new ways of working in order to keep our employees and communities safe, while still managing to achieve new milestones in environmental management, stakeholder engagement and social development. By redoubling our efforts, we were able to make significant progress against our commitment to rehabilitate a multi-functional forest over the Mine footprint. We not only produced a record number of endemic seedlings at our industrial nursery this year, but also ramped-up our restoration activities, surpassing our annual targets and achieving our best revegetation results to-date.

Across our conservation and industrial sites, we also continued to develop and strengthen our vast network of monitoring and assessment systems. Increased forest patrols and community-led ecological monitoring helped reduce threats in our offset areas and, at our industrial sites, advances in Plant Site stack testing and the installation of new groundwater monitoring wells (across our Mine and conservation areas) placed us in an even better position to understand, monitor and control our impacts.

We continued to support community development and livelihood initiatives, with a particular focus on counteracting some of the socio-economic impacts experienced during Covid-19. To this effect, Ambatovy donated medical equipment and meals to support the treatment and prevention of Covid-19 locally and, through our enduring partnership with UNICEF, contributed to the life-saving treatment of 1,950 severely acutely malnourished children in the South of Madagascar. Ambatovy also continued to support income generating activities and "local-local" procurement within communities near our operations. We established ten new VSLAs to support local entrepreneurship and completed the construction of five public primary schools as part of our commitments funded through the Social Investment Fund.



As we look forward to a promising year ahead, Sustainability will remain at the core of our business and all of our decision-making processes. We remain acutely aware that, as Madagascar's largest industrial unit, our actions have the potential to bring significant lasting impacts to the communities and environments where we operate and understand that our performance today will set an important example for future mining endeavors in the country. By striving to meet and exceed the highest national and international standards, our hope is to prove ourselves as an industry leader in good governance and responsible mining, and a true corporate citizen of Madagascar. We are confident that through our dedication to environmental stewardship, stakeholder engagement and social investment, we will create a legacy that will be felt for generations to come.

Thank you for taking the time to read our report.

Sincerely,

Philippe Beaulne Vice President, Sustainability

#### Appendix 1: The Sustainable Development Goals

The United Nations' Sustainable Development Goals (SDGs), a follow up to the Millennium Development Goals, consist of 17 ambitious targets to address global issues and to ensure a sustainable and resilient future for the world by 2030. The success of the SDGs depends on the participation of a range of actors – governments, communities, non-governmental organizations and corporations.

The nature of the work of the natural resources sector has social, economic and environmental impacts on the jurisdictions where projects and operations are located. As a responsible company working in both a low-income country and a biological hotspot, we aim to ensure that the potential negative impacts of our activities are minimized and mitigated to the greatest extent possible, while also focusing on actions that positively impact local communities and Madagascar. To this end, the SDGs serve as a reference for us to gauge how and to what extent we are contributing to Madagascar's development and to its achievement of these globally recognized sustainability targets.

Below is a summary of ways in which Ambatovy is contributing to the achievement of the 17 SDGs. More information about our work can be found in the text of the report.



## End poverty in all its forms everywhere

- One of the biggest private sector employers in Madagascar
- At the end of 2021, approximately 11,609 employees, both direct employees and operational contractors; 91% of our total workforce are Malagasy
- Hiring practices that emphasize the recruitment of national employees, local to our sites of operations
- Support for skills development, both for our employees and local communities
- Policy of "Buy locally, hire locally"



#### End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

- Training in improved agricultural and small animal husbandry techniques as well as new income generating activities (IGAs) for former construction employees and local community members
- School nutrition program at the resettlement village of Vohitrambato
- Support for community nutrition activities through school feeding programs and Food for Work Projects
- Donation to UNICEF to contribute to the life-saving treatment of severely acutely malnourished children affected by the drought and food insecurity situation in the *Grand Sud* of Madagascar
- Promotion of the use of ammonium sulphate, a by-product of our hydrometallurgical process, as an affordable and appropriate fertilizer for smallholder farmers as a means of achieving greater food security and increasing families' incomes



# Ensure healthy lives and promote well-being for all, at all ages

- Support for youth kiosks along the RN2 to promote HIV/AIDS awareness and reproductive health
- Support for HIV/AIDS awareness-raising and testing with Ambatovy employees and communities
- Development of communities' medical facilities through donations of equipment and rehabilitation/construction of infrastructure
- Support for the responses to the plague and measles epidemics
- Donations of medical equipment, materials, supplies, meals for health workers and other support, for the fight against Covid-19



# Ensure inclusive and equitable education and promote lifelong learning opportunities for all

- Construction of schools and classrooms in the resettlement villages and in other communities
- Scholarship support to help further the education of youth from Vohitrambato and of vulnerable girls from our zones
- Collaboration with UNICEF on the construction of ecofriendly schools
- Training and capacity building for school administrators in our zones
- · Training and leadership development for our employees
- Support to local technical and vocational schools
- Donation of school kits to children at primary schools in our zones



# Achieve gender equality and empower all women and girls

- Equal opportunity employer, even for traditionally male mining roles
- Development and promotion of income generating activities and VSLAs with predominantly female-headed households
- Promotion of Zero Tolerance policy for sexual exploitation of young girls
- Scholarship program for vulnerable girls in our zones of operation



# Ensure viability and sustainable management of water and sanitation for all

- Support of Water Users Associations (WUA) in our communities
- Construction of water pumps and water points in villages and on school grounds
- Extensive water monitoring system through all Ambatovy sites
- Partnership with the Zararano Project for the installation of a water tower and distribution network in the village of Vohitrambato



# Ensure access to affordable, reliable, sustainable, and modern energy for all

- Creation of electric vehicle fleet at Plant Site
- Provision and installation of solar panels at Vohitrambato resettlement village
- Donation of generators to local Covid-19 treatment centers



#### Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all

- Employment program with comprehensive employment benefits
- Work Council to strengthen employee relations and employeemanagement interactions
- Requirements for our contractors including respect for health and safety standards and procedures and for human rights
- Active contracts with more than 350 local suppliers and support for local business creation
- Development and promotion of income generating activities and VSLA
- Produce for Ambatovy's canteens sourced from approximately 3,000 local farmers through bulk purchasing centers and from farmers' groups near the Mine and Plant Sites



# Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

- Extensive rehabilitation and construction of roads
- Rehabilitation and extension of railroad track in Toamasina
- Expansion of Port B in Toamasina
- Investment in infrastructure through the Social Investment Fund
- Support for the rehabilitation of 11 refuge shelters in the Maroantsetra District after Cyclone Enawo to help strengthen communities' resilience



## Reduce inequalities within and among countries

- With nickel as one of Madagascar's top export products, supporting the local currency and narrowing the trade deficit
- Bringing in significant foreign exchange earnings through investment, expatriate salaries and product sales
- Support for anti-corruption measures and firm stance against corruption in all forms



# Make cities and human settlements inclusive, safe, resilient and sustainable

- Installation of railroad safety fences and rail-road crossings
- Work with regions on industrial risks and disaster preparedness
- Support for the responses to the plague and measles epidemics as well as significant contributions to cyclone relief efforts and to the fight against the Covid-19 pandemic



# Ensure sustainable consumption and production patterns

- Mitigation of inflation in local markets by purchasing produce through centers working directly with local farmers
- Development of local businesses to support industrial sector and to recycle our waste products



# Take urgent action to combat climate change and its impacts

- Extensive reforestation work and conservation actions with local community involvement
- Minimization of emissions by utilizing gravity-fed system to transport slurry along the Pipeline from the Mine to the Plant and by importing low emission coal for Plant processes
- Coordinated bus transport for employees and installation of electric bus fleet



# Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

- Recycling of process water rather than relying entirely on river water withdrawals
- Conservation activities for rivers in our areas and the native fish species, including control of invasive species
- Waste treatment through the Tailings Management Facility to ensure that water discharged into the sea has the composition of marine water



Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

- Extensive biodiversity monitoring, mitigation and restoration program in place
- BBOP pilot project from 2009 to 2018, promoting avoidance, minimization, restoration and offsets to achieve no net loss, and preferably a net gain, in biodiversity
- Work with village organizations on monitoring and enforcing the sustainable use of ecosystem services
- · Protection of conservation offset sites
- Protection, monitoring, evaluation, and study of flora and fauna in our conservation areas
- Environmental awareness-raising at schools and at community level for communities surrounding our conservation zones
- Awareness-raising on the damage caused by slash-andburn agriculture, poaching, bush meat consumption, and endangered species trade



# Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels

- Support for the EITI process and participation in the Voluntary Principles on Security and Human Rights
- Collaboration with Government and local authorities to develop a mechanism for the safe, transparent, equitable and sustainable management of mining royalties
- Partnership with the local NGO SAHA for capacity building, guidance and accompaniment of Communes receiving our royalties
- Firm stance on business ethics and anti-corruption, which all employees and contractors must adhere to
- Work with the international NGO Search for Common Ground to foster constructive company-community dialogue, to promote mutual understanding and to build trust



# Strengthen the means of implementation and revitalize the global partnership for sustainable development

- Extensive partnerships supporting our activities in health, education, livelihoods, social development, the environment and good governance
- Partnerships and close collaborations with the public, private, NGO, and business communities in Madagascar and around the world



65

#### **Appendix 2: Partnerships and Associations**

Ambatovy is a member of several industry associations and initiatives. We are a member of the Multi-Stakeholder Group (National Committee) for the EITI in Madagascar, the Chamber of Mines of Madagascar, the Madagascar Industries Union (*Syndicat des Industries de Madagascar*, SIM) and the Madagascar Business Association (*Groupement des Enterprises de Madagascar*, GEM). We also engage with international industry bodies, such as the Nickel Institute and the Cobalt Institute.

Ambatovy is also a member of several regional coordination committees with civil society and local government. Ambatovy has worked in recent years with a number of local, national and international organizations to ensure transparency, to create opportunities, to broaden networks and perspectives, and to develop sustainable operations. These partners and associations include:

#### International

- Business and Biodiversity Offsets Program (BBOP)
- Cobalt Institute
- Conservation International
- Duke Lemur Center of Duke University
- Extractive Industries Transparency Initiative (EITI)
- Forest Trends
- Joint United Nations Programme on HIV/AIDS (UNAIDS)
- Missouri Botanical Garden (MBG)
- Nickel Institute
- Office for the Coordination of Humanitarian Affairs (OCHA)
- Office of the High Commissioner for Human Rights (OHCHR)
- Prodaire (Projet de Développement de l'Approche Intégrée pour promouvoir la Restauration Environnementale), a program funded by the Japanese International Cooperation Agency (JICA)
- Search for Common Ground (SFCG)
- South African Institute for Aquatic Biodiversity
- The Peregrine Fund
- United Nations Children's Fund (UNICEF)
- United Nations Development Programme (UNDP)
- University of Queensland, Centre for Social Responsibility in Mining
- Wildlife Conservation Society (WCS)

#### **National**

- Action et Développement
- American Chamber of Commerce (AmCham)
- · Asity Madagascar (an affiliate of BirdLife International)
- Association Nationale d'Actions Environnementales (ANAE)
- Association Handicaps Esperance Tamatave
- Brickaville Miara-Mitraka (BRIMIMI)
- Bureau National de Gestion des Risques et Catastrophes (BNGRC)
- Canadian Chamber of Commerce and Cooperation (CanCham)
- CASEF Program (Agriculture Rural Growth and Land Management Project of the World Bank)
- Centre d'Études et de Recherches Ethnologiques et Linguistiques (CEREL)
- Centre National de Recherches Océanographique (CNRO)

- Centre National de Recherche sur l'Environnement (CNRE)
- Centre Technique Horticole de Tamatave (CTHT)
- Chamber of Mines of Madagascar
- Circonscription de l'Environnement et du Développement Durable (CIREDD)
- Cultural and Social Center (CCS)
- Department of Animal Biology at the University of Antananarivo
- Diocesan Development Office of Toamasina (ODDIT)
- Direction Générale du Développement Durable (DGDD)
- Direction Régionale de l'Agriculture et de l'Elevage (DRAE)
- Direction Régionale de l'Environnement et du Développement Durable (DREDD)
- Direction Régionale de Tourisme
- EcoFauna
- Ezaka ho Fampandrosoana any Ambanivohitra (EFA)
- Ezaka Vaovao
- Fehizoro Federation
- Fianakaviana Sambatra (FISA)
- Fifanampiana Kristiana ho an'ny Fampandrosoana eto Madagasikara (FIKRIFAMA)
- Fikambanambe Mivondrona Ampitambe Mahatsara (FIMIAM)
- FORMAPROD (Programme de Formation Professionnelle et d'Amélioration de la Productivité Agricole)
- Groupe d'Etude et de Recherche sur les Primates (GERP)
- Groupe Mavitrika, University of Tamatave
- Groupement des Entreprises de Madagascar (GEM)
- Henry Doorly Zoo (HDH)
- Kopakelatra Project
- Love and Care Organization
- Madagascar Consulting Ingredients (MCI)
- Madagascar Fauna and Flora Group (MFG)
- Maison des Jeunes Moramanga
- Malagasy Red Cross Society
- Mamizo
- Man and the Environment (MATE)
- Miarintsoa
- MIDEM (Independent Mission for Development and Education in Madagascar)
- Mitsinjo Association
- Museum of Art and Archeology of the University of Antananarivo (ICMAA)
- Ny Sahy
- Ombona Tahiry Ifampisamborana Vola (OTIV)
- Pensei
- Private Sector Humanitarian Platform of Madagascar (PSHP)
- Programme Prosperer (Programme de Soutien aux Poles de micro-Entreprises Rurales et aux Economies Régionales)
- Regional Office of Nutrition (ORN)
- Regional Tourism Office of Alaotra Mangoro (ORTALMA)
- SAF/FJKM
- SAHA (Sahan'Asa Hampandrosoana ny eny Ambanivohitra)
- St. Gabriel
- Syndicat des Industries de Madagascar (SIM)
- University of Antananarivo
- Vahatra
- Voahary Voakajy
- Vohimanana
- Zararano Project

#### Appendix 3: Compliance to External Initiatives

Ambatovy strives to maintain the highest ethical standards, to respect local culture and traditions, and to comply with the laws and regulations of Madagascar. We endeavor to meet and, when possible, exceed the mandatory compliance requirements of our agreements with the Government of Madagascar, our lenders and other stakeholders. We are also committed to several voluntary measures that go beyond our legal obligations.

#### **Mandatory Compliance**

Law on Large Scale Mining Investments (Loi sur les Grands Investissements Miniers, LGIM) — Madagascar's LGIM establishes the legal framework for developing and operating large-scale mining projects in the country. Ambatovy was certified under the LGIM in 2007. Under the LGIM, we are required to report annually to the Government on a range of sustainability issues, such as local employment, local content, environment measures and community activities.

Decree on Rendering Investments Compatible with the Environment (Décret sur la Mise en Compatibilité des Investissements avec l'Environnement, MECIE) — The MECIE is a national decree that regulates environmental compliance for investment projects in Madagascar. Ambatovy received our environmental permit from the Malagasy authorities in December 2006, six months after filing our Environmental and Social Impact Assessment (ESIA). Following the ESIA, Ambatovy developed an Environmental and Social Development Management Plan (PGEDS), which provides the framework to ensure that all issues identified during the ESIA are addressed through appropriate mitigation and follow-up actions. We submit annual reports to the ONE on our progress against the PGEDS, and ONE officials conduct regular site visits to review our work.

International Finance Corporation (IFC) Performance Standards – The IFC Performance Standards are an international benchmark for identifying and managing environmental and social risks; they have been adopted by many companies and organizations as a key component of their environmental and social risk management. Our agreement for US\$ 2.1 billion in project financing requires that we adhere to IFC Performance Standards on environment, labor, and social aspects for a major investment project. Our work is closely monitored and regularly reviewed by Independent Engineers sent by our lenders to ensure compliance with these standards.

Equator Principles – The Equator Principles are voluntary standards for banking institutions; they have greatly increased the attention and focus on environmental and social/community standards, accountability and responsibility. Since some of Ambatovy's lending institutions are Equator Principles Financial Institutions (EPFIs), our financing agreements require that we uphold these principles. EPFIs pledge to take into account social and environmental criteria in the large-scale projects they finance and to abstain from financing loans where the borrowers are not willing or able to comply with these criteria.

#### **Voluntary Commitments**

Voluntary Principles on Security and Human Rights (VPSHR) – Established in 2000, the VPSHR are a set of principles designed to guide companies in the extractive sector in maintaining the safety and security of their operations within an operating framework that ensures respect for human rights and fundamental freedoms. The duty to protect human rights rests with governments, but other actors in society, including businesses, have a responsibility to respect human rights. Extractive industry companies, such as Ambatovy, have a unique opportunity to have a positive impact on peace and stability, and we are continuously engaging with local, national and international entities to educate and raise awareness for the promotion of human rights. The VPSHR are embedded in Ambatovy's Security Policy and, in order to reinforce shared commitments to the Principles, Ambatovy has developed relationships and agreements with national ministries responsible for security that establish clear expectations for public security forces and Ambatovy under the VPSHR.

Extractive Industries Transparency Initiative (EITI) – The EITI is a global standard for the good governance of oil, gas and mineral resources. It seeks to address the key governance issues in the extractive sector and to foster transparency along the extractive industry value chain – from the point of extraction, to payments to the government, to production levels, to contributions to the economy and community investments. Since Madagascar became an EITI candidate country in February 2008, Ambatovy has been a strong supporter of the EITI process and an active member of the Multi-Stakeholder Group (known as the National Committee in Madagascar), comprised of representatives from government, extractive industry companies, and civil society. Each year, Ambatovy participates in Madagascar's EITI reconciliation report.

International Standard ISO 9001 – The ISO 9001 certification confirms the ability of Ambatovy to provide goods and services meeting the needs of our clients, and the conformity of our products with international market requirements. For example, it is needed to meet the requirements of the London Metal Exchange (LME). In 2014, we received our ISO certification for Refining, Analytical Services and Shipping of Nickel, Cobalt, and Ammonium Sulphate products by AFNOR (the Association Française de Normalisation), the certification and standardization body. In February 2017, our certification was renewed, under the new and more stringent 2015 version of the ISO 9001 standard; we were re-certified in 2020.

#### International Council on Mining and Metals (ICMM)

- The ICMM is an organization established in 2001 to act as a catalyst for performance improvement in the mining and metals industry. The ICMM brings together mining and metals companies with national and regional mining associations and global commodity associations. Ambatovy endeavors to apply relevant ICMM principles and has integrated them, where applicable, into internal planning and strategies. Responsible Minerals Initiative (RMI) – Founded in 2008 by members of the Responsible Business Alliance and the Global e-Sustainability Initiative, the Responsible Minerals Initiative (RMI) is one of the most utilized and respected resources for companies from a range of industries addressing responsible mineral sourcing issues in their supply chains. The RMI's flagship Responsible Minerals Assurance Process (RMAP) offers companies and their suppliers an independent, third-party audit that determines which smelters and refiners can

be verified as having systems in place to responsibly source minerals in line with current global standards, including the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act. More than 400 companies and associations from over ten industries participate in the RMI today. Ambatovy was pleased to begin our engagement with the RMI in 2021.

#### Appendix 4: Social Investment Fund (SIF)

In 2012, Ambatovy, in partnership with the Government of Madagascar, created the SIF, with a total value of US\$ 25 million to be used for social and infrastructure projects for the benefit of the local population. These projects have been identified in collaboration with our local communities and Malagasy authorities, and are managed in accordance with Ambatovy's procurement and purchasing policies.

At the end of 2021, there were 17 projects that fell under this commitment, with 13 of them completed, two ongoing and two suspended. These projects are:

- the rehabilitation of the century-old Bazary Be market in Toamasina (completed in 2014)
- the destruction of the Zeren ammonia stock stored in two old and deteriorating pressure vessels which represented a serious safety hazard for neighboring communities in Toamasina (completed in 2014)
- the establishment of a social business, an integrated poultry farm known as the Harenasoa Poultry Project (completed in 2016)
- support for JIRAMA in Toamasina, the national water and energy provider, through the donation of two generators producing 12.6 megawatts of power to support electricity supply in Toamasina (completed in 2016)
- provision of equipment and the donation of two fire trucks for the fire brigade in Toamasina (completed in 2016)
- the rehabilitation of the Technical and Vocational High School in Toamasina (completed in 2016)
- the rehabilitation of a portion of road in Ambatondrazaka to improve the road infrastructure quality in the capital of the Alaotra Mangoro Region (completed in 2016)

- the creation of a Civil Protection Unit in Toamasina to strengthen the city's emergency response capacities (completed in 2016; as part of a sub-project, security forces were provided with radios to strengthen their capacity and to improve coordination between the services)
- the construction of a new market facility in Moramanga (completed in 2017)
- the rehabilitation of the market in Brickaville (construction completed in 2017; final handover to local authorities in 2019)
- the rehabilitation of the trial court building in Moramanga (completed; final handover to local authorities in 2019)
- the provision of two ambulances for Moramanga (completed; handover in 2020)
- the rehabilitation/construction of some small-scale infrastructure in Toamasina (completed in 2021)
- support for the establishment of a mechanism for the good governance of royalties, *Tsara Tantana*, and for the accompaniment and capacity building of communes impacted by our operations (ongoing)
- the construction of a laboratory for the ONE in Toamasina so that it can independently perform analyses (ongoing)
- support for the collection and recycling of domestic waste in Moramanga through the "Moramadio" waste management project (suspended)<sup>15</sup>
- support for the collection and recycling of domestic waste in Toamasina through the "Tamadio" waste management project (suspended)

<sup>15&</sup>quot;Moramadio" is the combination of two words "Moramanga" and "madio" which is Malagasy for "clean"; similarly for "Tamadio" in the case of the waste management project in Toamasina (Tamatave).

### Appendix 5: Priority Species

These priority species are listed by the International Union for Conservation of Nature (IUCN) as endangered (EN), critically endangered (CR), evolutionary significant units (ESU) or Species of Concern (SOC), and are nationally, regionally or locally endemic to our conservation and intervention areas.

LEMURS		
NAME	STATUS	LOCATIONS
Daubentonia madagascariensis	EN	Mine footprint, Mine conservation zone, Pipeline, Ankerana, CFAM, Torotorofotsy
Indri indri	CR	Mine footprint, Mine conservation zone, Pipeline, Ankerana, CFAM, Torotorofotsy
Prolemur simus	CR	Mine conservation zone, Pipeline, CFAM, Torotorofotsy
Propithecus diadema	CR	Mine footprint, Mine conservation zone, Pipeline, Ankerana, CFAM, Torotorofotsy
Varecia variegata	CR	Mine conservation zone, Pipeline, Ankerana, CFAM

OTHER MAMMALS		
NAME	STATUS	LOCATIONS
Microgale jobihely	EN	Mine footprint, Mine conservation zone, CFAM

BIRDS		
NAME	STATUS	LOCATIONS
Anas melleri	EN	Mine footprint, Torotorofotsy
Ardea humbloti	EN	Mine footprint, Torotorofotsy
Ardeola idea	EN	Torotorofotsy
Sarothrura watersi	EN	Torotorofotsy
Tachybaptus pelzelnii	EN	Mine footprint
Circus macrosceles	EN	Torotorofotsy

<b>AMPHIBIANS</b>		
NAME	STATUS	LOCATIONS
Mantella aurantiaca	CR	Mine footprint, Mine conservation zone, Pipeline, CFAM, Torotorofotsy
Boophis boehmei	EN	Mine footprint, Mine conservation zone, Pipeline, Ankerana, CFAM, Torotofotsy
Boophis feonnyala	EN	Mine footprint
Gephyromantis eiselti	EN	Mine footprint, Mine conservation zone
Gephyromantis thelenae	EN	Mine footprint, Mine conservation zone, Ankerana
Mantidactylus albofrenatus	EN	Mine conservation zone, Ankerana
Plethodontohyla guentheri	EN	Mine conservation zone
Rhombophryne kibomena	EN	Mine footprint, Mine conservation zone, Ankerana, CFAM, Torotorofotsy
Cophyla mavomavo	EN	Mine footprint, Mine conservation zone

REPTILES		
NAME	STATUS	LOCATIONS
Brookesia ramanantsoai	EN	Mine footprint, Mine conservation zone, CFAM
Calumma furcifer	EN	Pipeline, Ankerana
Calumma gallus	EN	Pipeline, Ankerana
Phelsuma flavigularis	EN	Pipeline
Phelsuma pronki	CR	Mine footprint, Mine conservation zone
Uroplatus pietschmanni	EN	Mine footprint, Mine conservation zone
Brookesia minima	EN	Pipeline

FISH		
NAME	STATUS	LOCATIONS
Ratsirakia Mangoro	ESU	Mine footprint, Mine conservation zone
Ratsirakia Sakalava	ESU	Mine footprint, Mine conservation zone
Ratsirakia Vondronina	ESU	Mine footprint, Mine conservation zone
Rheocles Mangoro	ESU	Mine footprint, Mine conservation zone
Rheocles Vondronina/Rianila	ESU	Mine footprint, Mine conservation zone
Rheocles alaotrensis	EN	Pipeline, CFAM

PLANTS		
NAME	STATUS	LOCATIONS
Dicoryphe sp.nov (Non Orchid)	SOC	Mine footprint
Helichrysum sp. nov. aff. Ambondrombeense (Non Orchid)	SOC	Mine footprint
Hyperacanthus sp. nov. A ('mangoroensis' ined.) (Non Orchid)	SOC	Mine footprint
Aloe leandrii (Non Orchid)	CR	Mine footprint, Mine conservation zone
Ellipanthus razanatsimae (Non Orchid)	CR	Mine foot print
Seringia macrantha (Non Orchid)	CR	Mine footprint
Bulbophyllum uroplatoides (Orchid)	CR	Mine footprint
Macaranga racemosa (Non Orchid)	CR	Mine footprint, Mine conservation zone, Ankerana, CFAM
Angraecum letouzeyi (Orchid)	EN	Mine footprint
Aerangis monantha (Orchid)	EN	Mine footprint
Aeranthes polyanthemus (Orchid)	EN	Mine footprint

Appendix 5: Priority Species

PLANTS		
NAME	STATUS	LOCATIONS
Angraecum alleizettei (Orchid)	EN	Mine footprint
Angraecum ankeranense (Orchid)	EN	Mine footprint, Mine conservation zone
Angraecum bicallosum (Orchid)	EN	Mine footprint
Angraecum obesum (Orchid)	EN	Mine footprint
Angraecum pseudodidieri (Orchid)	EN	Mine footprint
Angraecum triangulifolium (Orchid)	EN	Mine footprint
Angraecum scroticalcar (Orchid)	EN	Mine footprint
Benthamia nigrescens (Orchid)	EN	Mine footprint
Bulbophyllum briophyllum (Orchid)	EN	Mine footprint
Bulbophyllum callosum (Orchid)	EN	Mine footprint
Bulbophyllum cardiobulbum (Orchid)	EN	Mine footprint
Bulbophyllum debile (Orchid)	EN	Mine footprint
Bulbophyllum horizontale (Orchid)	EN	Mine footprint
Bulbophyllum petrae (Orchid)	EN	Mine footprint
Bulbophyllum sulfureum (Orchid)	EN	Mine footprint, Mine conservation zone
Cryptocarya fulva (Non Orchid)	EN	Mine footprint, Mine conservation zone
Cryptocarya myristicoides/ multiflora (Non Orchid)	EN	Mine footprint, Mine conservation zone
Cryptopus paniculatus (Orchid)	EN	Mine footprint, Mine conservation zone
Cymbidiella pardalina (Orchid)	EN	Mine footprint
Cynorkis aurantiaca (Orchid)	EN	Mine footprint
Dombeya biumbellata (Non Orchid)	EN	Mine footprint, Mine conservation zone, CFAM
Gastrorchis tuberculosa (Orchid)	EN	Mine footprint
Lemurella papillosa (Orchid)	EN	Mine footprint
Liparis ambohimangana (Orchid)	EN	Mine footprint

72

PLANTS		
NAME	STATUS	LOCATIONS
Liparis warpuri (Orchid)	EN	Mine footprint, Mine conservation zone
Aspidostemon conoideus (Non Orchid)	EN	Mine footprint, Mine conservation zone
Coffea liaudii (Non Orchid)	EN	Mine footprint
Cynanchum moramangense (Non Orchid)	EN	Mine footprint, Mine conservation zone
Eugenia urschiana (Non Orchid)	EN	Mine footprint, Mine conservation zone
Eugenia wilsoniana (Non Orchid)	EN	Mine footprint, Mine conservation zone
Melicope discolor (Non Orchid)	EN	Mine footprint, Mine conservation zone
Melittacanthus divaricatus (Non Orchid)	EN	Mine footprint
Pandanus analamazaotrensis (Non Orchid)	EN	Mine footprint, Mine conservation zone
Phyllanthus ambatovolana (Non Orchid)	EN	Mine footprint
Psorospermum nervosum (Non Orchid)	EN	Mine footprint, Mine conservation zone
Baroniella acuminata (Non Orchid)	EN	Mine footprint
Breonia louvelii (Non Orchid)	EN	Mine footprint
Canarium moramangae (Non Orchid)	EN	Mine footprint, Mine conservation zone
Croton enigmaticus (Non Orchid)	EN	Mine footprint
Croton ferricretus (Non Orchid)	EN	Mine footprint, Mine conservation zone
Croton humbertii (Non Orchid)	EN	Mine footprint, Mine conservation zone
Croton radiatus (Non Orchid)	EN	Mine footprint
Decaryochloa diadelpha (Non Orchid)	EN	Mine footprint
Gravesia tanalensis (Non Orchid)	EN	Mine footprint
Ivodea antilahimenae (Non Orchid)	EN	Mine footprint, Mine conservation zone
Korthalsella taenioides (Non Orchid)	EN	Mine footprint, Mine conservation zone
Medinilla mandrakensis (Non Orchid)	EN	Mine footprint, Mine conservation zone
Noronhia cuspidata (Non Orchid)	EN	Mine footprint
Ochna thouvenotii (Non Orchid)	EN	Mine footprint, Mine conservation zone

Appendix 5: Priority Species 73

PLANTS		
NAME	STATUS	LOCATIONS
Tina urschii (Non Orchid)	EN	Mine footprint, Mine conservation zone
Exacum bulbilliferum (Non Orchid)	EN	Mine footprint, Mine conservation zone
Psychotria moramangensis (Non Orchid)	EN	Mine footprint, Mine conservation zone
Psychotria trichantha (Non Orchid)	EN	Mine footprint, Mine conservation zone
Aeranthes antennophora (Orchid)	EN	Mine footprint, Mine conservation zone
Aeranthes neoperrieri (Orchid)	EN	Mine footprint, Mine conservation zone
Angraecum pinifolium (Orchid)	EN	Mine footprint
Beclardia grandiflora (Orchid)	EN	Mine footprint
Bulbophyllum amoenum (Orchid)	EN	Mine footprint
Bulbophyllum auriflorum (Orchid)	EN	Mine footprint
Bulbophyllum ciliatilabrum (Orchid)	EN	Mine footprint
Bulbophyllum discilabium (Orchid)	EN	Mine footprint, Offset (Torotorofotsy)
Bulbophyllum hapalanthos (Orchid)	EN	Mine footprint
Bulbophyllum imerinense (Orchid)	EN	Mine footprint
Bulbophyllum lakatoense (Orchid)	EN	Mine footprint
Bulbophyllum obtusatum (Orchid)	EN	Mine footprint
Bulbophyllum rubiginosum (Orchid)	EN	Mine footprint
Bulbophyllum septatum (Orchid)	EN	Mine footprint
Bulbophyllum teretibulbum (Orchid)	EN	Mine footprint
Bulbophyllum toilliezae (Orchid)	EN	Mine footprint
Cynorkis henrici (Orchid)	EN	Mine footprint
Goodyera perrieri (Orchid)	EN	Mine footprint, Offset (CAZ)
Goodyera rosea (Orchid)	EN	Mine footprint
Jumellea brachycentra (Orchid)	EN	Mine footprint
Jumellea peyrotii (Orchid)	EN	Mine footprint

74

PLANTS		
NAME	STATUS	LOCATIONS
Pyrostria analamazaotrensis (Non Orchid)	EN	Mine footprint, Mine conservation zone
Stenandrium amoenum (Non Orchid)	EN	Mine footprint, Mine conservation zone
Syzygium lugubre (Non Orchid)	EN	Mine footprint
Syzygium onivense (Non Orchid)	EN	Mine footprint, Mine conservation zone
Scleria madagascariensis (Non Orchid)	EN	Mine footprint, Mine conservation zone
Pectineriella edmundi (Orchid)	EN	Mine footprint
Pectineriella scroticalcar (Orchid)	EN	Mine footprint
Pentopetia longipetala (Non Orchid)	EN	Mine footprint
Polystachya tsinjoarivensis (Orchid)	EN	Mine footprint
Vepris sclerophylla (Non Orchid)	EN	Mine footprint
Xylopia flexuosa (Non Orchid)	EN	Mine footprint

### **Appendix 6: Ambatovy Offset Sites**

Offsets are the final step in the mitigation hierarchy, designed to compensate for any residual impacts on biodiversity that cannot be avoided, mitigated, minimized or restored. Given the large scope of our operations and in line with BBOP guidance and IFC Performance Standard 6, Ambatovy has developed a multifaceted offset program comprising several sites and associated activities. Ambatovy's offsets include the Mine Conservation Forests, the Analamay-Mantadia Forest Corridor (CFAM), the Ankerana Forest and the Torotorofotsy Wetlands Ramsar Site. Combined, these areas come to a total of almost 14,000 ha, or roughly 9 times the size of our Mine impacted area of approximately 1,600 ha.

Incorporated into the offset program is an awareness that sustainable forest management cannot be successful without the support and participation of local populations who depend on forests for their natural resources. Ambatovy promotes community wardenship and has designated peripheral forest segments specific to this use. Through awareness campaigns and livelihood development initiatives, Ambatovy seeks to decrease economic reliance on forest resources and reorient local communities towards alternative income generating activities.

### Mine Conservation Forests

Two parcels of azonal forest overlapping the ore body have been set aside and will not be mined, despite the valuable nickel lying beneath them. The combined area of these two parcels is approximately 300 ha. During the Environmental and Social Impact Assessment, these azonal forest habitats were considered to be a rare habitat type compared to the more typical zonal forests of the Eastern Forest Corridor. In addition, we have more than 3,500 ha on-site of transitional and zonal forests dedicated to conservation. The conservation zone provides a buffer for receiving the fauna leaving the Mine footprint and serves as a seed bank to facilitate ecological restoration of the Mine footprint. These forests are directly managed by Ambatovy.

# Analamay-Mantadia Forest Corridor

The Analamay-Mantadia Forest Corridor (CFAM) will be part of a proposed new protected area that will ensure habitat connectivity between existing conservation areas in the region including forests around the Mine managed by Ambatovy, the Ankeniheny-Zahamena Corridor (CAZ), the Mantadia National

Park and the wetlands of Torotorofotsy. Formal protection of this corridor, spanning approximately 8,000 ha in size (of which 3,490 ha is forested land), will result in the creation of one of the largest continuous expanses of protected habitats in Madagascar (over 450,000 ha) that includes several endangered species such as the critically endangered Diademed sifaka (Propithecus diadema). Ambatovy continues to support the establishment of this larger, new protected area, which will be called the Torotorofotsy-CFAM Complex New Protected Area, and which is still awaiting final governmental approval. We also support patrolling activities carried out by our agents and local communities, in order to maintain threats at the minimum level, pending the Government appointment of a site manager. Of particular importance, the creation of this larger, new protected area will ensure protection of a surviving population of the critically endangered Greater bamboo lemur (Prolemur simus), one of the rarest lemurs in Madagascar and on the list of the top 25 most endangered primates of the world. Three COBAs participate in the management of the CFAM and are supported by regional DREDD offices and local NGOs in their duties.

#### **Ankerana Forest**

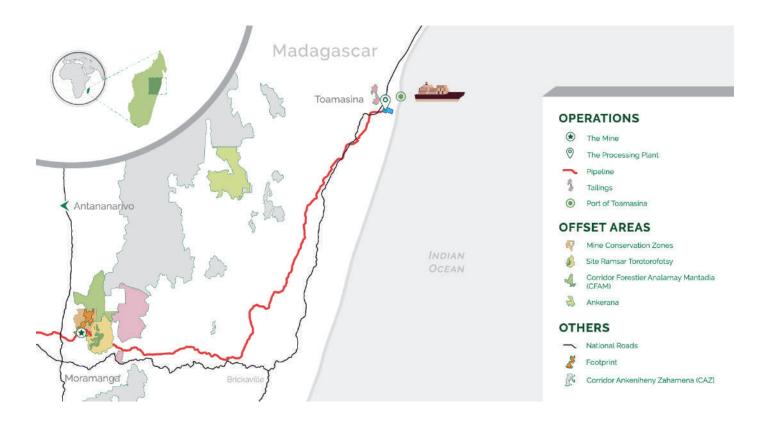
Ankerana was the first offset site identified by Ambatovy and remains the centerpiece of our Business and Biodiversity Offsets Program. It is an intact area of low-to-medium altitude forest lying 70 km to the northeast of the Mine and is linked to the Ankeniheny-Zahamena Corridor (CAZ). The area is continuously threatened by local activities, such as slash-and-burn agriculture and poaching. However, since we began our work in Ankerana in 2011, the number of documented threats has significantly declined. The site has a total surface area of approximately 8,000 ha, of which 4,879 is forested surface. Conservation International and the local NGO Vohimanana work with Ambatovy in managing the protection of the Ankerana Forest, bringing valuable expertise to our biodiversity management. Recently, conservation activities were expanded to include the forest corridor linking the Ankerana Massif to the CAZ, extending the total surface area managed by Ambatovy and our partners to over 14,740 ha. We work closely with the communities on the outskirts of this offset site through education programs and through support for the COBA organizations to ensure that our efforts to protect and maintain the delicate ecosystem continue beyond our operations. Several COBAs have been created to continue to strengthen the protection of the Ankerana Forest's resources. Income generating activities (IGAs) practiced by the surrounding communities continue to improve. These include fish farming, the cultivation of spices, coffee, and vegetable crops as well as native seedlings produced at village nurseries.

# Torotorofotsy Wetlands Ramsar Site

The Torotorofotsy Wetlands lie immediately to the east of the Mine and cover 10,064 ha of wetlands, forest and other habitats. Protected forests form 1,597 ha of this area. In 2006, Torotorofotsy was classified as a wetland of international importance under the Ramsar Convention on Wetlands. We support local community associations by reinforcing management capacity and sharing activities that help stop marsh transformation and degradation. The day-to-day management of the Torotorofotsy Wetlands is managed by Asity Madagascar (an affiliate of BirdLife International, the world leader in bird conservation) and supported by

Ambatovy. Patrols conducted by Asity enable Ambatovy to gain an understanding of the range of biodiversity within the wetlands.

The success of Torotorofotsy as an offset site and the sustainability of its protection status will only happen with the participation of the communities surrounding it. Awareness campaigns are carried out and alternative income generating activities, to alleviate the community members' pressure on forest resources, continued throughout the year.



## Appendix 7: GRI Content Index

GRI Content Index				
GRI Standard	Disclosure	Report Page	Omission	
GRI 101: Foundation				
[GRI 101 does not include any disclo	osures]			
General Disclosures: Core Option				
GRI 102: General Disclosures 2016	102-1 Name of the Organization	cover		
	102-2 Activities, brands, products, and services	12, 14		
	102-3 Location of headquarters	back cover		
	102-4 Location of operations	12		
	102-5 Ownership and legal form	16		
	102-6 Markets served	59-61		
	102-7 Scale of the Organization	12, 13		
	102-8 Information on employees and other workers	54		
	102-9 Supply Chain	34		
	102-10 Significant changes to the organization and its supply chain	10		
	102-11 Precautionary principle or approach	43		
	102-12 External initiatives	27, 67		
	102-13 Membership of associations	27, 66		
	102-14 Statement from senior decision makers	8, 62		
	102-15 Key impacts, risks, and opportunities	18		
	102-16 Values, principles, standards and norms of behavior	12		
	102-17 Mechanisms for advice and concerns about ethics	27, 30, 31		
	102-18 Governance structure	16		
	102-40 List of Stakeholder groups	21, 22		
	102-41 Collective bargaining agreements	56		
	102-42 Identifying and selecting stakeholders	21		
	102-43 Approach to stakeholder engagement	21		
	102-44 Key topics and concerns raised	22		
	102-45 Entities included in the consolidated financial statements	10		
	102-46 Defining report content and topic Boundaries	10		
	102-47 List of material topics	78		
	102-48 Restatements of information	10		
	102-49 Changes in reporting	10		
	102-50 Reporting period	10		
	102-51 Date of most recent report	10		
	102-52 Reporting cycles	10		
	102-53 Contact point for questions regarding the report	10		
	102-54 Claims of reporting in accordance with GRI Standards	10		
	102-55 GRI content index	78		
	102-56 External Assurance	10		

	GRI Content Index		
Material Topics			
Economic Performance			
GRI 103: Management approach	103-1 Explanation of the material topics and its Boundary	33	
2016	103-2 The management approach and its components	33	
	103-3 Evaluation of the management approach	33	
GRI 201: Economic Performance	201-1 Direct economic value generated and distributed	33-36	
2016	201-4 Financial assistance received from government		N/A <sup>16</sup>
Indirect Economic Impacts			'
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	33	
2016	103-2 The management approach and its components	33	
	103-3 Evaluation of the management approach	33	
GRI 203: Indirect Economic	203-1 Infrastructure investments and services supported	34, 35	
Impacts 2016	203-2 Significant indirect economic impacts	33, 34	
Procurement Practices			
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	33, 34	
2016	103-2 The management approach and its components	33, 34	
	103-3 Evaluation of the management approach	33,34	
GRI 204: Procurement Practices 2016	204-1 Proportion of Spending on local suppliers	33, 34	
Anti-Corruption			<u>'</u>
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	28	
2016	103-2 The management approach and its components	28	
	103-3 Evaluation of the management approach	28	
GRI 205: Anti-Corruption 2016	205-1 Operations assessed for risks related to corruption	28, 34	
	205-2 Communication and training about anti-corruption policies and procedures	28	
Water			'
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	51	
2016	103-2 The management approach and its components	51	
	103-3 Evaluation of the management approach	51	
GRI 302: Water 2016	303-1 Water withdrawal by source	51	
	303-2 Water sources significantly affected by withdrawal of water	51	
Biodiversity			
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	43	
2016	103-2 The management approach and its components	43	
	103-3 Evaluation of the management approach	45	
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, or managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	47, 48	
	304-2 Significant impacts of activities, products and services on biodiversity	43-52	
	304-3 Habitats protected or restored	47, 48	
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	70	

 $<sup>\</sup>overline{^{16}\text{Not applicable:}}$  Ambatovy does not receive financial assistance from the Government.

Appendix 7: GRI Content Index

	GRI Content Index	
Emissions		
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	48, 49
2016	103-2 The management approach and its components	48, 49
	103-3 Evaluation of the management approach	49, 50
GRI 305: Emissions 2016	305-1 Direct GHG emissions	51, 52
Effluents and Waste		
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	48, 49
2016	103-2 The management approach and its components	48, 49
	103-3 Evaluation of the management approach	49, 50
GRI 306: Effluents and Waste 2016	306-2 Waste by type and disposal method	49, 50
	306-3 Significant spills	49
	306-5 Water bodies affected by water discharges and/or runoff	51
<b>Environmental Compliance</b>		
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	43-45
2016	103-2 The management approach and its components	43-45
	103-3 Evaluation of the management approach	43-45
GRI 307: Environmental	307-1 Non-compliance with environmental laws and	34
Compliance 2016	regulations	
Employment		
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	53
2016	103-2 The management approach and its components	53
	103-3 Evaluation of the management approach	54
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not	53, 54
O	provided to temporary or part-time employees	
Occupational Health and Safety	102 1 Evaluation of the material tonics and its Boundary	57
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its Boundary	57
	103-2 The management approach and its components	
CDI 402. Conventional Health and	103-3 Evaluation of the management approach	57, 58
GRI 403: Occupational Health and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	57, 58
Training and Education		
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its Boundary	55
2016	103-2 The management approach and its components	55
	103-3 Evaluation of the management approach	55
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	55
	404-3 Percentage of employees receiving regular performance and career development reviews	53, 54
Human Rights		
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	27
2016	103-2 The management approach and its components	27, 29
	103-3 Evaluation of the management approach	27, 29
GRI 412: Human Rights Assessment 2016	412-1 Operations that have been subject to human rights reviews or impact assessments	29, 34
	412-2 Employee training on human rights policies or procedures	29
	412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	29

80

GRI Content Index			
Child Labour			
GRI 103: Management Approach	103-1 Explanation of the material topics and its Boundary	27, 29	
2016	103-2 The management approach and its components	27, 29	
	103-3 Evaluation of the management approach	27, 29	
GRI 408: Child Labour 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	29	
GRI 409: Forced or compulsory labor	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	29	
Local Communities			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its Boundary	37	
	103-2 The management approach and its components	37	
	103-3 Evaluation of the management approach	37	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement , impact assessments, and development programs	37	
	413-2 Operations with significant actual and potential negative impacts on local communities	37	
Customer Health and Safety			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its Boundary	52	
	103-2 The management approach and its components	52	
	103-3 Evaluation of the management approach	60	
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	60	

## Appendix 8: Additional References

Please consult the following websites as additional references for information included in this report.		
Ambatovy	www.ambatovy.com	
Business and Biodiversity Offsets Program	bbop.forest-trends.org	
Children's Rights and Business Principles	unicef.org/csr/	
Cobalt Institute	www.cobaltinstitute.org	
Equator Principles	http://equator-principles.com	
Extractive Industries Transparency Initiative Madagascar	https://eiti.org/Madagascar	
Global Reporting Initiative	https://www.globalreporting.org	
International Council on Mining and Metals	www.icmm.com	
International Finance Corporation's Performance Standards	www.ifc.org/performancestandards	
IUCN Red List of Threatened Species	http://www.iucnredlist.org/	
London Metal Exchange, Responsible Sourcing	https://www.lme.com/en/company/responsibility/responsible-sourcing	
Madagascar's National Office for the Environment (ONE)	https://www.pnae.mg/	
Nickel Institute	www.nickelinstitute.org	
OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (CAHRAs)	https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf	
Responsible Minerals Initiative, Responsible Minerals Assurance Process	https://www.responsiblemineralsinitiative.org/responsibleminerals-assurance-process/	
Sustainable Development Goals	https://www.un.org/sustainabledevelopment/sustainabledevelopment-goals/	
Voluntary Principles on Security and Human Rights	www.voluntaryprinciples.org	

#### **About Forward Looking Statements**

This document contains certain forward-looking statements within the meaning of applicable securities laws. Often, but not always, forward-looking statements can be identified by the use of forward-looking words like "plans", "targets", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipated" or "does not anticipate" or variations of such words and phrases and statements that certain actions, events or results "may", "could", "might", or "will be taken", "occur", or "be achieved". There can be no assurance that such forward-looking information will prove to be accurate. Forward-looking information is based on the opinions and estimates as of the date such information is provided and is subject to known and unknown risks, uncertainties and other factors that may cause the actual results to be materially different

from those expressed or implied by such forward-looking information. Key factors that may result in material differences between actual results and developments and those contemplated by this document include business, economic and political conditions in Madagascar. Accordingly, readers should not place undue reliance on forward-looking information. The forward-looking information contained in this document is made as of the date hereof and Ambatovy undertakes no obligation to update publicly or revise any forward-looking information, whether as a result of new information, future events, unexpected occurrences affecting the statement afterwards, or otherwise, except as required by applicable securities laws. The forward-looking information contained herein is expressly qualified in its entirety by this cautionary statement.

