

AMMAN



INTEGRATING
SUSTAINABILITY,
CREATING
A LEGACY

2022 Sustainability
Report





Table of Contents

01	Letter from the Board	4
02	Sustainability Performance Highlights	6
03	About This Report	11



04	About AMMAN	12
	Company Profile	12
	AMMAN at a Glance	14
	Key Operating Assets	16
	Business Process	18
	AMMAN's Historical Milestones	22
	Our Vision, Mission, Core Values and Commitments	24
	Association Memberships	26
	Awards and Achievements	26
	Certificates	26



05	Approach to Sustainability	28
	Material Topics	29
	Sustainability Strategy Framework	30
	Sustainability Governance	32



06	Upholding Ethics	34
	Promoting Corporate Governance, Compliance and Transparency	36
	Managing Enterprise Risks	43
	Responsible Supply Chain Management	46
	Engaging our Stakeholders	49



07	Advancing People	52
	Supporting Local Communities	54
	Empowering our Workforce	62
	Upholding Human Rights	70
	Ensuring a Safe Working Environment	74



09	Managing Resources	104
	Promoting Energy Efficiency	106
	Preserving Water Resources	110
	Managing Waste	114
	Ensuring Responsible Mine Closure	121



08	Preserving Environment	80
	Responsible Tailings Management	83
	Safeguarding Biodiversity	90
	Protecting Air Quality	96
	Managing GHG Emissions	99

10	Appendix	
	Appendix I: OHS Performance	126
	Appendix II: Risk Management Definitions and Risk Matrix	127
	Appendix III: Acronyms and Abbreviations	129
	Appendix IV: Glossary	131
	Appendix V: SASB Index	135
	Appendix VI: OJK Index	149
	Appendix VII: Feedback Form	153



More information can be accessed on our website

www.amman.co.id

01 | Letter from the Board



We are pleased to present our first Sustainability Report (SR), a significant milestone in realising our vision of creating a legacy of best. The report reiterates our deep commitment to sustainability and environmental, social and governance (ESG) principles; describes how we integrate sustainability and transparency into our business; and provides an overview of our sustainability and ESG policies, performance, programmes, and initiatives during the 2022 reporting year.

Meeting Expectations

There is a growing expectation for the mining sector to contribute to the increased demand for key minerals required to transition to low-carbon economies, increase domestic processing of raw materials, and to operate in a sustainable and transparent manner.

As detailed further in this report, we actively contribute to meeting these expectations by supplying vital raw materials, constructing a smelter and precious metal refinery, committing to responsible production, and investing into mitigating and managing our ESG risks.

Maintaining an Ethical and Responsible Business

In 2022, we further strengthened our corporate policies to provide guidance in implementing our commitments to sustainability and responsible mining practices. These policies build on our material sustainability topics and priorities and include Communities, Fair Employment, Responsible Supply Chain, Risk Management, Environment, Human Rights, and Health & Safety.

We established our Sustainability Strategy Framework, comprising four pillars: Upholding Ethics, Advancing People, Preserving Environment, and Managing Resources, and also identified the material sustainability topics which are a priority for our company. To support the implementation of the Framework, we restructured and reorganised our ESG and risk management resources, management systems, and governance processes. This included the formation of an ESG Steering Committee, ESG Task Force, and Enterprise Risk Management Committee.

Promoting Human Capital Development

Our people are our greatest and most valuable asset. By the end of 2022, our workforce comprised over 11,000 people. Through structured training programmes, we equip our employees with the skills and knowledge they need to perform their roles effectively and promote a culture of continuous learning and improvement.

This year, our Environmental Leadership Programme (ELP), designed to develop a culture of environmental stewardship and compliance, was successfully delivered to 102 participants in eight separate courses. We also became the first Indonesian mining company licensed as a Professional Certification Organisation – Second Party (*Lembaga Sertifikasi Profesi – Pihak Kedua/LSP P-2*), and trained and certified 126 employees.

In 2022, we also delivered training to 395 security personnel to improve their understanding of the Voluntary Principles of Security and Human Rights (VPSHR). We firmly believe that through our risk management

processes, effective stakeholder engagement and training efforts, our security personnel will be better equipped to balance the critical task of safeguarding our operations with the utmost respect for the rights and well-being of individuals and communities.

Fostering Environmental Stewardship

We continued to increase our investments and efforts to reduce and mitigate our environmental impacts. In 2022, our environmental expenditure was USD 35,691,572, a 53% increase compared to the previous year, and our greenhouse gas (GHG) reduction programmes avoided an estimated 40,000 tonnes CO₂e.

In our commitment to safeguarding ecosystems and biodiversity, we have been actively engaged in the conservation of the marine environment in Gili Balu since 2010. Our efforts encompass the careful monitoring of mangroves, seagrass beds, and natural coral reefs. To further bolster the management of Gili Balu from 2022 to 2026, we have established a formal partnership with the Office of Maritime Affairs and Fisheries of West Nusa Tenggara Province. This collaboration involves providing financial support, facilities, trainers, and other necessary resources, as well as implementing diverse conservation activities.

Our watershed rehabilitation programme and planting initiative, which commenced in 2019, spans 6,129 hectares across Lombok and Sumbawa, and in 2022 included the successful rehabilitation of over 138 hectares in the Suela Sub-district, East Lombok Regency.

Our Sustainability Challenges

In 2022, unprecedented rainfall at our Batu Hijau site resulted us exceeding our discharge water quality limits on a few occasions. However, as a result of our risk mitigation initiatives, we were able to limit the number of occurrences. We believe that climate change is increasing the probability of similar rainfall patterns occurring in the future. We continue to review and strengthen our operational and physical controls to minimize the likelihood of repeating such incidents.

This year, AMMAN accepted an invitation from the House of Representatives of the Republic of Indonesia (*Dewan Perwakilan Rakyat Republik Indonesia/DPR RI*) Commission VII to clarify corporate policies regarding human rights, worker safety, and environmental issues. The Commission was responding to concerns expressed by some members of the communities adjacent to Batu

Hijau. We responded to all inquiries to the satisfaction of the Commission members. We also reiterated our commitment to cooperate fully with the Commission and engage extensively with our stakeholders.

We will strive to further reconcile our needs-based community development programmes with the evolving expectations of our stakeholders. Our efforts will focus on constructive dialogue about the respective rights and responsibilities of the company and members of surrounding communities.

Our 2022 Awards

In 2022, we were recognised for our commitment to environmental stewardship and community development, receiving several prestigious awards. These included the Aditama Award (Gold Award) for Environmental Management and the Utama Award (Silver Award) for Implementation of Mineral Conservation and Management of Mining Engineering, all presented at the 2022 Good Mining Practice Award by the Ministry of Energy and Mineral Resources (MEMR) for our performance in the previous year.

Moving Forward

As part of our ongoing sustainability journey, we will continue to monitor the implementation of our Sustainability Strategy Framework and performance against our key performance indicators (KPIs), and remain committed to upholding our corporate values and creating long-term value for our stakeholders. We will continue to prioritise sustainability in our operations and seek new opportunities to innovate and improve, solidifying the pathway to be a transformative organisation that creates a legacy of best.

We welcome your comments and suggestions (see Feedback Form in the appendix), and look forward to sharing our progress and engaging with our stakeholders in the years ahead.

Sincerely,

Alexander Ramlie
President Director
PT Amman Mineral Internasional Tbk.

02 Sustainability Performance Highlights

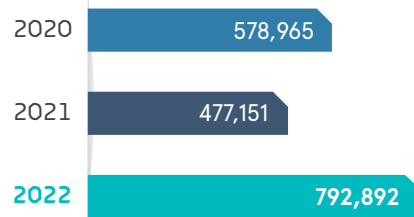
Our Vision
is to be a
transformative
organisation that
creates a legacy
of best.

To achieve this, we monitor and measure our economic, social, and environmental performance to ensure that we conduct a responsible and sustainable business. Our performance highlights are reported below:

Key Company Metrics

Production of concentrate (dry basis)

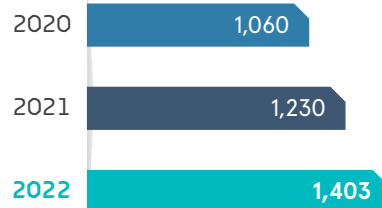
in tonnes¹



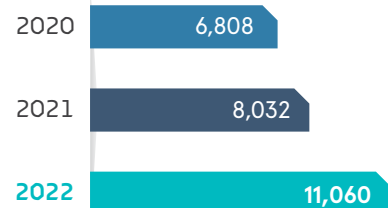
Note:

The 792,892 tonnes of copper concentrate is equivalent to 463.9 Mlbs of copper, 730.7 koz of gold, and 2,170.4 koz of silver.

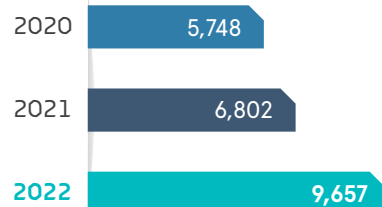
Total number of employees



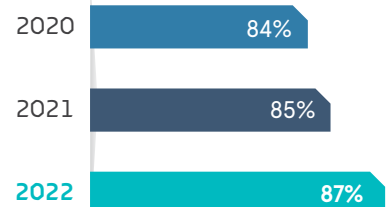
Total number of workers



Total number of contractors



Percentage of contractors



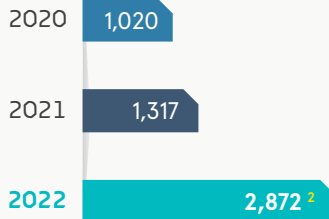
¹ Tonnes throughout this report means metric tonne or 1,000 kilograms.

Financial Performance



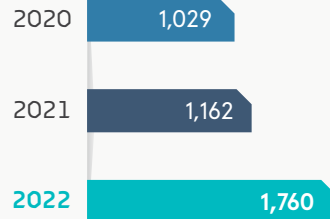
Economic value generated

in million USD



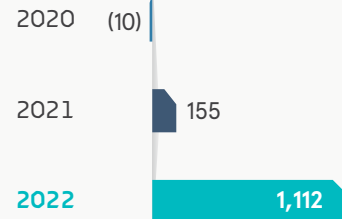
Economic value distributed³

in million USD



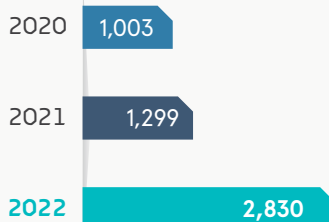
Economic value retained

in million USD



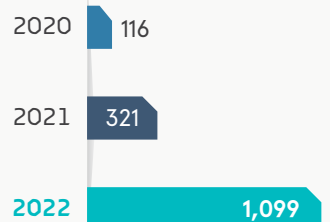
Net Sales

in million USD



Net Income

in million USD



² This includes 1,609 million USD in copper sales, 1,222 million USD in gold sales, and 41.7 million USD in silver sales.

³ Includes operating costs, employee wages and benefits, payments to providers of capital, payments to the regional and national governments and community investments.

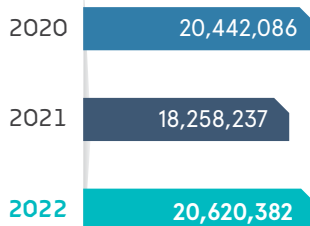
Environmental Performance

Our focus is on reducing emissions and mitigating environmental impacts by practising responsible consumption of energy, water, and resources as well as safeguarding biodiversity.

For more information on our environmental initiatives, please refer to the **Preserving Environment** and **Managing Resources** chapters.

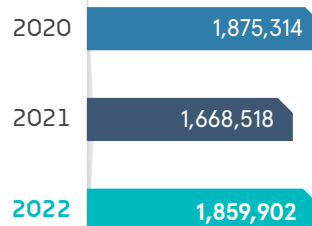
Energy consumption

in GJ



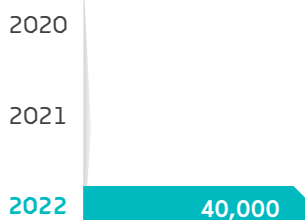
Scope 1⁴ GHG emissions

in tCO₂e



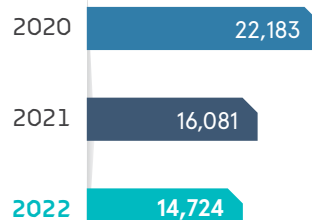
GHG emissions avoided

in tCO₂e



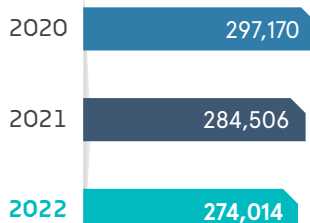
Total Weight of Hazardous Waste

in tonnes



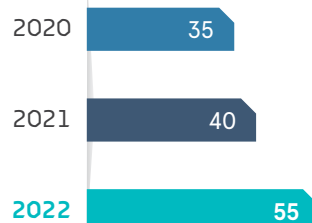
Water Consumption⁵

in thousand m³



Revegetated area as concurrent reclamation

in hectares



⁴ AMMAN is accountable for Scope 1 GHG emissions. Scope 2 GHG emissions are not applicable as AMMAN does not purchase electricity from the grid.

⁵ Includes the total amount of seawater, surface water and ground water.



New and Renewable Energy Products

Sumbawa Solar PV Power Plant

peak potential capacity of

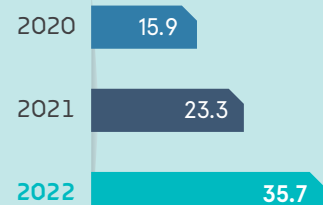
26.8 MW

Completed June 2022

Largest terrestrial solar PV plant in Indonesia

Our Environmental Expenditure

in million USD



As outlined in our Work Plan and Budget (*Rencana Kerja dan Anggaran Biaya/RKAB*) submitted to the MEMR, our environmental expenditure in 2022 was USD 35,691,572, indicating a 53% increase in realised budget compared to the previous year. The funds were spent on carrying out programmes such as environmental monitoring, land management, acid rock drainage prevention and control, and civil works such as the construction and maintenance of sedimentation ponds.

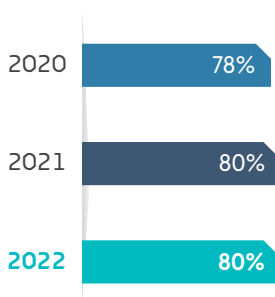
Social Performance

We uphold our commitment in to support local community development surrounding our operational areas.

Further details regarding our programmes are included in the Supporting Local Communities chapter.



Percentage of Local Suppliers



In responding to local needs, the following key initiatives were introduced and implemented:



Vocational Scholarships

- Sponsored **training for students across multiple disciplines**, including data science, coding, animation, engineering, heavy equipment mechanic and hospitality.
- **67% of these programme graduates have secured full-time or part-time jobs** with an average monthly salary of USD 211 (IDR 3.1 million), exceeding West Sumbawa's minimum wage.



Conservation Initiatives at Gili Balu

- In continuing our conservation initiatives from 2010, we formed a **partnership** with the Office of Maritime Affairs and Fisheries of West Nusa Tenggara Province to improve the management of Gili Balu from 2022 to 2026.
- The programmes involve the protection and rehabilitation of fish populations and habitat and capacity building of the local communities for sustainable tourism and fisheries.



Stunting Reduction and Prevention in West Sumbawa

- An initiative aimed at **reducing stunting** across 16 villages in West Sumbawa, West Nusa Tenggara Province, through a series of programs with CARE, an international non-profit organisation.



Empowerment of Small Businesses at Tongo Village

- We supported local product development programmes through training and assistance on various aspects related to sugar palm tree management and production, including quality optimisation and creation of value-added products, increasing product value from USD 1.19 to USD 8.31 per litre of tree sap.
- **A production kitchen was developed**, with the production of powdered palm sugar and palm sugar briquette expected to increase by 50kg and 70kg per day respectively.



Football Development

- This program, which commenced in 2022, aims to revive the football league in West Sumbawa by providing training, coaches, referees, and players to the local football organisation so that matches may be conducted in accordance with FIFA standards.
- The intent is to eventually create multiple football teams for men, women, youth and disabled people.

03 | About This Report

This is the first annual Sustainability Report by PT Amman Mineral Internasional (AMMAN). The report covers our direct, material, and operating subsidiaries: **PT Amman Mineral Nusa Tenggara (AMNT)**, **PT Amman Mineral Integrasi (AMIG)**, and **PT Amman Mineral Industri (AMIN)**. It contains information on our ESG performance, covering the 2022 financial year from January 1st, 2022, to December 31st, 2022, as well as comparisons with 2020 and 2021 data where appropriate.

In developing this report, we utilised a materiality assessment carried out in 2021, the disclosure requirements set forth by the Indonesian Financial Services Authority (*Otoritas Jasa Keuangan /OJK*) No. 51/POJK.03/2017, the OJK Circular Letter No. 16/SEOJK/2021 on the Form and Content of the Annual Report Issuer or Public Company and the Sustainability Accounting Standards Board (SASB) Metals & Mining Standard Version 2021-12.

The United Nations Sustainable Development Goals (UN SDGs) have served as guiding principles in developing, implementing, and disclosing our sustainability strategy, programmes and initiatives. This helps us align our efforts with global priorities to demonstrate our commitment to creating a sustainable future together. Throughout this report, financial data is given in the United States Dollars (USD) for consistency of our disclosures. The following conversion rates, from USD to Indonesian Rupiah (IDR), have been used:

Table 1: Conversion Rates Used in the Sustainability Report 2022

Year	Conversion Rate
2020	USD 1 = IDR 14,580
2021	USD 1 = IDR 14,312
2022	USD 1 = IDR 14,836

The acronyms, abbreviations, and glossary for key terms used throughout this report can be found in Appendix III and IV, respectively.

We acknowledge that this is just the beginning of our sustainability reporting journey, and we are committed to continuously improve our reporting. We will use the feedback from our stakeholders to enhance the accuracy, relevance and reliability of our future sustainability reports to ensure that they effectively align with our stakeholders' expectations.

For any inquiries or feedback on this report, please complete the form in the appendix of this report and contact us through:



PT Amman Mineral Internasional Tbk.

Menara Karya 6th Floor Unit A, B, C dan H
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2
Jakarta Selatan 12950

Telp: +6221 5799 4600

Fax: +6221 576 1464

E-mail: sustainability@amman.co.id
corporate.secretary@amman.co.id



This Sustainability Report was published on August 18th, 2023

04 | About AMMAN



Company Profile

Company Name

PT Amman Mineral Internasional Tbk. (AMMN)

Activities, Products, Services

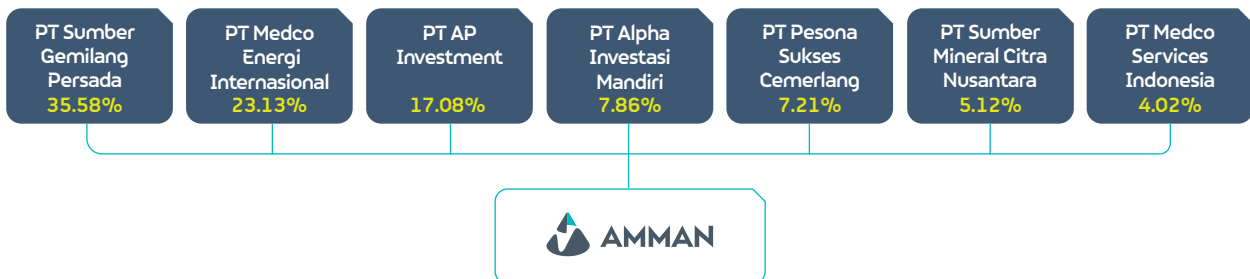
AMMN is the parent or holding company for AMNT, AMIG, AMIN, ANP, MLS, and MSS.

For the purpose of this report, we are collecting data from the following direct, material and operating subsidiaries.

- **PT Amman Mineral Nusa Tenggara (AMNT)** undertakes mining and ore-processing activities at the Batu Hijau mine in West Sumbawa Regency, West Nusa Tenggara Province, Indonesia. The Batu Hijau mine site produces high-quality copper concentrate with low impurity levels which is in high demand by smelters within the Asia-Pacific region. The concentrate also contains significant amounts of gold and silver. AMNT is currently at the definitive feasibility stage of the Elang copper-gold project, located 62 km to the east of Batu Hijau and has ongoing exploration programmes within its leases.
- **PT Amman Mineral Integrasi (AMIG)** provides human resources to AMNT’s operations.
- **PT Amman Mineral Industri (AMIN)** is in the process of constructing a copper smelter and precious metals refinery, due to be commissioned in 2024.

This group of companies is collectively referred to as "AMMAN" throughout this report.

Ownership as of December 31th, 2022⁶



⁶ As of the publication of this report, the composition of shareholders has undergone the following changes:

PT Sumber Gemilang Persada holds 32.44%, PT Medco Energi Internasional holds 21.09%, PT AP Investment holds 15.58%, PT Alpha Investasi Mandiri holds 7.17%, PT Pesona Sukses Cemerlang holds 6.58%, PT Sumber Mineral Citra Nusantara holds 4.67%, PT Medco Services Indonesia holds 3.67%, and the public holds 8.80%



Operating Country

Indonesia

Location of Operations

- 1. AMMAN Head Office: Jakarta**
Menara Karya 6th Floor, Unit A, B, C dan H
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2
Jakarta Selatan 12950
Telephone: +62 21 5799 4600
Fax: +62 21 576 1464
- 2. AMNT (including AMIN) Head Office: Jakarta**
Energy Building, 28th and 30th Floor, SCBD Lot 11A,
Jl. Jenderal Sudirman Kav 52-53, Jakarta 12190
Telephone: +62 21 5799 4600
Fax: +62 21 576 1464
- 3. AMNT Operational Office (Mining): Batu Hijau Mine Site**
West Sumbawa Regency,
West Nusa Tenggara
Telephone: +62 372 6353 18
Fax: +62 372 6353 19
- 4. AMNT Regional Office: Mataram**
Jl. Bung Karno No. 6, Mataram 83125,
West Nusa Tenggara
Telephone: +62 372 6363 18
Fax: +62 372 6333 49

Website

<https://www.amman.co.id/>

Total Workforce in 2022 (including employees and contractors)

11,060 people (as at the end of 2022)

AMMAN at a Glance

AMMAN operates the second-largest copper-and-gold mining company in Indonesia, operating the Batu Hijau mine on the island of Sumbawa. AMMAN has a fully integrated operation encompassing exploration and mine development, mining, processing, and smelting in the near future.



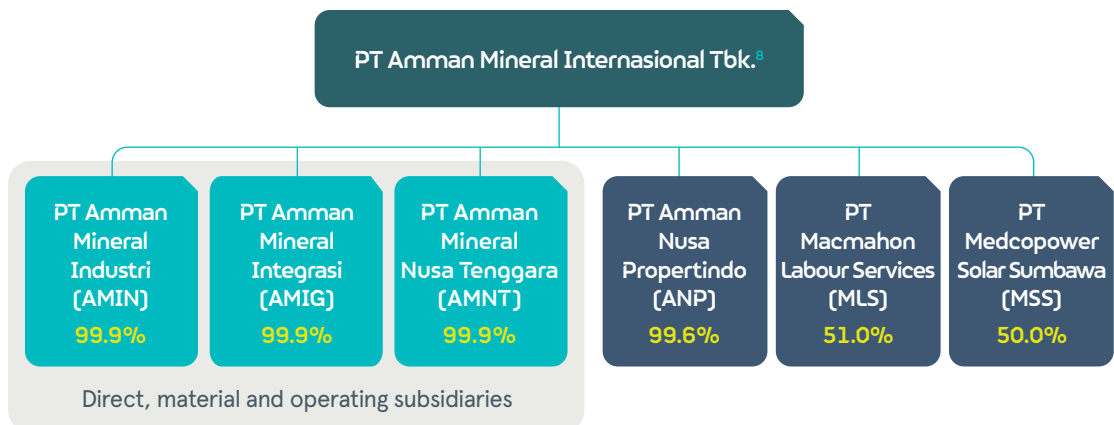
We hold a concession comprising four blocks, totalling 25,000 hectares located in West Sumbawa and Sumbawa Regencies, West Nusa Tenggara Province, Indonesia. The concession, which includes the Elang exploration project and Batu Hijau mine, features the world’s fifth largest copper reserve in the world. As at the end 2022, the Batu Hijau mine had produced 9,400 million pounds of copper and 9.5 million ounces of gold over the life of the operation.

The key activities and facilities currently include an open cut mine, ore processing plant, shipping port, various power plants (coal, diesel and solar), deep-sea tailings placement (DSTP), worker accommodation, and associated support facilities.

When AMMAN acquired Batu Hijau in 2016, the mine was in Phase 6 of the comprehensive mining plan. In 2017, AMMAN began Phase 7, accelerating ore production by three years and processing the stockpile of oxidized low-grade ore. In April 2020, AMMAN began processing the first batch of fresh ore from Phase 7. Drilling and resource modelling conducted during 2019 indicated promising results for the next phase of production. The continuous increase in efficiency and upward trend in commodity prices encouraged AMMAN to embark on Phase 8, and the approved mine life has been extended to 2032.

AMMAN plans to expand the capacity of the ore-processing plant to handle the output of Phase 8 of Batu Hijau as well as projected output from the Elang project now being surveyed and assessed. Copper smelting and precious metal refining facilities currently under construction will support the Indonesian government’s initiatives to add value to exported natural resources. In addition, the company is also currently constructing a 450MW LNG combined cycle power plant to support the expanded operations.

Figure 1: Simplified Company Structure⁷



Through various subsidiaries of AMNT, AMMAN holds a significant stake in Macmahon Holdings Limited, an ASX-listed company with mining contracting business operations throughout Australia and Southeast Asia.

⁷ As of January 2023.

⁸ As of 2022, PT Amman Mineral Internasional Tbk. operates three direct, material and operating subsidiaries, as shown in Figure 1. In addition, it holds three subsidiaries: PT Amman Nusa Propertindo (ANP), PT Macmahon Labor Services (MLS) and PT Medcopower Solar Sumbawa (MSS). ANP plans to construct and operate property projects close to Batu Hijau. It is not an operating company but a direct material subsidiary. PT Macmahon Labor Services (MLS), a non-direct and material subsidiary, provides human resources services. PT Medcopower Solar Sumbawa (MSS) built and operates the Sumbawa Solar PV Power Plant, in which PT Amman Mineral Internasional Tbk. holds a 50% share.

Figure 2: Key Operating Assets



Mataram

LOMBOK ISLAND

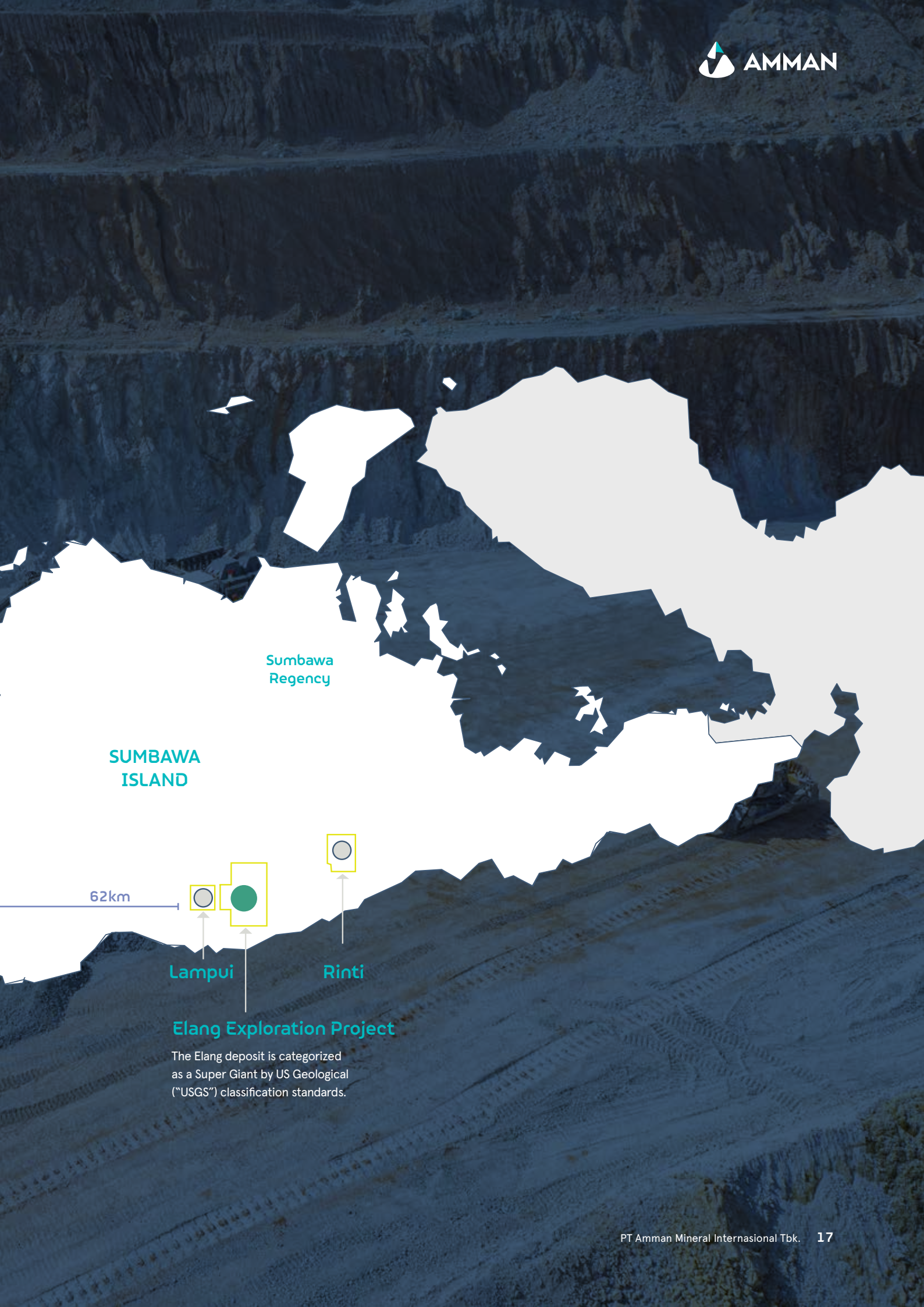
West Sumbawa Regency

Distance

- Prospect locations
- Batu Hijau Mine operations
- Elang drilling operations
- IUPK block
- Forest borrow use area
- Project area

Batu Hijau Mine

A large open pit mine operation, producing copper, gold and silver since 2000.



Sumbawa
Regency

SUMBAWA
ISLAND

62km

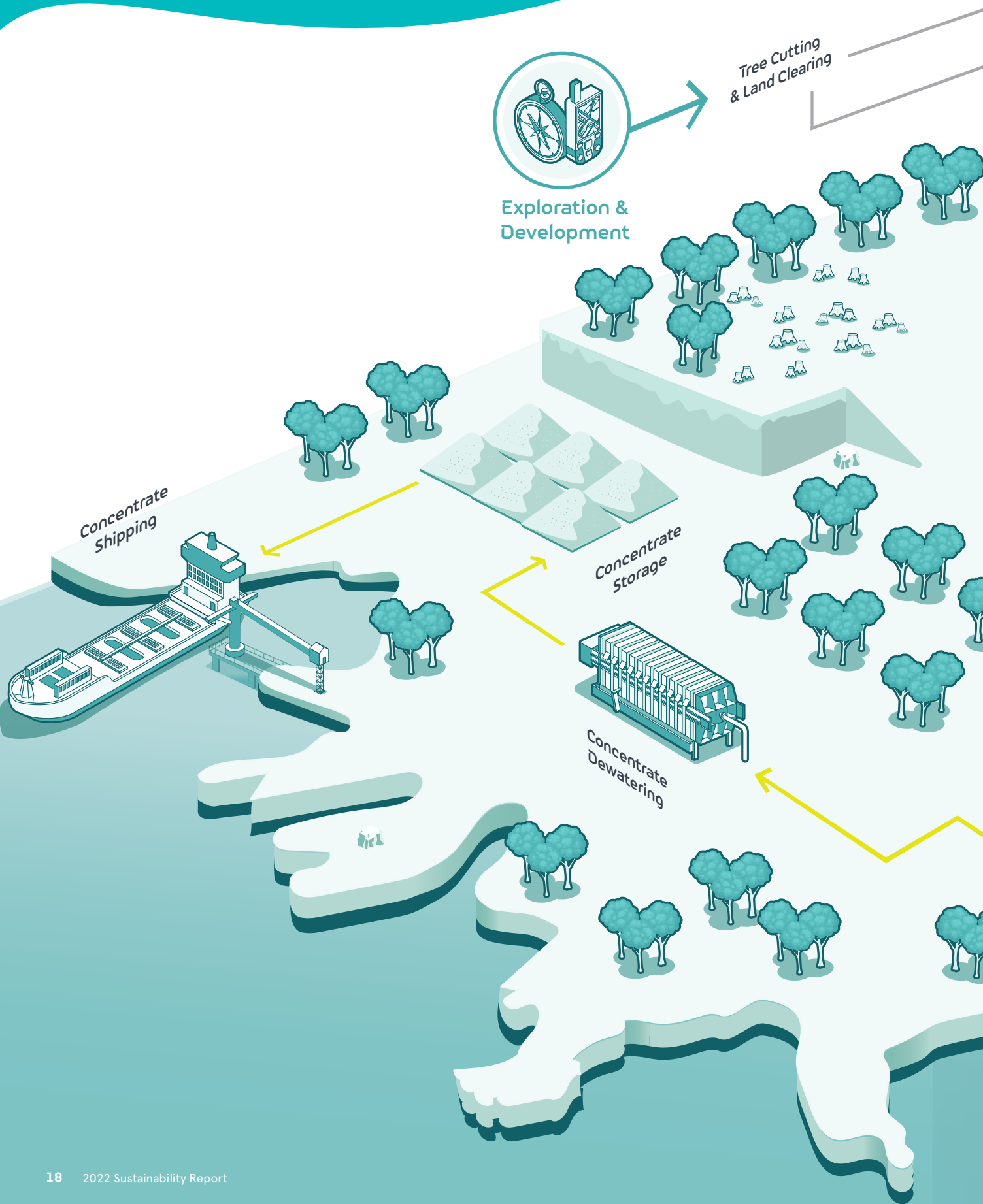
Lampui

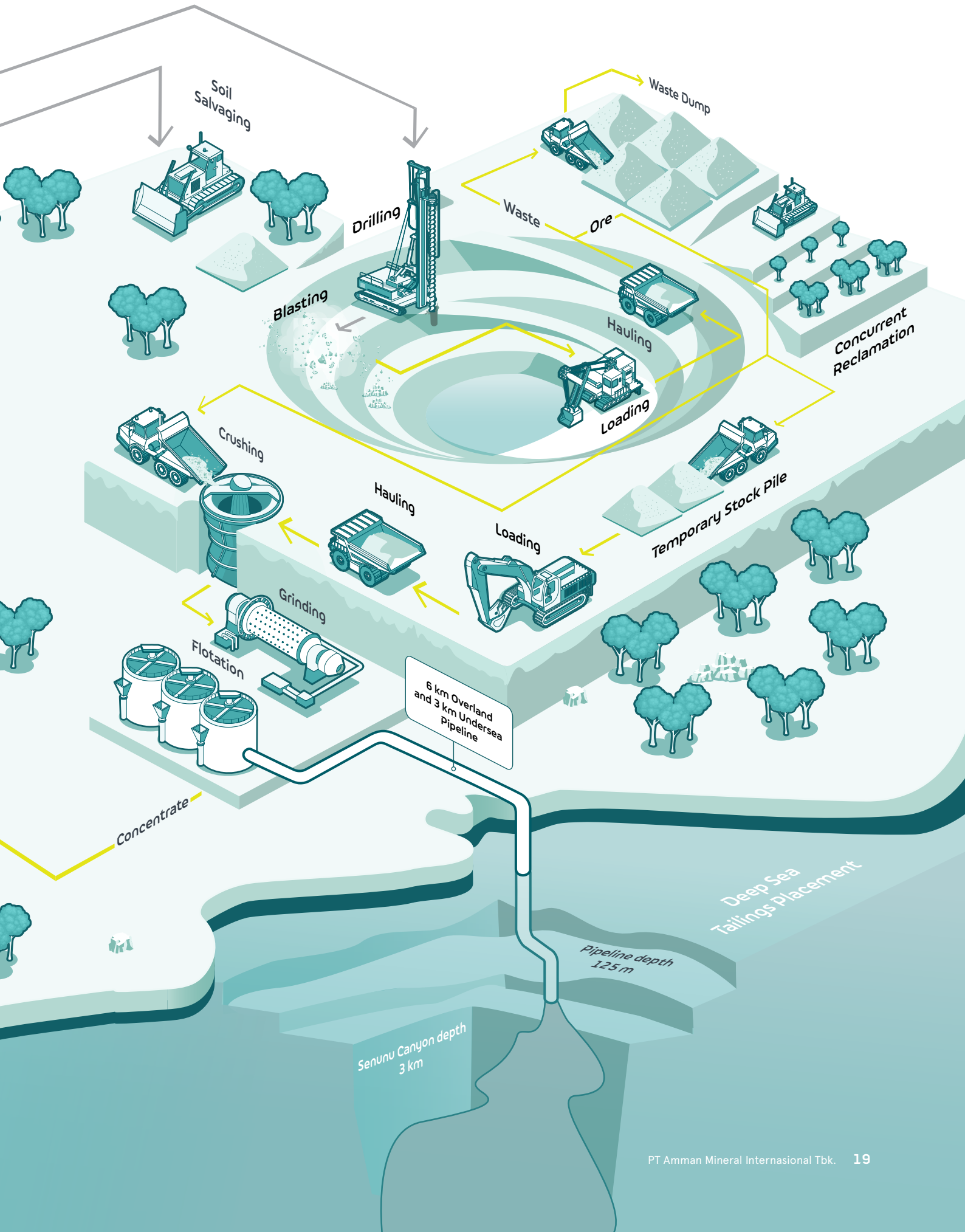
Rinti

Elang Exploration Project

The Elang deposit is categorized as a Super Giant by US Geological ("USGS") classification standards.

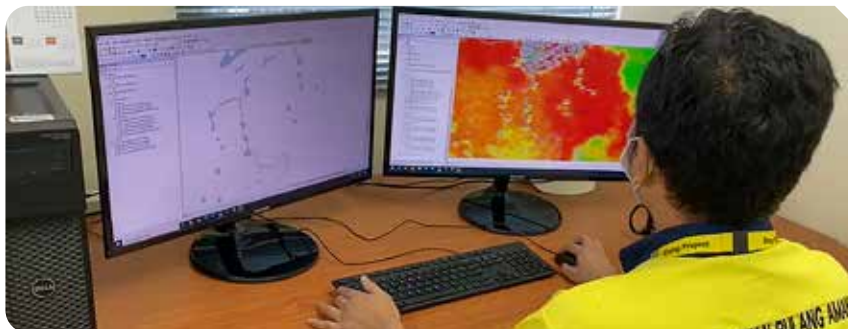
Figure 3: Business Process





- **Exploration & Development**

Comprehensive geological studies, including geological mapping, core drilling, resource modelling, and estimation.



- **Mining**

Higher grade ore is hauled directly to primary crushers as process plant feed, other ores are either directly crushed, placed on stockpiles for blending or processing at a later date. Waste rock is hauled to the waste rock dump where it is progressively contoured, encapsulated by soils, and then seeded to rehabilitate the land.

Table 2: Mining Equipment

Equipment	Model	Quantity ⁹
Electric shovels	P&H 4100	5
	P&H 2800	1
Mining excavator	Liebherr 9800	2
	Liebherr 9350	3
	Hitachi EX5500	2
	Hitachi EX3600	1
	Hitachi EX1200	4
Mining excavator - support	Caterpillar 390	2
	Caterpillar 320	1
	Hitachi EX350	1
	Hitachi EX210	5
	Komatsu PC300	13
	Komatsu PC210	5
Large wheel loader	Caterpillar 994	1
Wheel loader - support	Caterpillar 988	5
	Caterpillar 986	1
	Caterpillar 966	3
	Caterpillar 938	2
Mining haul trucks	Caterpillar 793	135
	Caterpillar 777	36
	Komatsu 785	10
Blasthole drills	PV351	5
	PV275	1
	PV235	2
	Sandvik 412	3
Drill rig	D65	5
Dozer	Caterpillar D11	6
	Caterpillar D10	12
	Caterpillar D8	14
	Komatsu D85	4
	Liebherr PR776	1



⁹ The fleet numbers are "approximate" to reflect that operational changes may occur.

- **Ore Processing**

The ore processing plant separates the non-valuable gangue material from the targeted copper, gold and silver bearing minerals.

Ore is tipped from trucks into two primary crushers, then it is fed to grinding circuit comprises of two 13.7MW SAG mill, pebble crushers and four 7.3MW ball mills. Water is added to the grinding process and pH is adjusted. The particles containing valuable minerals are recovered using a froth flotation process whereby the slurry pass through a series of tanks in which bubbles are generated and the valuable mineral particles adhere to the bubbles and float to surface as a froth which is skimmed off to produce concentrate.

The concentrate slurry is dewatered in the filter plant to produce final concentrate with approximately 10% moisture content. It is then kept in a storage barn until it is shipped.

The tailings (fine waste material left after the product is recovered from the ore) from the flotation circuits reports to the tailings deaeration box, where it is monitored to ensure compliance with discharge quality requirements. It then flows by gravity through a 6km onshore pipe, and 3.4km offshore pipe to the deep sea.

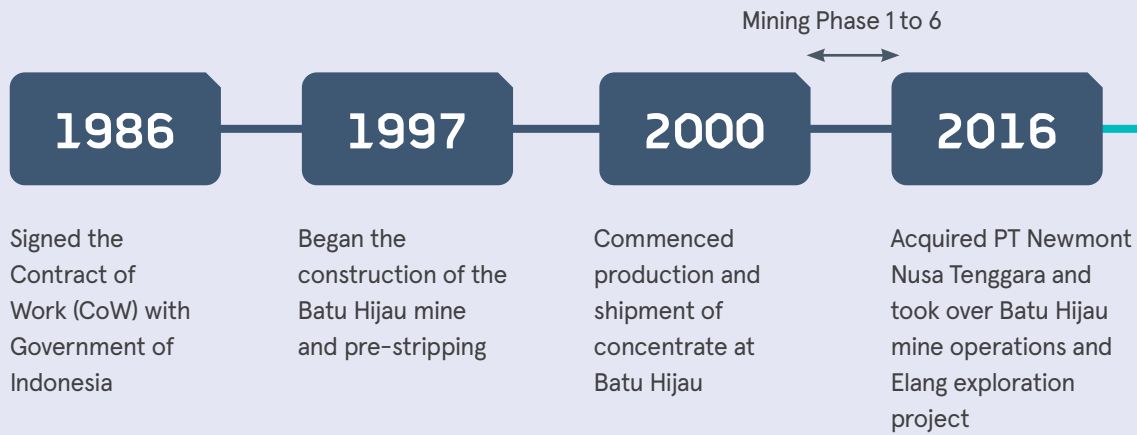


- **Concentrate Shipping**



AMMAN's Historical Milestones

Newmont Legacy (1986 to 2016)



2022

- **Signed LSTK contract** with China Non-ferrous Metal Industry's Foreign Engineering and Construction Co., Ltd (NFC) and PT Pengembangan Industri Logam (PT PIL) for smelter and precious metals refinery projects in West Sumbawa
- Signed LSTK contract with Jurong Engineering Limited and PT Jurong Engineering Lestari for gas-fired power plant project
- Received **three awards**, namely the **Aditama Award** in Environmental Management, **Utama Award** in Mineral Conservation, and **Utama Award** in Mining Engineering Management, from the Good Mining Practices 2022 which was held by the Indonesia Ministry of Energy and Mineral Resources
- Commenced definitive feasibility study on the Elang Project with a focus on optimisation and decarbonisation
- Developing expansion projects including a recently commissioned 26.8MW solar farm, smelter construction, processing plant expansion, power plant expansion and LNG storage and regasification facilities

Transformation of Business and Continuing a Stable, Growing Business under AMMAN
(2016 to Present)

2017

- Converted CoW to the **Special Mining Business License for Production Operation**
- Became a **significant shareholder of MacMahon Holdings Limited**, a leading Australian mining contractor listed on the Australian Securities Exchange (ASX)
- Re-established the **Explorations Department** and began **resource drilling** at Elang and at other targets
- Conducted a scoping study on the Elang Project

2018

- **Optimisation of productivity and operational efficiency** to achieve significant cost savings
- Pre-feasibility study on Elang Project

2019

- **Initiated Front-End Engineering Design (FEED) for the smelter project** and acquired 145 hectares of land for the project site in Benete
- **Improvements in ore processing recoveries** which improved the sustainability of the Batu Hijau reserves and quality of tailings
- Commenced feasibility study on Elang Project
- Conducted a feasibility study on Batu Hijau Phase 8 based on 29,000 metres of resource drilling, **increasing ore reserves by 314 Mt**
- Decision made to **replace 120MW coal-fired power plant (CFPP) with 450MW combined cycle power plant (CCPP)** to power the smelter and the expansions

2021

- Introduced AMMAN's **new logo, Vision, and Mission**
- Received two **Aditama Trophies** – the highest Award – In Environmental Management and Mineral Conservation from Good Mining Practice Awards 2021, held by Indonesia's Ministry of Energy and Mineral Resources
- **Signed Lum Sump Turnkey (LSTK) contract with NFC and PT PIL** for smelter and precious metals refinery projects in West Sumbawa

2020

- Started the first productive ore from Phase 7, three months ahead of the schedule
- Completed scoping, pre-feasibility and feasibility studies for Elang project
- Completed 33,000 metres of **resource drilling** for Phase 8 and **revised pit design** to further increase Phase 8 reserves from **314 Mt to 460 Mt**
- Received **Aditama Trophy** in Environmental Management and Utama Award in Mineral Conservation during the Good Mining Practices Awards 2020, held by Indonesia's Ministry of Energy and Mineral Resources
- Undertook FEED for mineral processing plant expansion

Our Vision, Mission, Core Values and Commitments



Our Vision and Mission

Vision:

To be a transformative organisation creating a legacy of best.

Mission:

Providing commodities to the world in a responsible and sustainable way by thinking bravely and acting with intent to bring out the best in ourselves, our communities, and our environment.

Our Core Values

Excellence: We will be relentless in our pursuit of excellence and quality in everything we do.

Integrity: We will do the right thing, be humble, be trustworthy and treat everyone with respect and honesty.

Teamwork: We espouse collaboration, human connection, and open communications to produce extraordinary results and achieve collective success. Everyone is part of the solution.

Health, Safety, Environment, and Community: Looking after our own and others' health and safety as well as prioritising the environment and community is paramount and cannot be compromised.

Creativity & Innovation: We apply creativity, innovation and resourcefulness to embrace change and opportunity, address challenges, provide breakthrough solutions and deliver game-changing results.

Our Commitments

1. We are committed to mine safety practices and management systems, which include the Occupational Health and Safety (OHS) and Mine Operational Safety (OS) to provide safe and healthy working conditions for the prevention of harm, injuries, and Work-Related Illnesses (WRI). We strive to create a safety culture through consultation and participation of employees.
2. We are committed to the responsible management of environmental and social aspects as an integral part of our business to create the legacy of best. We adopt a brave thinking mindset to drive improvements in environmental protection, pollution prevention and social impact in a measured, continuous, and sustainable manner.
3. We are committed to providing excellent product quality and services through continual improvements.

In order to achieve our vision, we continuously:

- **ENGAGE** stakeholders to understand their needs, aspirations, and values regarding mining developments, operations, closures, product and service delivery.
- **INTEGRATE** the rationale of OHS, OS, environmental, social, and quality aspects to reduce negative impacts and long-term financial liability and enhance social benefits.
- **ELIMINATE** hazards, **REDUCE** risks, **ENHANCE** opportunities in OHS, OS, environmental, social and quality aspects and **DEVELOP** strategies to achieve best practices, Zero Injury and Zero WRI.
- **COMPLY WITH** the applicable legal, regulations, and other requirements related to mine safety, environmental management, social impact masterplan and quality control.
- **EMPOWER** local communities to generate broad opportunities for all to thrive in the future.
- **COMMUNICATE** our performance in an accurate, transparent and timely manner.
- **PROMOTE** participation of employees in improving the mine safety management system, environmental management, social impact programmes and quality assurance.
- **DEVELOP** our workforce to their best potential by providing training and required resources.
- **EXECUTE** operations according to the adopted management systems including change management, and emergency response systems.
- **EVALUATE** performance by conducting regular monitoring, audits and reviews.
- **RESPECT** the rights of employees, business partners and local communities.

Association Membership

AMMAN is a member of the following associations:

Table 3: Our Association Memberships

Name of Association
Indonesian Mining Association (IMA)
Forest Reclamation Forum on Former Mining Land (<i>Forum Reklamasi Hutan pada Lahan Bekas Tambang</i> /FRHLBT)
Indonesian Chamber of Commerce (<i>Kamar Dagang dan Industri Indonesia</i> /KADIN)
Indonesian Employers Association (<i>Asosiasi Pengusaha Indonesia</i> /APINDO)
Association of Indonesian Processing and Refining Companies (<i>Asosiasi Perusahaan Industri Pengolahan dan Pemurnian Indonesia</i> /AP3I)
Asian Venture Philanthropy Network

Awards and Achievements

The table below lists the awards that AMMAN received during the reporting year:

Table 4: Our Awards and Achievements in 2022

Name of Award	Awarding Year	Receiving Entity	Awarding Body
Blue PROPER	2022	AMNT	MoEF
Aditama Award for Environmental Management	2022	AMNT	MEMR
Utama Award for Mining Engineering Management	2022	AMNT	MEMR
Utama Award for Implementation of Mineral Conservation	2022	AMNT	MEMR

Certificates


The table below lists the certificates that we have secured:

Table 5: Our Certificates

Certificate	Certification Body	Date of Acceptance	Validity
SNI ISO 14001:2015 on Environmental Management System	SGS UK Ltd.	28 May 2009	28 May 2024
ISO 9001:2015 on Quality Management System	SGS UK Ltd.	16 September 2022	16 September 2025
ISO 45001:2018 on Occupational Health and Safety Management System	PT Superintending Company of Indonesia (SUCOFINDO)	21 December 2022	20 December 2025
Professional Certification Organisation – Second Party (<i>Lembaga Sertifikasi Profesi – Pihak Kedua</i> /LSP P-2)	National Professional Certification Agency (<i>Badan Nasional Sertifikasi Profesi</i> /BNSP)	27 May 2022	27 May 2027



05 | Approach to Sustainability



At AMMAN, we recognise the critical role that we play in both the global and local economy and we understand that our business has the potential to impact the surrounding environment and communities.

At our core, we are committed to providing commodities in a responsible and sustainable way; seeking to balance the economic, social, and environmental considerations of our business and operations.

Our corporate policies outline the way we integrate sustainability into our business and operations, conduct effective stakeholder engagements, and ensure compliance with relevant laws and regulations, these can be accessed [here](#).

Material Topics

Identifying our material topics is an essential step in managing our sustainability performance, as it helps us identify the issues that matter most to our stakeholders and business. This allows us to focus our resources and efforts where they will have the greatest impact, and to continuously improve our performance.

In 2021, we conducted a materiality assessment to identify, understand and prioritise our material topics. This was subsequently reviewed in 2022. The following diagram summarises our process:

Figure 4: Our Materiality Assessment Process



The assessment we conducted predominantly used a single materiality approach. In the coming years, we aim to implement a double materiality approach to comprehensively assess both external impacts and internal factors when identifying and evaluating our material topics.

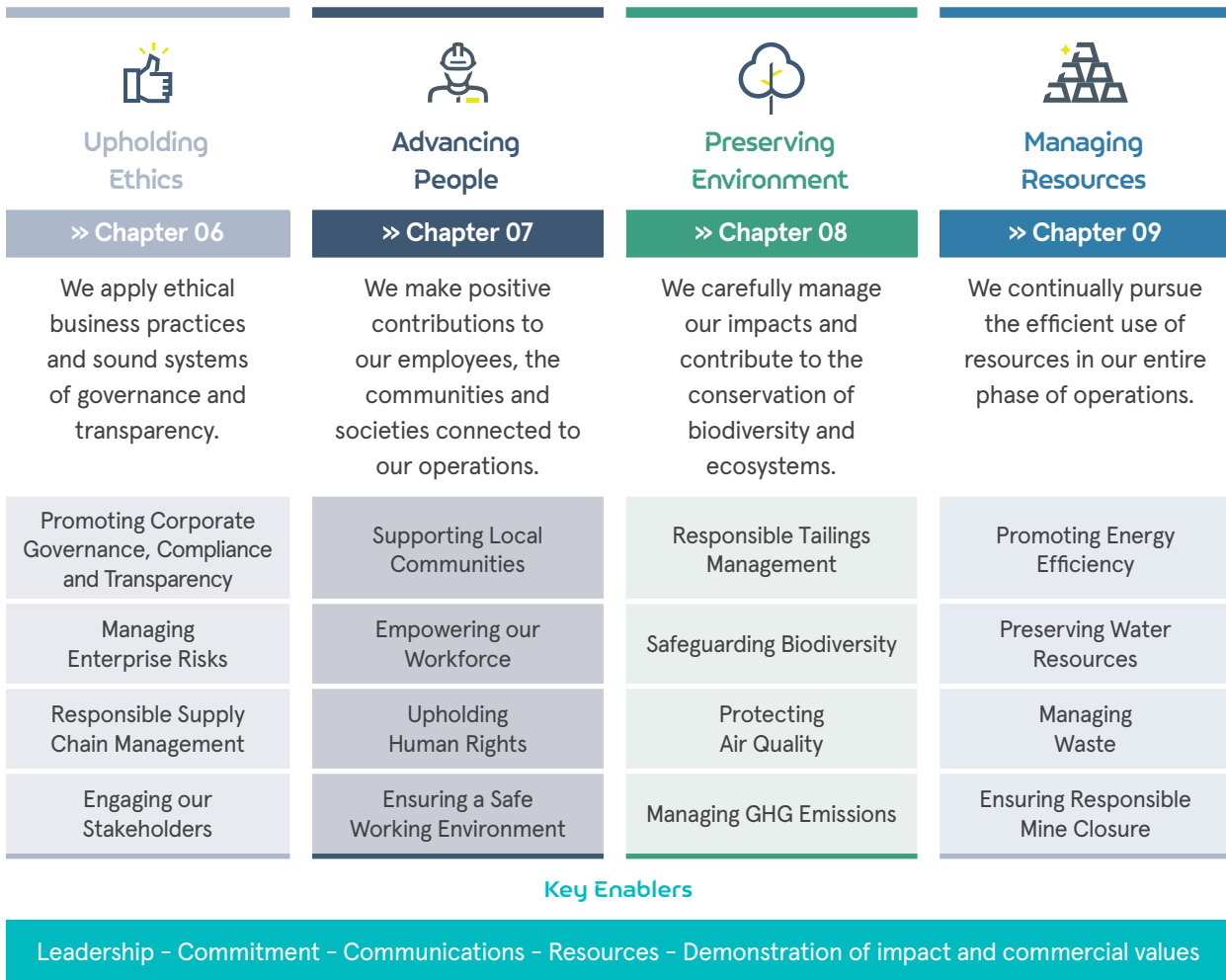
Sustainability Strategy Framework

We integrate sustainability into our business practices and operations to secure long-term stakeholder value.

One important step in this process is translating our list of material topics into our Sustainability Strategy Framework. In doing so, we aim to develop a comprehensive and integrated approach to sustainability that reflects the interests of our stakeholders and the unique challenges of our business.

In developing the Framework, we categorised our material topics into four 'Sustainability Pillars': **Upholding Ethics, Advancing People, Preserving Environment, and Managing Resources**. We have also identified 'Key Enablers', namely **Leadership, Commitment, Communications, Resources and Demonstration of Impact and Commercial Values**. These 'Key Enablers' represent internal and external factors that support the implementation and success of our sustainability programmes and initiatives. They include a range of different elements that can facilitate the adoption of sustainable practices, enhance performance, and create value for all stakeholders.

Figure 5: Our Sustainability Strategy Framework and Material Topics



Upholding Ethics

'Upholding Ethics' is a critical aspect of our commitment to operate business in an ethical, responsible, and transparent manner. Through our **corporate governance, compliance, and transparency**, we strive to maintain a transparent and accountable corporate culture. We implement policies and procedures that support ethical conduct, and we regularly review and update our corporate governance practices, as well as our **risk management** processes, to ensure that they align with best practices.

We engage with our **supply chain** members to ensure their alignment with our ethical and other relevant standards. Through our structured **stakeholder engagement** programs, we also listen to and involve stakeholders on matters that affect or interest them. Our grievance mechanism, which was updated in 2022, and 'whistleblower' channels provides additional opportunities for our stakeholders and business partners to identify their concerns, and for us to manage risks and improve performance.

Advancing People

We believe that our people are our greatest and most valuable assets, and that our success is closely tied to the well-being and development of our surrounding communities. We understand that our operations can have a significant impact on the lives and livelihoods of our employees and the surrounding communities in which we operate.

Through our focus on **labour and human capital development** and **health and safety**, we seek to provide our employees with opportunity, a safe and supportive working environment, where they can develop the skills and knowledge needed to grow their careers. Under this pillar, we are also committed to upholding **human rights** in all our operations and supply chain. We see it as our responsibility to respect and safeguard the rights of our employees and surrounding communities. Furthermore, we believe that **community development** is key to the long-term sustainability of our business. We work closely with local communities to identify and address their needs, investing in programmes that support education, health, and economic development.

Preserving Environment

'Preserving Environment' encompasses our initiatives aimed at minimising our environmental impact, addressing the risks of climate change, and safeguarding natural resources.

Climate change is one of the most pressing environmental issues of our time, and we are continuously exploring opportunities to reduce our **GHG emissions**, while also supporting the transition to cleaner energy sources. In addition, we aim to implement responsible **tailings management**, which includes the adoption of best practices and technologies to reduce its associated risks.

At AMMAN, we work closely with local communities, government agencies, and other stakeholders to promote responsible environmental stewardship, and protect ecosystems and **biodiversity**. We also implement initiatives aimed at improving **air quality** and reducing air pollution associated with our operations.

Managing Resources

'Managing Resources' represents our commitment to improving our efficiency of natural resource utilisation throughout the different stages of our operations. This also includes our efforts in ensuring sustainable and responsible mine closures.

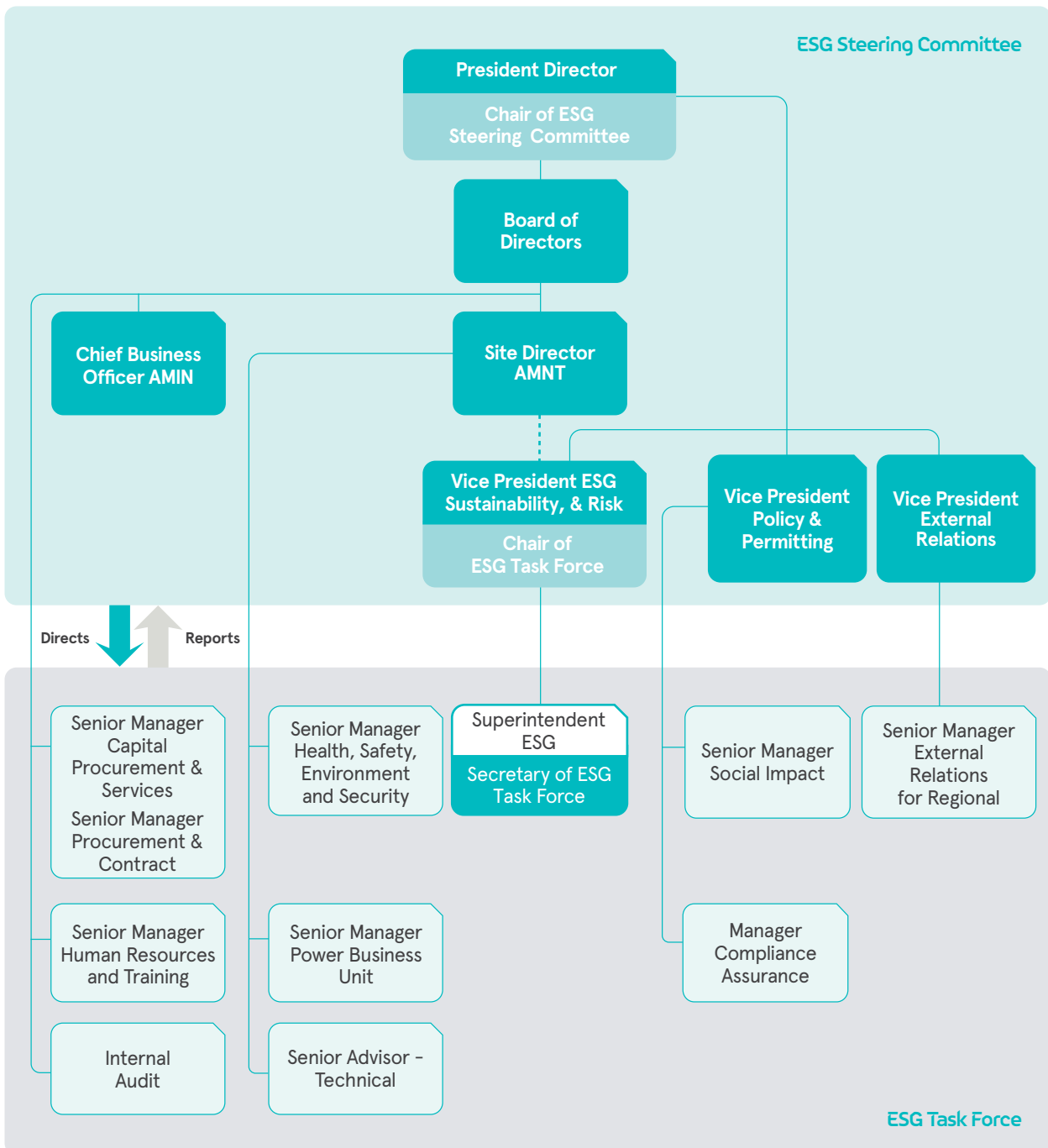
Given we are not connected to the national grid, **energy** is a critical resource that is essential to our operations, and we are determined to reduce our carbon footprint by improving energy efficiency and introducing low-carbon energy generation options, such as solar and gas power plants. In addition, we prioritise responsible **water management** practices to ensure that we minimise our water consumption and reduce our impact on water resources. We also **manage waste and hazardous materials** responsibly, adopting best practices to minimise our impact on the environment and ensure safe handling and disposal. Finally, we plan for sustainable **mine closure**, recognising our responsibility to rehabilitate the land and support the long-term well-being of local communities after the closure of our operations.

Sustainability Governance

Strong corporate governance provides a foundation for responsible decision-making and effective risk management. As part of our sustainability governance, we have established the **ESG Steering Committee** and the **ESG Task Force**. Our governance structure enables us to integrate sustainability into our business strategy and operations, promote a culture of transparency, and secure long-term value for our stakeholders.

The figure below outlines our sustainability governance structure:

Figure 6: Our Sustainability Governance Structure



ESG Steering Committee

The **ESG Steering Committee** is responsible for developing and reviewing AMMAN’s Sustainability Strategy Framework and provide recommendations to the AMMAN Board of Directors (“the Board”) to ensure its alignment with Good International Industry Practice (GIIP) and integration into key decision-making processes within the Company. The Steering Committee monitors and reviews AMMAN’s ESG and sustainability performance across various aspects, comparing them against our KPIs to identify areas of improvement.

In addition to overseeing AMMAN’s performance, the Steering Committee is tasked with monitoring global and national sustainability and ESG-related regulations, standards, practices, trends, emerging material risks and/or controversies. The Steering Committee also reviews AMMAN’s ESG disclosures, ensuring its accuracy, transparency and accountability.

To carry out its responsibilities, the Steering Committee engages with representatives from AMMAN’s departments and external advisors to address risks faced by the Company and enhance management strategies accordingly. The Steering Committee holds a minimum of four meetings per year, with additional meetings arranged if deemed necessary, and undertakes periodic reviews of its Charter, at least every two years, to ensure its continued relevance and effectiveness.

ESG Steering Committee Chair

The **ESG Steering Committee Chair** leads the steering committee on its mandate, and other matters delegated by the Board. They are tasked with ensuring the effectiveness of the Steering Committee’s performance. The Chair is selected from and appointed by members of the Board.

ESG Task Force

The **ESG Task Force** is responsible for operationalising and implementing the Sustainability Strategy Framework and Goals. The Task Force is tasked with developing and managing sustainability programmes and initiatives, monitoring, and reporting on sustainability and ESG metrics and progress and ensuring compliance with sustainability and ESG-related regulations and standards. The Task Force also engages with internal and external stakeholders on sustainability matters and provides regular updates to the ESG Steering Committee on sustainability programmes, initiatives and performance.

For our Task Force, we have carefully selected members and divisions to ensure that all the Copper Mark Criteria for Responsible Production are met, and that there is accountability throughout the organisation.



At AMMAN, we recognise that sustainability governance involves a collaborative effort between the ESG Steering Committee and ESG Task Force.

Each entity plays a critical role in developing, implementing, and overseeing the Company’s sustainability strategy and goals, monitoring and reporting on sustainability performance, and engaging with stakeholders. This integrated approach ensures that we effectively manage our sustainability risks and opportunities and contribute to a more sustainable future.



06 Upholding Ethics





Upholding Ethics



Advancing People



Preserving Environment



Managing Resources

Our “**Upholding Ethics**” pillar is an integral part of our efforts to create a sustainable future. This pillar reflects our unwavering commitment to creating a legacy of best and focuses on building a fair and transparent business by upholding our ethical standards across our value chain. It encompasses our material topics, “Corporate Governance, Compliance & Transparency”, “Risk Management”, “Supply Chain Management” and “Stakeholder Engagement”.

At AMMAN, we understand that our actions have an impact on the world around us.

To strengthen our value chain, we actively collaborate with business partners to ensure that they adhere to our corporate policies and Code of Business Ethics and Conduct.



Started aligning our business and sustainability governance to the

Copper Mark
assurance framework.



100%

of new contractors undergo environmental screening and

zero

contracts have been terminated due to negative environmental impacts within the last three years.



Conducted

Stakeholder Mapping

in 2022 to update the material topics and engagement methods with stakeholders

Promoting Corporate Governance, Compliance and Transparency



Management Approach

At AMMAN, our Code of Business Ethics and Conduct (“Code”) is a comprehensive document that outlines our ethical standards and expectations for employees and business partners.

It covers a wide range of topics, including conflicts of interest, compliance with applicable laws and regulations, and respect for human rights. We require strict adherence to our Code from our workforce, and our employees are expected to sign and acknowledge their comprehension on an annual basis. Our Code is accessible on our website [here](#).



To ensure the highest ethical standards, we align ours with international human rights and labour standards, such as the United Nations Guiding Principles on Business and Human Rights and the VPSHR. Furthermore, we have started to align our business with the Copper Mark Criteria for Responsible Production in 2022.

This framework provides a credible and independent certification for copper production that meets rigorous ESG standards. By adopting it, we aim to demonstrate our commitment to responsible production practices and the promotion of sustainability across our operations.

We are fully committed to complying with all national legal requirements and applicable international standards. Our compliance efforts are supported by the Department of Legal Affairs and Department of Policy and Permitting (DPP). The DPP oversees two essential functions:

1. **Policy and Research (PR)** monitors changes and trends in national laws, regulations, and permitting, ensuring AMMAN remains informed and compliant.
2. **Compliance Assurance (CA)** communicates identified regulations and evaluates their implementation. To ensure legal compliance, the CA directly informs the relevant business unit heads and provides necessary information dissemination and training.

Prevention of Corruption, Bribery, and Anti-Competitive Behaviour

We are dedicated to maintaining a robust management system that effectively prevents bribery, corruption, and anti-competitive behaviour, ensuring compliance with relevant Indonesian laws and regulations.

Our Department of Internal Audit (IA) is responsible for overseeing the implementation of this compliance system. The IA conducts

regular ethics workshops for ongoing education and awareness on ethical practices within our business.

To prevent bribery and corruption, we have implemented several measures, including annual reporting of gratification payments in accordance with the law. In addition, we have also established a gift registry system which can be accessed through a company-wide online platform called "Discovery," and promoted a gift awareness programme to discourage employees from giving or receiving gifts during negotiations for business transactions, contract renewals, and assessments.

It is noteworthy that we operate solely in Indonesia, a country that does not fall within the 20 least transparent nations according to Transparency International's Corruption Perception Index. Since acquiring the mine asset from Newmont in 2016, we have maintained a clean record of zero reports of corruption or bribery involving internal and external stakeholders.

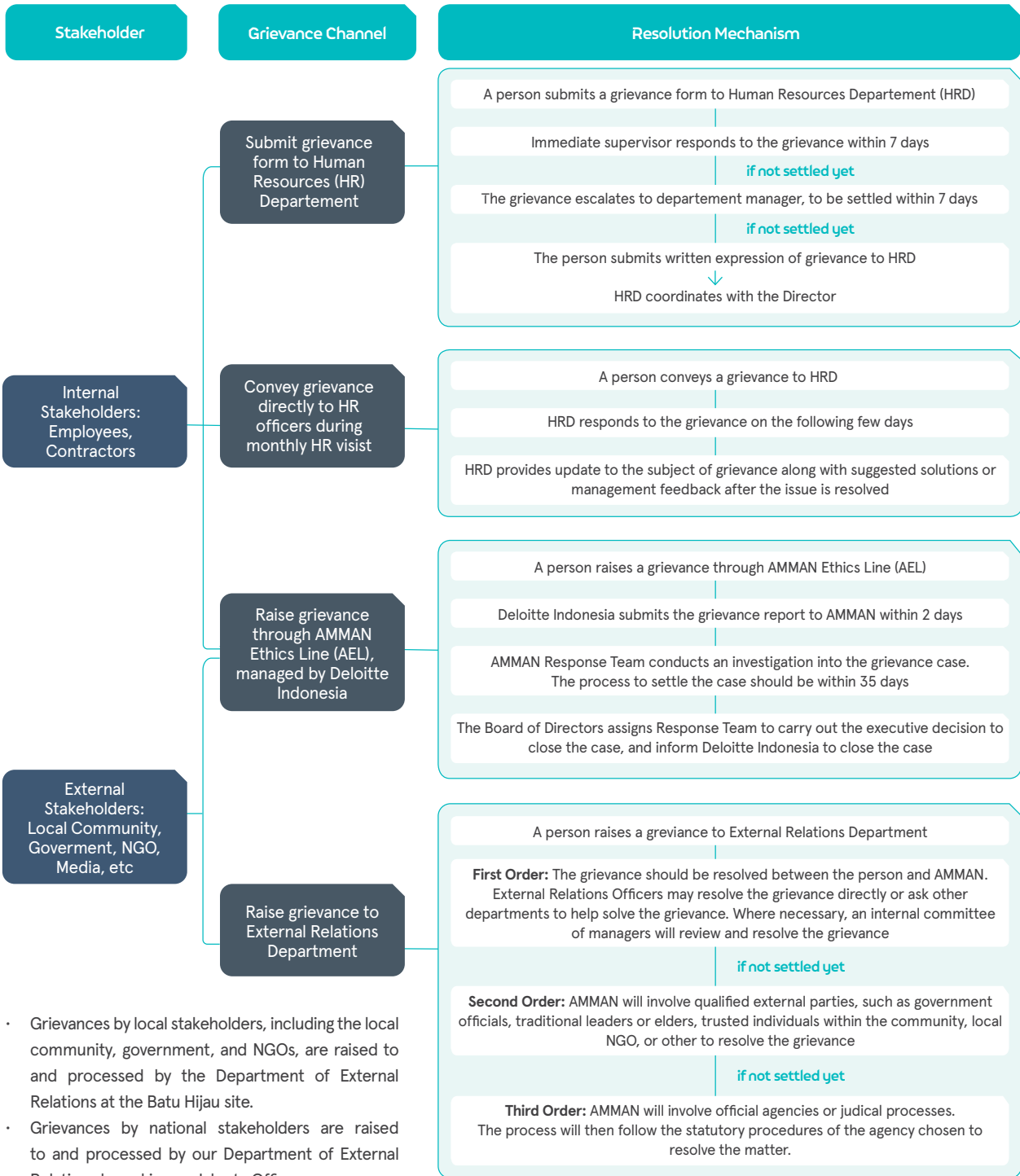
Grievance Mechanisms

We have implemented a procedure to handle grievances, offering a channel through which stakeholders can express their issues and grievances anonymously. Our primary goal is to resolve challenges and problems while safeguarding the individual against any form of retaliation. At AMMAN, various channels are available for reporting grievances, accessible to both internal and external parties.

We are currently improving the Grievance Process Flow for those raised to the Department of External Relations. Depending on the topic raised, officers from the Department of External Relations may directly address and resolve certain grievances or seek assistance from other departments at AMMAN. In addition, certain grievances may require the involvement of a third party for their resolution.

The figure below provides the overview of our grievance channels and resolution mechanism at AMMAN.

Figure 7: Our Grievance Mechanism



The timeline for resolving grievances through the Department of External Relations may vary depending on their complexity, and their resolution process may extend into the following year.

AMMAN Ethics Line

We acknowledge that whistleblowing systems (WBS) are critical to promote transparency, accountability, and integrity within organisations. These systems are instrumental in identifying and addressing potential issues before they escalate.

The AMMAN Ethics Line is designed as a reporting platform for both internal and external stakeholders to report any instances of violations and misconduct within the company.

It covers a wide range of areas, including but not limited to accounting and auditing matters, conflicts of interest, bribery involving government officials, environmental concerns, health and safety issues, improper activities by suppliers or contractors, inappropriate behaviour, and misuse of company assets or services.

To maintain the independence and confidentiality of our WBS, we engage an external party, Deloitte Indonesia, to manage the AMMAN Ethics Line. This external management helps create a secure and confidential platform for stakeholders to report any concerns or incidents. We understand the importance of providing a safe reporting environment, where individuals can share information without fear of retaliation or punishment.

Our dedicated Ethics Response Team comprises members from various departments, including Health, Safety and Environment (HSE), Security, Human Resources (HR), Legal, and IA. This team is responsible for thoroughly investigating reports received through the AMMAN Ethics Line. They conduct comprehensive audits, analyse the findings, and develop appropriate measures to address the reported incidents effectively. Furthermore, the team implements preventative measures to minimise the likelihood of similar incidents occurring in the future.

AMMAN Ethics Line

Telephone

+62 370 625000 (Mataram)
 +62 372 635050 (Sumbawa)
 +62 21 23507071/72 (Jakarta)

SMS/WhatsApp

0811 3960 5050

Fax

+62 21 2350 7020

E-mail

ammanethicsline@tipoffs.info

Letter

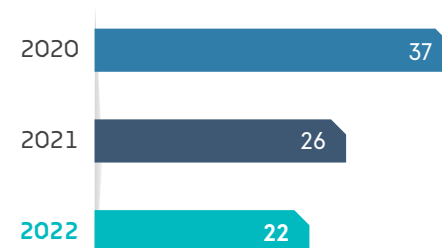
Amman Ethics line Po Box 3706 JKP 10037

Website [for further information]

<https://idn.deloitte-halo.com/ammanethicsline/>

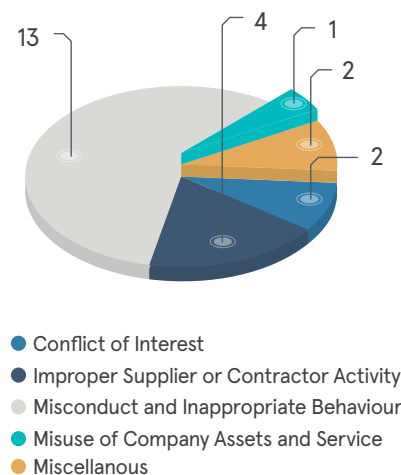
Below are the figures indicating the number of cases reported through the AMMAN Ethics Line:

Figure 8: Number of Reported Cases through the AMMAN Ethics Line



In 2022, we received 22 reported cases, a slight decrease from the previous year. The reported cases in 2022 include misconduct and inappropriate behaviour, improper supplier or contractor activity, conflict of interest, and misuse of company assets and services, outlined in the following figure. The AEL team resolved all cases in less time than targeted, with an average of 27.5 days per case.

Figure 9: Breakdown of Reported Cases by Topic in 2022

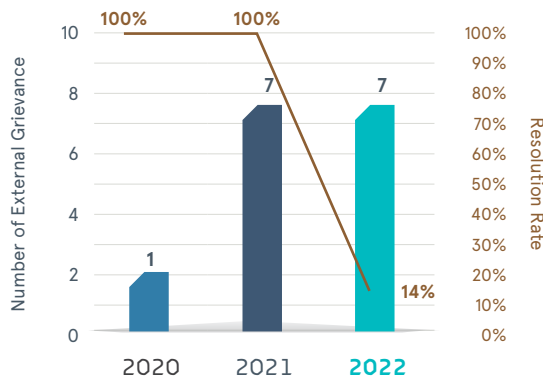


Addressing National and Local Grievances

In addition to the external grievances mechanism managed by Internal Audit (AEL), AMMAN's Department of External Relations maintains national and local grievances registers. These registers enable us to receive and address grievances raised by external stakeholders such as communities and non-governmental organisations (NGOs). In 2022, we began the process to align our grievance mechanism with GIIP, and continue to strive to resolve complaints within the expected and reasonable timeframes.

The graphs below displays the number and issues of external grievances recorded and the issues reported from 2020 to 2022:

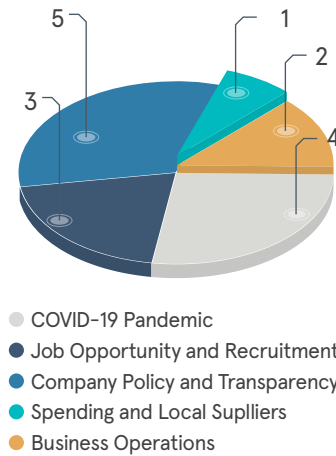
Figure 10: Number of Grievances Raised with External Relations Department and Resolution Rate



Notes:

1. Local and national grievances include the number of complaints conveyed directly to our External Relations Department through written communication, or through demonstration by a group of people.
2. The resolution rate is the percentage of total grievances that have been resolved or settled by AMMAN.
3. In 2022, one External Grievance was resolved, and another is currently undergoing the assessment process. The remaining five are types of Grievances that require involvement or facilitation from external parties (e.g. Government agencies, community leaders) and are currently being processed.

Figure 11: Grievances Raised by Topic (2020-2022)



Our communities and other stakeholders raised seven grievances in 2022, classified as Category 3¹⁰ or greater as per our consequence definitions (Appendix II), the same number as the previous year. While grievance resolution may take considerable time and potentially extend into the following year, our commitment to address them remains steadfast. This includes grievances relating to the impact of project expansion/construction blasting activities on community houses. We have utilised data and documentation collected prior to the commencement of blasting activities, to establish eligibility criteria for accepting complaints and have created a comprehensive database to assess ongoing grievances.

This year, a grievance emerged from the West Sumbawa Anti Mining-Mafia Community (*Aliansi Masyarakat Anti-Mafia Tambang Kabupaten Sumbawa Barat/AMANAT KSB*). AMANAT alleges that AMMAN engaged in various unlawful activities, including improper working schedules, blacklisting individuals for employment, obstructing workers' unions, neglecting Corporate Social Responsibility (CSR) obligations, and illegally disposing of hazardous waste into the sea.

¹⁰ Category 3 community impacts include a high frequency of complaints, repeated complaints from the same area (clustering), prolonged adverse attention from national media, public, or national NGOs, and/or minor coverage by international media.

Following the allegations, in November 2022 we attended a public hearing arranged by the House of Representatives of the Republic of Indonesia (*Dewan Perwakilan Rakyat Republik Indonesia/DPR RI*) Commission VII. During this hearing, we provided comprehensive information to address the allegations. We reaffirmed our commitment to maintaining high operating standards and emphasised that we undergo regular audits by government entities such as the MEMR, MoEF, Ministry of Manpower, and Ministry of Finance to ensure compliance with relevant laws and regulations.

Members of the DPR RI Commission VII subsequently visited the Batu Hijau site in April 2023, to inspect the smelter strategic project construction area, and discuss several points including items raised in the November 2022 hearing. As of the date of this report, the National Committee on Human Rights (Komnas HAM), in their role as mediator between AMANAT and AMMAN, has stated that they have yet to see any indication of human rights violations as reported by AMANAT.

Resolution of Environmental-Related Non-Compliance Event

An audit by the Directorate General of Sustainable Forest Management concerning compliance with the Approval for the Use of Forest Areas based on MoEF Regulation No. 8 of 2021 was conducted in 2022. This audit examined activities undertaken between 2017 and 2021, and identified a case involving the clearing and utilisation of forest areas beyond the boundaries approved by the MoEF. It was found that the AMMAN field team cleared a piece of land based on the total planned area instead of adhering to the approved area. This non-compliance resulted in a fine of approximately USD 357,757.

However, it is important to note that the Directorate General of Sustainable Forest Management did confirm that the land-clearing activities in Batu Hijau, Elang, Lampui, and Rinti were conducted within the boundaries of our Pinjam Pakai (forest area approved for borrow-to-use), and did not exceed the total area specified in the yearly clearing plan.

We have taken the necessary steps to comply with regulations by circulating a memorandum, establishing

a procedure and creating a tree-cutting approval process and form. The Department of Environment and Compliance and Assurance unit will carefully review and monitor this process.

Transparency Initiatives

At AMMAN, we are committed to reporting our annual environmental, social, and economic performance transparently, in accordance with the applicable regulations and industry best practices.

We diligently comply with the Indonesian regulations by submitting mandatory environmental reports through our Environmental Management and Environmental Monitoring Plan (*Rencana Pengelolaan Lingkungan Hidup-Rencana Pemantauan Lingkungan Hidup/RKL-RPL*)¹¹ and actively participate in the Corporate Performance Rating Program in Environmental Management (*Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup/PROPER*)¹². In 2022, we achieved the Blue PROPER rating, signifying that our environmental programs, initiatives, and performance are in full compliance with Indonesian regulations.

To further demonstrate our commitment to transparency, we actively engage in activities related to the Extractive Industries Transparency Initiative (EITI) at the country level. EITI is a global standard that promotes good governance of oil, gas, and mineral resources. As an EITI-implementing member country, we are obligated to submit an Annual Report, reflecting our efforts to maintain transparency in our operations.

Prior to AMNT's acquisition of the Batu Hijau mine in 2016, Newmont Nusa Tenggara was one of the ten pilot programmes for the Indonesian EITI in 2010. We have provided reports in support of state-level EITI participation up to 2018. From 2019 onwards, the responsibility for EITI was transferred to the MEMR, focusing on disclosing information related to state-owned companies.

¹¹ RKL (*Rencana Pengelolaan Lingkungan*) and RPL (*Rencana Pemantauan Lingkungan*) are two environmental management plans that are required by the Ministry of Environment and Forestry in Indonesia for companies including AMMAN. RKL outlines the company's plan to manage and minimise environmental impacts from its operations, while RPL describes the monitoring activities that a company will carry out to assess the effectiveness of its environmental management plan.

¹² PROPER (*Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup* or Corporate Performance Rating Program in Environmental Management) is the Government of Indonesia's programme that assesses and rates the environmental performance of Indonesian companies and provides incentives for improved performance. The programme evaluates a company's environmental management systems, compliance with environmental regulations, and overall environmental impact.

Our Programmes and Initiatives

AMMAN Ethics Line Campaigns and Socialisations

To ensure that everyone within our organisation has an adequate degree of understanding of the AMMAN Ethics Line process, we carry out ongoing awareness campaigns across the workplace. We use a variety of communication channels such as media flyers, posters, banners, and Videotron. These materials are strategically placed in prominent areas to ensure maximum exposure and promote reporting of any unethical behaviour or wrongdoing.

Our goal is to foster a culture of transparency and accountability, empowering individuals to voice their concerns without fear of reprisal or punishment. In doing so, we aim to align our business with the principles of SDG 16 (Peace, Justice and Strong Institutions).



Our awareness campaigns on the AMMAN Ethics Line involve various multimedia channels to communicate the system in a visually engaging manner.

Building a Culture of Ethical Business Practices through Training

Promoting ethical practices and upholding high ethical standards are of utmost importance to AMMAN. We demonstrate our commitment to these values through our annual Code of Conduct and Business Ethics training. We understand that providing training to our employees and business partners is essential to foster a culture of integrity within our organisation.

Our comprehensive training programme covers a broad range of topics and aims to educate participants on the significance of making ethical decisions, implementing anti-corruption measures, and complying with relevant laws and regulations. We offer this training through both online and offline formats to ensure accessibility to all individuals within our organisation, and in 2022, we successfully trained 3,766 of our employees and business partners.

Through this training, we aim to contribute to SDG 4 (Quality Education) by fostering a knowledgeable and values-driven workforce, and to SDG 16 (Peace, Justice, and Strong Institutions) by promoting transparency, accountability, and responsible governance.



Promoting a culture of integrity through training on our Code of Conduct and Business Ethics.

Managing Enterprise Risks



Management Approach

Through the effective management of risks, we strive to achieve our vision of becoming a transformative organisation that creates a legacy of best. We recognise and address various risk categories that may prevent us from achieving our objectives relating to OHS, Security, Community, ESG & Sustainability, Permitting & Regulatory Compliance, External Relations, Production & Quality, Project Development & Execution, Human Capital, Cyber-Security, Reputation, Business Continuity, Crisis Management, and Financial & Market Performance.

Our Risk Management Policy outlines our approach to understanding and responding to the risks we face. The Policy can be accessed [here](#).

To achieve effective management of risk, we:

- Maintain a comprehensive Risk Management Framework, that encompasses AMMAN's risk management strategy, policies, technical standards, guidelines, systems, and objectives/targets. This framework aligns with ISO31000:2018 and adheres to government regulations.
- Embed a risk management process into all our significant decision-making procedures. We carefully evaluate decisions to ensure we have accurate information and minimise the impact of uncertainty on our objectives.

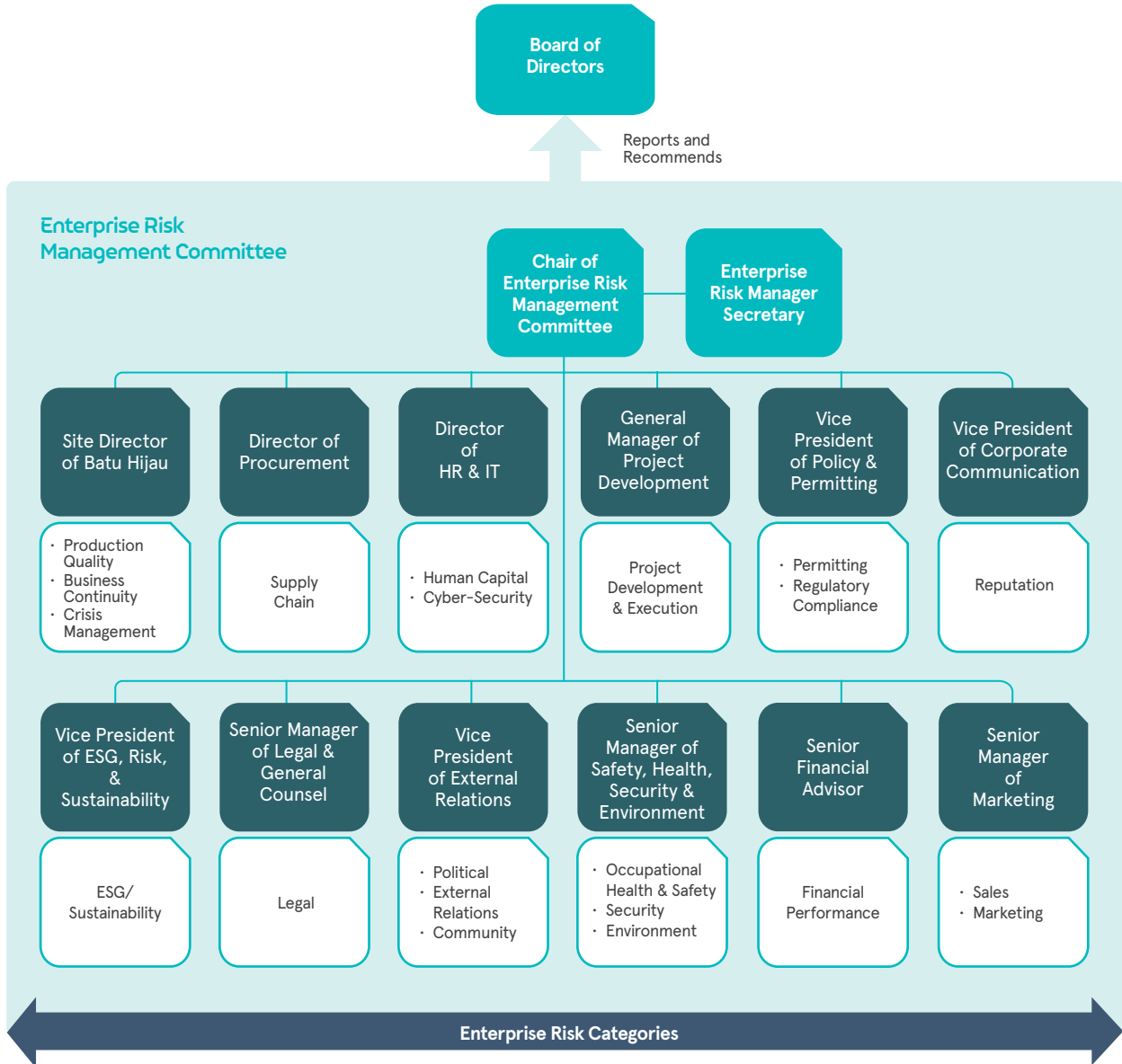
- Develop the essential capabilities and capacities to consider alternative ways managing risks.
- Oversee the critical controls to ensure that they are functioning as intended and effectively addressing significant risks.
- Systematically analyse successes and failures in managing risks, driving operational excellence and growth through continuous learning and improvement.
- Regularly measure, report, and communicate our performance against our Risk Management Framework to the company directors through the Enterprise Risk Management Committee.

Enterprise Risk Management Committee

Our **Enterprise Risk Management** Committee is responsible for developing and reviewing the Risk Management Framework, ensuring its consistency, soundness, effectiveness, and alignment with the GIIP. In doing so, the Committee is tasked with recommending the Risk Management Framework, risk management strategy and plan, as well as reviewing the risk impact of strategic decisions and exposures across all Risk Categories.

The chart below illustrates the members of the Committee:

Figure 12: Our Enterprise Risk Management Committee



The Enterprise Risk Management Committee is actively involved in monitoring and reviewing key risks reported by the Enterprise Risk Manager, performance against KPIs, and changes in the internal and external environment. The committee also reviews risk-related disclosures that are filed publicly and ensures effective communication of the Risk Management Framework. The committee communicates with various departments and/or external advisors, reviews progress on risk control plans, and evaluates its own effectiveness.

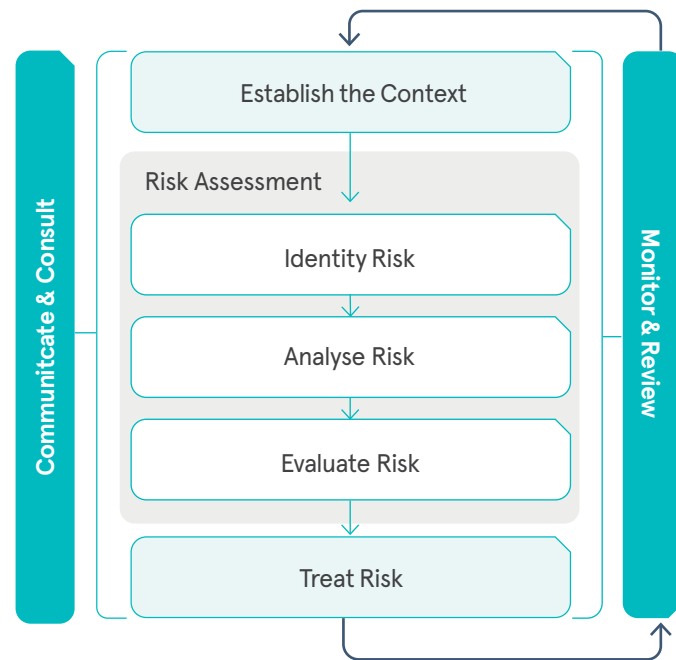
In addition to overseeing risk management, the Enterprise Risk Management Committee consistently reports to the Board and offers recommendations on the management of the Company and its subsidiaries. To fulfil its responsibilities, the committee collaborates with the ESG Steering Committee and other relevant Board Committees. The risk committee convenes at least four times annually, with additional meetings scheduled as needed, and determine meeting agendas in consultation with the Enterprise Risk Manager.

Risk Management Process

At AMMAN, we implement several risk management-related processes, including, but not limited to, Formal Qualitative Risk Assessments, Pre-Task Risk Assessments, Hazard Management Processes, Fatality Risk Management, and Health Risk Assessments.

Irrespective of the risk type, we adopt a consistent approach to risk management, following a standardised process outlined in the following figure. This process is developed based on ISO 31000:2018 and enables informed decision-making on risk treatment strategies through identifying, analysing, and evaluating risks.

Figure 13: Risk Management Process at AMMAN



Before conducting a risk assessment, it is essential to establish the context. This involves defining assessment boundaries, identifying key stakeholders, establishing primary objectives and determining risk tolerability levels.

The risk assessment process comprises three steps of identifying, analysing and evaluating risk, outlined below:

1. **Risk identification** involves the systematic process of finding, recognising and describing risks. This includes identifying risk sources (e.g. hazards), events and the potential causes and consequences associated with these events.
2. **Risk analysis** involves assessing the nature of a risk and determining its risk level. The level of risk is measured by considering both the consequence of an event and the likelihood of the event occurring.
3. **Risk evaluation** includes ranking the risks, generally based on their determined risk levels. A risk matrix is utilised to facilitate this process. Risk evaluation also includes comparison of the results from the risk analysis with the pre-determined risk criteria to decide whether the risk and/or its magnitude are acceptable/tolerable.



$$R = C \times L$$

R = Level of risk
 C = Consequence of the event
 L = Likelihood of the event occurring which results in the consequence identified

The results of risk assessments are incorporated into our risk registers. These registers contain information about identified risks, existing controls and planned future controls to mitigate, eliminate or reduce the risk.

The more detailed definitions which are used at AMMAN for likelihood, consequence and risk, as well as our risk matrix, are included in the appendix.

Responsible Supply Chain Management



Management Approach

Our Responsible Supply Chain Policy outlines our commitments to ethical and sustainable practices in procurement and supply chain management, as well as our approach to identifying and mitigating risks and improving performance. The policy can be accessed [here](#).

To foster a responsible supply chain, we implement policies and practices that apply to all our entities and projects, and closely monitor our procurement performance. We conduct inherent-risk assessments for our primary Tier One suppliers and effectively communicate and enforce our expectations regarding ethics, human rights, and social as well as environmental performance to our business partners and supply chain.

Currently, we do not own or control any operations or projects in Conflict-Affected and High-Risk Areas as defined by the Uppsala Conflict Data Programme¹⁵, nor do we source minerals from third parties. However, if this situation changes, we are committed to implementing the Organisation for Economic Co-operation and Development (OECD) Due Diligence

Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. This will enable us to identify, evaluate, and mitigate any risks and impacts associated with sourcing minerals from such regions.

Our Supply Chain Programmes and Initiatives

In conducting our business, we recognise the potential risks that our supply chain may pose to our organisation. Therefore, we adopt a risk-based approach to assess our business relationships and ensure responsible business practices are upheld throughout our organisation and supply chain. We have implemented the following processes to minimise these risks:

- We have established **procurement processes** that define our expectations and requirements for suppliers, concerning topics from ethics to environmental and social (E&S) performance. These processes include vendor registration and screening, due diligence criteria and pre-qualification forms, reference checks, and the use of standardised templates for contracts and purchase orders.

¹⁵ According to Uppsala Conflict Data Program's (UCDP) data and analysis, Indonesia recorded 53 deaths from active conflicts in 2021 (the latest available data set from UCDP). UCD shows that 51 or 96% of these fatalities are located in regions which are well over 1,400 km from AMMAN's operations and do not affect our activities.

- We require our business partners to refrain from establishing any business relationships or affiliations that could create conflicts of interest. We strictly prohibit any form of improper benefit, and our business partners must disclose any existing business relationships they have with our company. If such a relationship exists, they are promptly obligated to notify us in writing.
- We ensure that our Procurement Department is equipped with **competent and skilled professionals** in implementing Responsible Supply Chain Management (SCM). We prioritise hiring individuals with the necessary expertise and provide training relating to Responsible SCM.
- We ensure that **all new contractors undergo an environmental screening** to assess their adherence to our standards. Those with significant potential negative environmental impacts receive training from our Environmental Department and may need to obtain additional certifications as required by regulations.
- We engage in **communication with our business partners** to encourage responsible business practices. This includes conducting comprehensive induction or orientation programmes that cover our key Health, Safety, Environment, and Community (HSEC) requirements, holding kick-off meetings to align expectations before work commences, conducting regular job inspections, and organising periodic meetings to discuss performance.
- We formalise **contractor performance reviews** every six months, documenting the assessment against key criteria.
- We report our contractors' performance in our **routine management reports**, including safety statistics and other relevant key performance indicators (KPIs).
- Where appropriate, we provide **capacity building support** to improve the capabilities of local suppliers. We also contribute to local partnerships by sharing resources and knowledge.

Customer & Shipping Considerations

Our Quality Management System provides the framework for continuous improvement and is designed to improve organisational efficiency, customer engagement and satisfaction, product compliance to specification, and sets out our robust audit program. In 2022, we obtained the ISO 9001:2015 Quality Management certification for the Mining of Copper and Gold, and Product Shipment from Benete Port.

To uphold our quality control standards, we operate our own Quality Assurance and Quality Control (QA/QC) laboratory within the Process Department. At this laboratory, we analyse copper concentrate samples to determine the grade of copper, gold, and silver prior to sale. This testing ensures that our customers receive high-quality products and allows us to uphold our commitment to quality control.

We evaluate our products and perform quality tests on each shipment. If any product that has a negative impact on the customer's operations or yields results outside of the quality range, we transparently communicate this to the customers. These impurities are also documented in the sales contracts.

At AMMAN, we also provide our customers with a Material Safety Data Sheet (MSDS) for each shipment of our copper concentrate. The MSDS contains information on the properties, toxicology, handling and storage, transport, exposure controls, personal protection, and disposal considerations of the concentrate. It includes recommendations for managing the risks associated with handling concentrates in industrial settings, following international practices.

Furthermore, we ensure that our operators are well informed on how to safely prepare ship loading and fulfil other requirements during the ship-filling process to prevent the concentrate from entering the sea. We provide explicit instructions on dealing with concentrate spills, as mandated by government regulations and International Maritime Organisation.

Our Programmes and Initiatives

Ethics Training for AMIN's Business Partners

We conducted an Ethics training session for AMIN's business partners in 2022, with the aim of familiarising them with our Code and ensuring its implementation. The training covered various topics, including the gift register, AMMAN Ethics Line, Social Media Policy, HR Industrial Relations, and concluded with a Q&A session.

This training session held significant importance as it marked the inaugural engagement with AMIN's business partners relating to ethics. The session was attended by over 300 employees from AMIN's business partners and

our employees. The attendees primarily consisted of Engineering, Procurement, and Construction (EPC) contractors involved in the construction of the smelter and Precious Metal Refinery (PMR).

This training exemplifies our commitment to maintaining a responsible supply chain for AMIN's smelter and PMR projects, both of which are considered National Strategic Projects. It also supports SDG 4 (Quality Education) by providing learning opportunities and instilling positive values and SDG 16 (Peace, Justice, and Strong Institutions) by encouraging transparency, accountability, and responsible governance.



- △ We provide comprehensive ethics training programmes for our business partners, ensuring that they receive the necessary knowledge and guidance to uphold ethical standards in their day-to-day operations.

Engaging our Stakeholders

Management Approach

We recognise the importance of involving our stakeholders in our sustainability initiatives. We value the input and collaborative efforts of our stakeholders in shaping our objectives and strategies. Through active engagement with our employees, customers, suppliers, communities, authorities, and NGOs, we strive to foster shared value and generate positive outcomes.

Our stakeholder engagements allow us to build trust and transparency, and maintain our strong reputation in the market. Our stakeholder engagement plan incorporates the following elements:

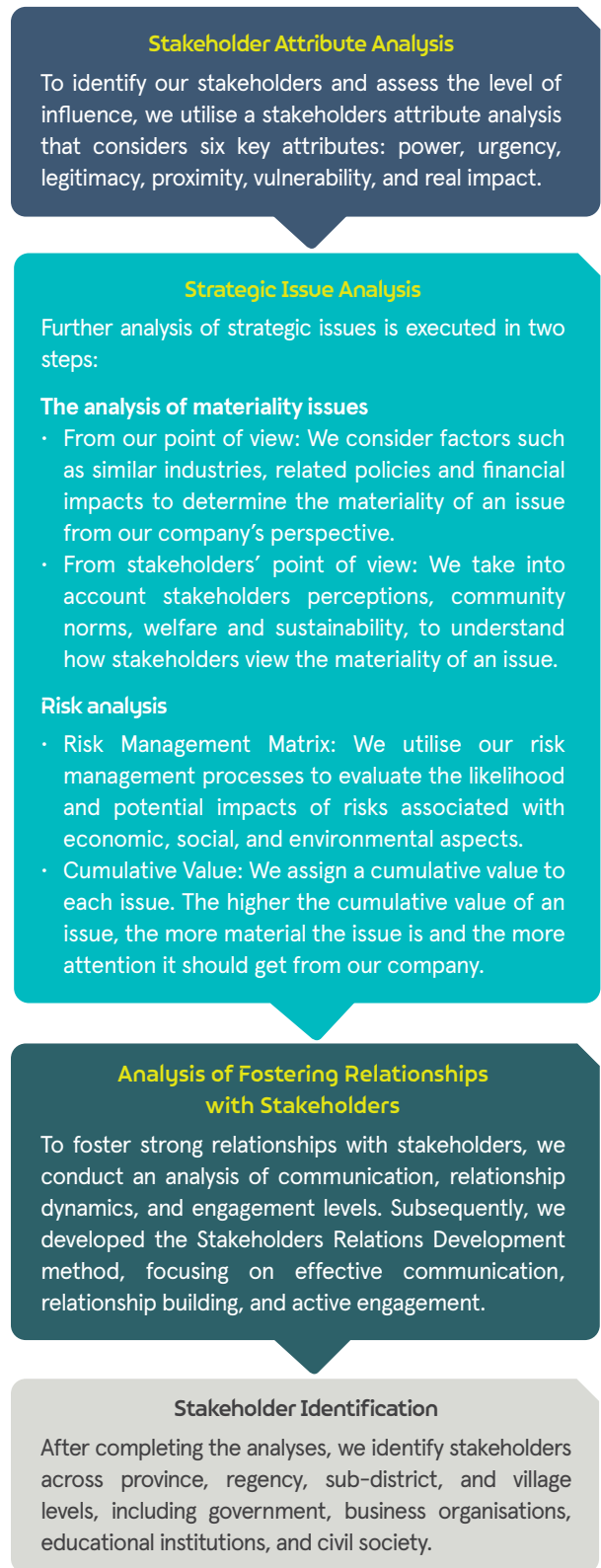
- A comprehensive summary of key stakeholder issues, concerns, and interests
- Prioritisation of stakeholders based on their level of influence and impact
- Utilisation of culturally appropriate engagement mechanisms to address stakeholder issues, concerns, and interests with a defined schedule, frequency, and timeline
- Clear engagement objectives and defined measures of success
- Alignment with our Human Rights Policy

Stakeholder Mapping at AMMAN

In 2022, we undertook a stakeholder mapping process as an update to the previous mapping conducted in 2017. This comprehensive process had two main objectives; firstly, to analyse strategic issues pertaining to our operations, and secondly, to identify and map the relevant stakeholders associated with those issues. In addition, the mapping process aimed to provide valuable recommendations on establishing and nurturing relationships with key stakeholders, taking into consideration the strategic issues and potential risks involved.

To ensure a comprehensive and robust mapping process, we followed the AA1000 Stakeholder Engagement Standard. The mapping was conducted in stages as shown in the following figure.

Figure 14: Our Stakeholder Mapping Process



Stakeholder Engagement

The table below summarises how we manage relationships and engage with our stakeholder groups:

Table 6: Our Stakeholder Key Concerns and Engagement Methods

No.	Stakeholder Group	Key Concerns	Engagement Method
1.	Shareholders and Investors People or entities who already committed or are about to commit capital to the Company with the expectation of receiving financial returns.	<ul style="list-style-type: none"> Financial Performance Environmental, Social and Governance Operational efficiency 	General Meeting of Shareholders (GMS), Quarterly Investor Reports, Press Releases, roadshows and one-to-one meetings.
2.	Employees People who work for AMMAN.	<ul style="list-style-type: none"> Occupational Health and Safety Employment and industrial relations Ethical Conduct 	Townhall meeting, discussion forums, employee training and capacity building.
3.	Local Communities People who live around the mine site and are directly impacted by the Company's operations and actions.	<ul style="list-style-type: none"> Community Development and Empowerment Business opportunities Job opportunities and recruitment Community health Business operation (e.g. blasting activity and smelter construction) 	Stakeholder engagements and focus group discussions.
4.	Government Officials Members of government institutions on local regency, provincial and national levels, whose decisions are critical to ensure the continuity of AMMAN's operations.	<ul style="list-style-type: none"> Financial Performance Community Development and Empowerment Contribution to development goals Industrial relations Business operation (e.g. blasting activity, smelter construction) Spending on Local Suppliers Environmental protection 	Performance reports, consultations, dialogues.
5.	Media Members of local, national, and international news organisations, including print, electronic and digital media.	<ul style="list-style-type: none"> Community development and empowerment Environmental protection Occupational health and safety Financial performance Operational productivity Contribution to economic growth Job opportunities and recruitment 	Press releases, media briefings, social media and online engagement with stakeholders, public events and sponsorships.

No.	Stakeholder Group		Key Concerns	Engagement Method
6.	Civil Society Organisations	Non-state, not-for-profit, voluntary entities formed by people in the social sphere that represent a wide range of interest.	<ul style="list-style-type: none"> • Community development and empowerment • Environmental protection • Occupational health and safety • Financial performance • Operational productivity • Contribution to economic growth • Job opportunities and recruitment • Environmental protection • Spending on local suppliers • COVID-19 pandemic 	Partnership and collaboration on community development initiatives, consultations with representatives, advocacy and lobbying on social and environmental issues.
7.	Industry Association	Association that supports and protects the rights of mineral industry and the people who work in the mining industry.	<ul style="list-style-type: none"> • Community development and empowerment • Industry trend • Regulatory compliance 	Forum participation, advocacy, regular communication, and consultation.
8.	Academic	An individual or group affiliated with educational institutions with expertise relevant to our operations.	<ul style="list-style-type: none"> • Contribution to economic growth • Community development and empowerment • Environmental protection 	Research collaboration and forum participations.
9.	Customers	Businesses that purchase the goods and services from AMMAN.	<ul style="list-style-type: none"> • Product quality • Delivery and logistics • Payment 	Customer satisfaction surveys.
10.	Business Partners	Businesses that provide goods and services for AMMAN to conduct our operations, including local business partners.	<ul style="list-style-type: none"> • Occupational Health and Safety • Business ethics • Business opportunities 	Collaboration and partnerships and performance reports.

07 Advancing People





Upholding
Ethics



Advancing
People



Preserving
Environment



Managing
Resources

At AMMAN, our commitment to advancing our people is reflected in three of our Core Values: **'Teamwork', 'Health, Safety, Environment and Community', and 'Creativity and Innovation'.**

We consider these values as the foundation of our organisation, enabling us to build a strong and respectful company that values our employees and local communities.

The Advancing People pillar comprises our material topics "Community Development", "Labour & Human Capital Development", "Human Rights" and "Health and Safety". We understand that our efforts are crucial to achieving sustainable and responsible business practices. Our commitments to our people and local communities are underpinned by our Fair Employment, Human Rights and Health & Safety Policies, amongst others. By prioritising our people's well-being and development, we believe that we can create long-term value for all stakeholders, including our employees, local communities, and shareholders.



Certified
126

employees through LSP P-2 AMMAN, including 85 Training Instructors and 41 Basic Engine Mechanics.



325

local community development projects and donations



USD 6,253,870

invested to support community development programmes

Supporting Local Communities



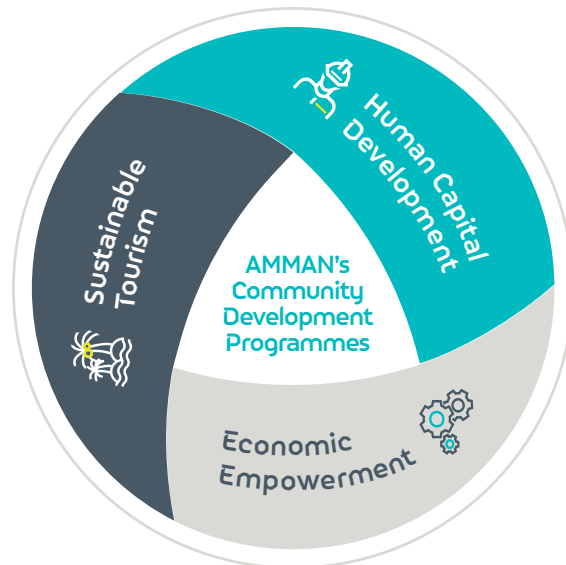
Management Approach

Meaningful engagement with our stakeholders, particularly our local communities, is critical to earning and maintaining our license to operate. Our Communities Policy outlines our intent to create a transformational impact in areas where we operate and leave a legacy of best. The Policy can be accessed [here](#).

At AMMAN, we recognise that our activities can have both positive and negative impacts on mine-adjacent communities. These activities cover all lifecycle stages including exploration, feasibility studies, site construction and development, production, decommissioning, reclamation, and closure. We are committed to understanding stakeholder views and minimising and mitigating any adverse effects associated with our day-to-day operations. To achieve this, we aim to foster effective cooperation with both our local stakeholders at the regency, provincial, and national levels. Our community development programs are also conducted in collaboration with business partners that operate on national and international levels. We take specific measures to monitor our impact, minimise the negative impacts and maximise our positive impact on the community.

Our commitment to creating sustainable and mutually beneficial relationships with our stakeholders is reflected in our efforts to engage with them in a collaborative and transparent manner. In supporting their livelihoods, we have established community development programmes with the three focus areas:

Figure 15: Our Three Key Focus Areas for our Community Development Programmes



We acknowledge that our presence in the region stimulates local economic and social development. In line with the Indonesian laws and regulations, we develop a Community Development Program Masterplan (*Rencana Induk Pengembangan dan Pemberdayaan Masyarakat/ RIPP*) on a periodic basis. The comprehensive plan aims to provide guidance for the implementation of our community development programmes. The RIPP concentrates on eight programs that comply with the MEMR Decree No. 1824/2018. These programs address the economic, environmental, social, and cultural rights and interests of the community. The development of RIPP involved various stakeholders, including government agencies, civil society organisations, and community members.

In 2022, we conducted an Environmental and Social Due Diligence Assessment (ESDD) to evaluate potential impacts and risks of our business plan. The assessment was conducted against the International Finance Corporation (IFC) Performance Standards (PS), Equator Principles (EP) 4, and applicable regulations and standards in Indonesia. The ESDD indicates that our policies and practices are in line with the IFC PS 4 (Community), PS 5 (Land Resettlement), and PS 8 (Cultural Heritage). However, there are a few areas that require attention, specifically the implementation of mitigation measures for local traffic disruption during expansion projects, ensuring ongoing access of the communities to their land, and the assimilation of cultural heritage awareness among contractors. Moving forward, these topics will be incorporated into the management systems and programmes accordingly.

Understanding Our Local Communities' Needs

Conducting stakeholder identification and mapping studies allows us to understand and prioritise the needs and interests of our stakeholders, particularly of our local communities. By analysing their concerns, expectations, and levels of influence, we can develop targeted engagement strategies that address their specific needs and help us to minimise any negative impacts of our operations.

The following lists our efforts and initiatives in identifying and understanding our local communities needs and concerns:

- Conducted a **social baseline mapping** and needs assessment in 2012 and 2016
- Conducted a **socio-economic baseline** study in 2022
- Completed a **stakeholder mapping** study in 2017 and 2022
- Carried out a **community needs assessment** to plan for AMMAN's corporate social responsibility programmes in 2017
- Published a **social impact annual report** in 2021
- Established a **Realisation Report of Workplan and Budget** (*Laporan Realisasi RKAB*) in 2021
- Completed an **RIPP** in 2021 with a revised version planned for a release in 2023

We also have a Stakeholder Engagement Plan (SEP) for our Batu Hijau site that focuses on engaging with local stakeholders who are impacted by the project activities or are essential for business continuity.

Supporting Local Community Development

Our community development programmes are managed by our Social Impact Department, which strives to consult with representatives of key stakeholders every six months. These representatives include local health authorities, labour authorities, and village leaders.



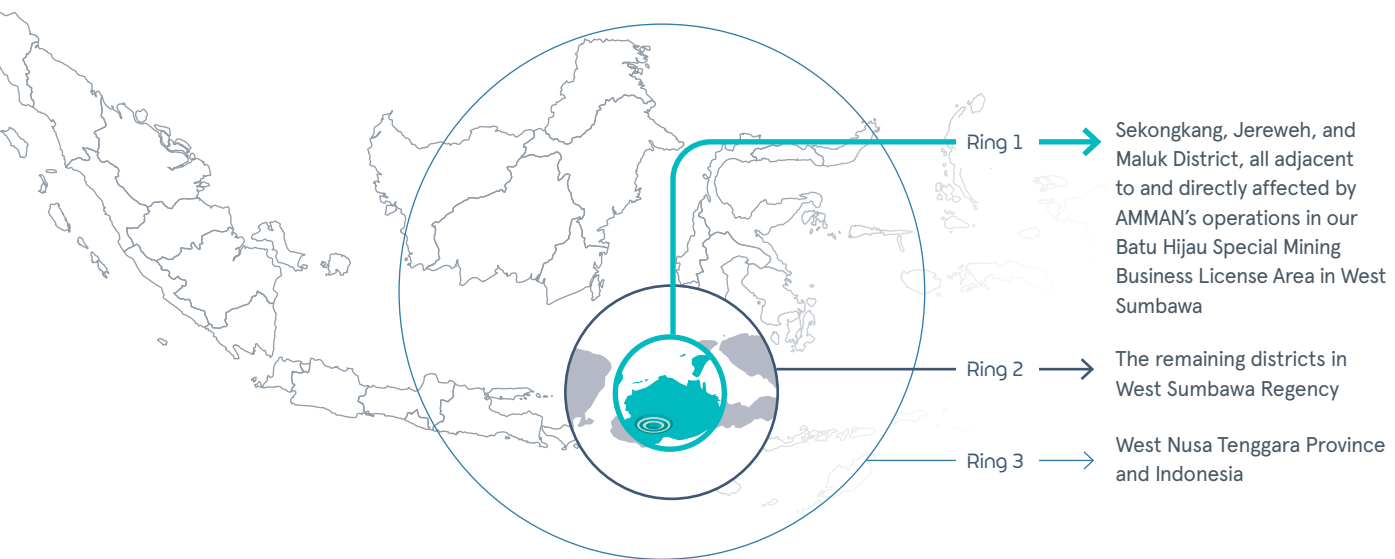
In 2022, we donated

USD 487,858

to support our local communities

The aim of our programmes is to stimulate development in our three spheres of influence:

Figure 16: Our Three Spheres of Influence



Some examples of the community development programmes and initiatives we conducted are presented in the following infographic, categorised according to the eight primary categories of community development programmes outlined in the MEMR Decree No. 1824/2018.

Figure 17: AMMAN's Community Development Programmes

<p> Education</p> <ul style="list-style-type: none"> Offering scholarships for hospitality training and higher education Assisting literacy and teaching infrastructures Upskilling and training teachers (including sport teachers) 	<p> Health</p> <ul style="list-style-type: none"> Establishing the Clean and Healthy Living Campaign Eradicating malaria and preventing stunting through a community-based programme Supporting access to clean water 	<p> Community Income and Employment</p> <ul style="list-style-type: none"> Developing a Tourism Masterplan Upskilling local residents to improve access to employment opportunities Recruiting local talent 	<p> Economic Independence</p> <ul style="list-style-type: none"> Supporting small and medium-sized enterprises (SMEs) by providing business and finance training
<p> Social-cultural Matters</p> <ul style="list-style-type: none"> Supporting the maintenance of cultural heritage sites Contributions to social and religious events Developing arts and cultural attractions for tourism 	<p> Environmental Preservation</p> <ul style="list-style-type: none"> Preservation programs for coastline, coral reefs, and turtles Initiating environmental preservation campaigns and initiatives Campaign for environmental Awareness and renewable energy utilisation 	<p> Community Institution</p> <ul style="list-style-type: none"> Strengthening tourism awareness groups Supporting the formation of local Tourism Industry Associations Supporting social and sports institutions 	<p> Community Infrastructure</p> <ul style="list-style-type: none"> Supporting the development of infrastructure for tourist destinations, disaster risk mitigation, and community literacy

AMMAN's Role in Creating Sustainable Business Opportunities in West Sumbawa

Based on the Statistics Indonesia report for the year ending December 31, 2022, the Batu Hijau mine contributed 85.3% to the GRDP of West Sumbawa Regency and 20.4% to the GRDP of West Nusa Tenggara Province. Naturally, the people of West Sumbawa rely heavily on the mining industry for employment and revenue. We have taken proactive measures to diversify West Sumbawa's economy, which will aid in the long-term wellbeing of the local community. This is evident in the vision and mission of our Social Impact Department, and the RIPPM approved by the government, where we remain committed to supporting the local community and government in developing non-mining business and employment opportunities.

We have purposefully selected programmes with a focus on developing sustainable non-mining businesses in the nearby communities. In doing so, our aim is to ensure that these communities continue to thrive even after our operations cease. Several key programmes that address this include vocational scholarships, tourism development, and MSME and village-owned enterprise (*Badan Usaha Milik Desa*/BUMDes) development. In 2022, we awarded vocational scholarships to more than 300 young individuals and helped 195 of graduates secure employment, with 85% of employed graduates working in industries other than mining. Additionally, we trained over a dozen MSMEs, with five participating in national events. We are actively revitalising local farming and cultural industries, such as palm sugar and traditional weaving, by optimising the quality of the raw materials, creating value added products and improving business administration skills.

Safeguarding Community Health and Safety

In addition to supporting their local development, we are also committed to avoiding and minimising adverse impacts on community health and safety, underpinned by our Health & Safety Policy and Communities Policy. This commitment also applies to all our business partners.

In line with our Core Values, we have integrated community health and safety considerations into our technical standards, including, but not limited to, water management, waste management, and air management. Our focus on these standards underscores our commitment to maintaining a safe and healthy environment. Further reading on our efforts can be read throughout our Preserving Environment and Managing Resources chapters.

Strengthening Community Resilience Against COVID-19

As a responsible mining company, we acknowledge that our mining activities throughout our lifecycle stages expose us to various social risks. The table below highlights the number of days due to non-technical delays¹⁴ we experienced in the past three years:

Table 7: Number of Non-Technical Delays

Indicator	2020	2021	2022
Number of Non-Technical Delays	0	1	0
Duration of the Non-Technical Delays (Days)	0	35	0

We suspended operations for 35 days, from January 2021 to early March 2021, to prevent the spread of COVID-19. During the second wave of the COVID-19 pandemic between August and October 2021, we maintained operations with a smaller workforce.

Additionally, we have delivered COVID-19 awareness and prevention workshops to help disseminate critical medical information. We have donated food staples, testing kits, medical supplies, and equipment to the local state-run hospital. As tourism was being promoted in West Nusa Tenggara by the national government, AMMAN reserved and repurposed twenty hotels in the province, into dedicated isolation facilities for our employees returning to the Batu Hijau mine after their mandatory field break.

¹⁴ Delays that are categorised as non-technical are those that arise from factors such as project shutdowns, pending regulatory permits, community concerns, stakeholder resistance or protests, and armed conflict.

Employees undergoing their two-week quarantine period received a menu of upskilling content from which they could choose through an online learning platform to prepare themselves for further upward career mobility.

We understand that these type of delays can have an impact on our stakeholders, including our employees, local communities, and the environment. Therefore, we are committed to addressing these challenges and maintaining open communication with all our stakeholders to ensure that we are addressing their concerns and needs.

Integrating Community and Health Safety into our Systems

We adhere to the applicable management laws and regulations that mandate the assessment of health and safety impacts throughout our business operations, ranging from design and construction to operation, demolition, and decommissioning. We conduct regular training programmes that involve our surrounding communities, such as tailings emergency response and fire drills. These initiatives are aimed at preparing the community for potential risks and emergencies associated with our operations.

Furthermore, robust management and monitoring systems are in place to mitigate environmental and human health risks, including those that affect the community.

Our training, monitoring, and management systems are highlighted below:

Figure 18: Our Community Health & Safety Management Strategy

AMMAN's Monitoring Systems to Ensure Community Health & Safety

Utilising a **risk management framework** with control hierarchy

Installation of **specific pollution control systems** for power plant, tailings, sediment control, and leachate collection

Treating domestic wastewater before discharge or reuse

Annual review of **Aspects and Impacts register**

Strict **compliance with Indonesian regulations** for handling, transportation, and storage of hazardous waste

Supplying **portable water** to Sejong Village, Sekongkang, and Maluku communities

Conducting **Deep-Sea Tailings Placement (DSTP) Emergency Response Plan** training

Implementing comprehensive **Environmental and Human Health monitoring programs**

Our Programmes and Initiatives

Providing Vocational Scholarships

Through our vocational scholarship programmes, we strive to enhance the employment prospects of the youth in West Sumbawa. These encompass both formal and non-formal scholarships (i.e. short courses) designed to equip students with the necessary skills to thrive in the competitive job market.

Our formal scholarships are offered through accredited vocational high schools (*Sekolah Menengah Kejuruan/SMK*), providing a comprehensive three-year curriculum leading to a high school diploma. In this regard, we partnered with Djarum Foundation, who has become a role model in implementing the Ministry of Education's national curriculum. In 2019, the Ministry of Education endorsed Djarum Foundation's efforts by inviting 300 school principals across Indonesia to the vocational high schools supported by Djarum Foundation.

In 2022, we awarded 78 formal scholarships across eight different fields of study: graphic design, software engineering, animation, nautical studies, electrical engineering, renewable energy, maritime and mechanical engineering. The first cohort of students is set to graduate in 2024.

Conversely, our non-formal scholarships offer short courses that specialise in skill areas such as digital literacy, heavy equipment training and hospitality.

For digital literacy scholarships, we work with business partners such as Hacktiv8, which partners with prominent

Indonesian start-ups such as Gojek. This digital literacy training focuses on several concepts, including full-stack coding, data science and data analysis. For heavy equipment training, we partner with United Tractors, one of the leading distributors of heavy machinery in the region. Finally, for hospitality training, we partner with Bije Jari, a training organization in West Sumbawa, and Bali Wise, an organization from Bali focusing on empowering disenfranchised women through hospitality training.

A summary of these programmes’ impacts can be found in the table below.

Table 8: Summary of Non-formal Vocational Scholarship Recipients in 2022

Programme	Number of Scholarship Recipients	Number of Graduates	Graduates Employed (Full time/Part Time)	Average Monthly Salary of Employed Graduates	Maximum Monthly Salary of Employed Graduates
Digital Literacy	149	149	68	USD 235	USD 809
Heavy Equipment	98	30	30	USD 397	USD 472
Hospitality	112	112	97	USD 134	USD 270



Through our vocational scholarships, we aim to empower West Sumbawa’s youth for sustainable employment.

Our vocational scholarships help achieve SDG 4, which focuses on providing quality education for all, and SDG 8, which aims to promote decent work and economic growth. These scholarships promote inclusive and equitable learning opportunities and empower individuals with employable skills in sustainable tourism, among other fields.



AMMAN handed over the humanitarian donation for the Cianjur earthquake. The delivery process was carried out with close coordination with the MEMR Disaster Preparedness and related regional governments.

Nurturing a Healthy and Resilient Future Generation

In collaboration with CARE, an international non-profit organisation, we established an initiative aimed at reducing the stunting rate in West Sumbawa. Our objective is to decrease the stunting rate from 13.9% in 2022 to less than 5% by 2024, focusing on addressing the detrimental effects of stunting on the physical and cognitive development of children in the region.

Our three key objectives are:

1. Improving the health and nutritional status of mothers and children.
2. Increasing women's economic opportunities.
3. Enhancing their capacity, voice, and leadership in the community and household.

Unlike other stunting intervention initiatives, this programme places equal emphasis on prevention and addressing the needs of stunted children. Alongside providing diagnostic care and nutritional supplements to identified cases of stunting, our approach focuses on preventive care by targeting expectant mothers and parents in general, ensuring that their children's nutritional and sanitation requirements are met. During 2022, we identified 198 stunted children in the Jereweh, Maluk and Sekongkang Sub-districts, provided consistent nutritional supplements and conducted regular monitoring of their weight and height.

In further efforts to combat and prevent stunting on a national scale we partnered with the USAID and BKKBN. This partnership specifically targets four provinces: West Kalimantan, East Nusa Tenggara, Banten, and East Java.

The consortium also includes four donors: AMMAN, Bakti BCA, Bakti Barito, and Tanoto Foundation, with AMMAN committing to pledging USD 1,000,000 over the next four years, until 2026.

Emergency and Disaster Relief Initiatives

In 2022, we assisted those impacted by the Cianjur earthquake by donating 440 mattresses, seven tents, food, hygiene supplies, and nine disaster relief personnel.



We actively engage in emergency and disaster relief efforts, collaborating with various partners and stakeholders to fulfil the needs of impacted communities, manage crisis situations, and facilitate post-disaster recovery.

Between 2021 and 2022, we also contributed emergency and disaster relief in nearby areas, including:

- Assisting with firefighting efforts, providing shelter tents, electricity supply, food packages, and fire-resistant roofing for multiple fire incidents in various villages across Sumbawa and West Sumbawa Regency, which impacted hundreds of people.

- Providing an excavator and dump truck to clean a 5.5-kilometer stretch of road after landslides in the Maluku-Sekongkang road, and repairing a 150-meter irrigation channel following flooding.

Empowering Local Farmers through Sustainable Innovation

Tongo Village in West Sumbawa is a rural village with abundant natural resources, particularly in agriculture and plantation. One of its most famous products is palm sugar, which is produced by local farmers from the village. However, these farmers have only been using coconut shell moulds to shape the sugar into blocks, lacking innovation to increase the value of their products.

Since 2009, two residents have pioneered the planting of palm seedlings in a systematic manner, using high-quality palm seedlings near the beach. However, some farmers remain sceptical about the potential for producing high-quality palm juice or sugar in these areas. It is thus crucial to provide training and assistance to these farmers to be able to produce various types of high-quality palm sugar derivatives.



▲ We supported the delivery of different forms of product development programmes aimed at supporting local farmers and their businesses.

To address this issue, we supported the initiation of a product development programme, not only as a means of socialisation and education, but also to introduce the creative works of farmers to other parties, such as the government and the public, to receive feedback and evaluation on the products. We partnered with King

Aren, a palm sugar producer from Lombok, an island in the West Nusa Tenggara Province, to develop the palm sugar industry in Tongo Village. Prior to intervention, the value of the palm sugar briquettes sold by the Tongo Village farmers was USD 1.19 for every litre of tree sap. After the intervention, the palm sugar derivatives have a sale value of USD 8.31 for every litre of tree sap, thereby increasing the sale value by a factor of almost seven times.

We are also in the process of creating a new production house for the Tongo Village palm sugar farmers, so that they can increase their production. This production house is expected to increase production of palm sugar briquettes and powdered palm sugar by 70 kg and 50 kg per day, respectively.

In supporting our communities through the programme, we aim to contribute to the achievement of SDG 8 (Decent Work and Economic Growth) by creating income-generating opportunities and fostering job creation and economic development.

Football Development

During 2022, the local government requested our assistance to revive the then-dormant football league in West Sumbawa. At the time, there were no skills improvement training for any of the coaches or sports teachers, no sport development program for youth and no long-term plans for sports in the region. In response, we soon began working with the local government, and Asian Soccer Academy (ASA) Foundation to create a self-sustaining football program. ASA Foundation is a sports-based education and empowerment NGO based in Indonesia but actively conducting programs around the world. This program will train 43 coaches, 32 referees, 22 regional league management personnel and 56 football teams – including nine teams for women, and six teams for disabled players. Train the trainer courses began in January 2023, and the formation of youth, women and disabled teams is planned to be completed within approximately one year.

In 2022, we also conducted a 2-day football festival to kick-start our football program. This event consisted of 240 professional players, 16 coaches, 78 students (52 male and 26 female) and participants from the local inclusive school (*Sekolah Luar Biasa*). The event ran smoothly, with high engagement from coaches, players and referees (which included one female). The West Sumbawa regent also attended the event and gave the program his full support.

Empowering our Workforce

Management Approach

Our people are key to driving the sustainable growth of our business. As such, we are committed to providing decent work as defined in the International Labour Organisation (ILO)'s Declaration on Fundamental Principles and Rights at Work. Our Fair Employment Policy details our commitments in creating working conditions that will allow our employees to thrive, supporting the principles of anti-discrimination, fair remuneration, and gender equality, amongst others. The policy can be accessed [here](#).

We recognise that our ability to recruit and retain talented employees, maintain high levels of productivity, and foster innovation, all hinge on the strength of our labour and human capital development systems. Therefore, we are committed to nurturing our workforce by providing ongoing and regular training, covering a wide range of topics, from technical training to health and safety training. In addition, we also offer complementary leadership skills training specifically tailored for middle and upper management. These programmes focus on developing leadership capabilities, strategic thinking, and decision-making skills.

By striving to make our workplace a desirable place to grow, we aim to attract and retain talent who can continue to deliver high performance and contribute to the success of our business.

Fair Remuneration and Benefit

Our employees receive fair remuneration that is equal to or exceeds the minimum wage mandated by the regional government in the areas we operate, as outlined by the Fair Employment Policy. Currently, the lowest level of remuneration for a permanent employee is higher than the provincial minimum wage at West Nusa Tenggara. We consider various factors, including job responsibilities, market competitiveness, and employee

retention when determining remuneration. We regularly review these factors based on company and employee performance, as well as market conditions. This ensures that we provide adequate compensation to our employees based on their contribution to our business.

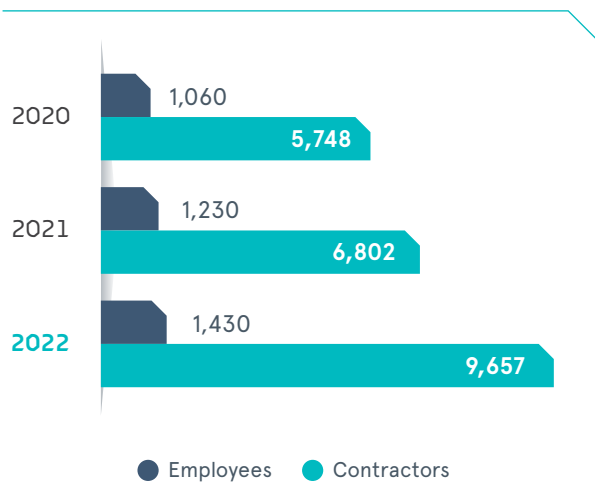
As required by the national laws, all our employees are enrolled in the Social Security Agency (*Badan Penyelenggara Jaminan Sosial/BPJS*) for Health and Manpower. In addition to the BPJS, we also provide additional medical coverage and free healthcare services on site for all AMMAN employees.

Our People at a Glance

As of the end of 2022, our workforce consisted of 1,403 employees and 9,657 contractors, representing a 38% increase from 2021.

Our hiring process is based on merit, prioritising skills and expertise and we do not discriminate based on ethnicity, religion, race, or gender. As at the end of 2022, approximately 13% of our employees were female, surpassing the national mining sector average of 4.6%¹⁵.

Figure 19: Our Workforce



¹⁵ Source: EITI Indonesia Continues to Drive Equal Representation in the Extractive Industry Sector, MEMR.

Figure 20: Employees by Gender

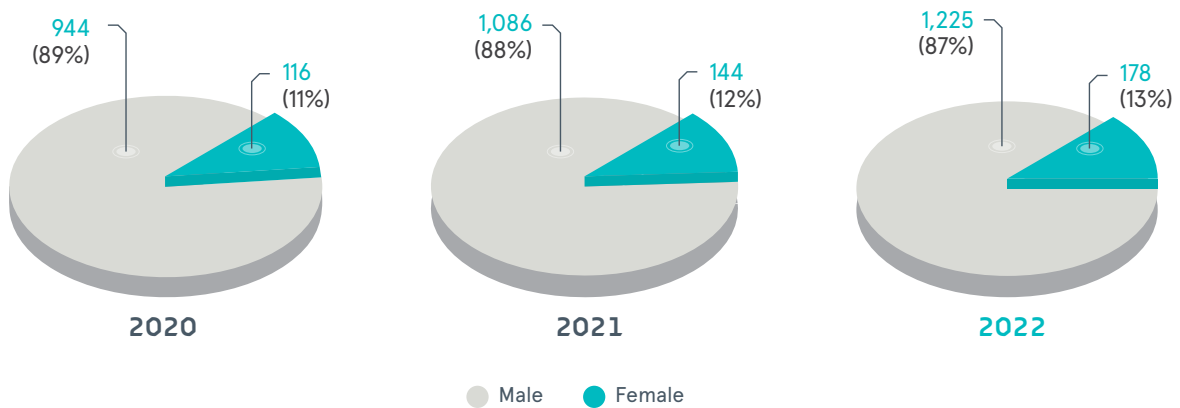


Figure 21: Employees by Educational Level

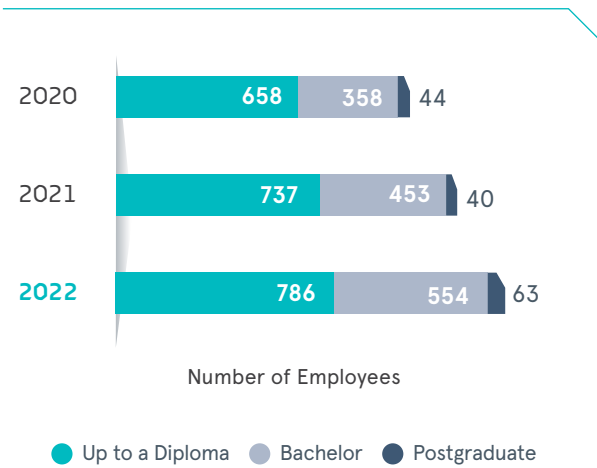


Table 9: New Hires


	2020	2021	2022
	198	249	271
Total New Employees			

Figure 22: Employees by Origin

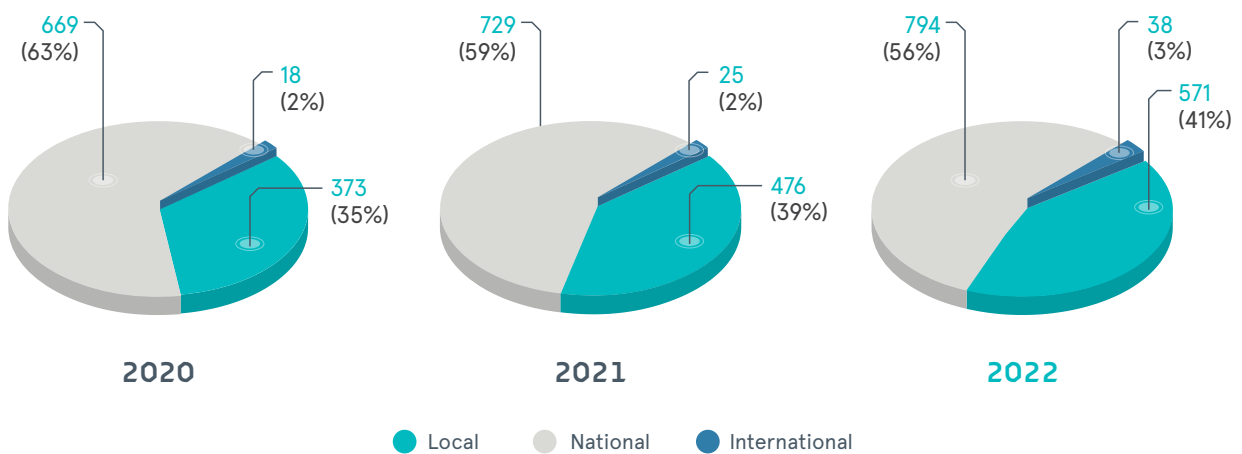
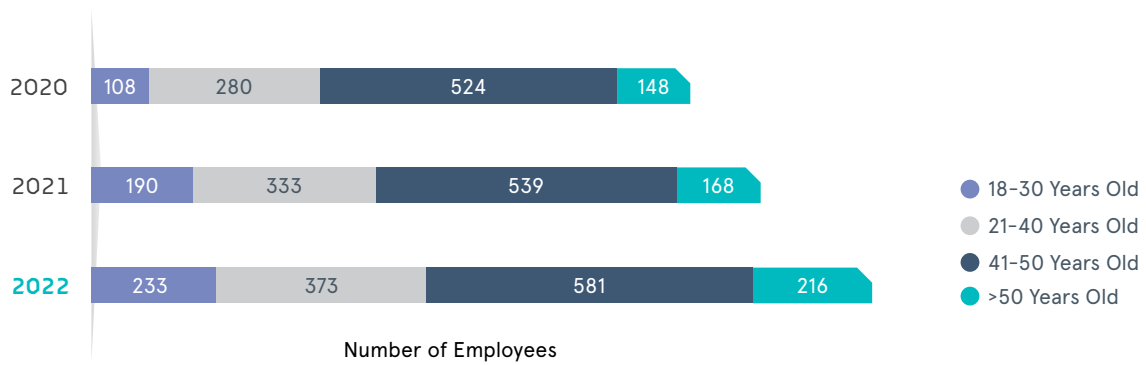


Figure 23: Employees by Age



Human Capital Training and Development

In 2022, our average total training hours per worker was 27 hours, including safety, health and emergency response training which was an average of 14 hours. We consider training and development to be essential for the growth and innovation of our business. Strong leadership and technical skills are required from our workforce to maintain our position at the forefront of the industry.



Table 10: Average Training Hours per Worker (Employees and Contractors)

Average hours	Unit	2020	2021	2022
Average Safety, Health and Emergency Response Training Hours	Per employee	11	15	22
	Per contractor	9	18	13
	Per worker (employee and contractor)	10	17	14
Average Total Training Hours	Per employee	18	19	84
	Per contractor	10	21	18
	Per worker (employee and contractor)	11	21	27

In 2022, the average safety, health and emergency response training hours per worker was comparable to previous years, but the average training hours (for all types of training) rose to 27 hours per worker.

The table below lists some of our training programmes and initiatives designed to enhance the skills and capabilities of our workforce.

Table 11: Training Programmes and Initiatives in 2022

No.	Training Category	Total Number of Participants
1	Operational Training includes multilevel programmes concerning Operational Mining, Process and Power Plant, and high-risk works or activities.	26,768
2	Maintenance Training consists of programmes relating to technical knowledge and all maintenance job role skills, including electrical, mechanical, welding and fabrication.	4,727
3	Functional Training covers boarding or general induction, mandatory training, civil and construction training.	18,312
4	Training Support and Future Workforce comprises programmes pertaining to certification standard, future workforce on boarding, external training and LSP-P2.	748

To foster continuous improvement at AMMAN, managers are mandated to provide training and mentoring for their team members to enhance their skills and knowledge. Training sessions are based on the Company’s needs and the worker’s competency and performance. We are also conducting regular performance appraisals for all employees, which are objectively completed in accordance with company policies and established Technical Standards.

Our Programmes and Initiatives

Paving the Ground to Nurture Our Talent and Build a Competent Workforce

In 2022, we received the LSP P-2 license certificate from the BNSP, making us the first Indonesian mining company to do so. This license enables LSP AMMAN to formally administer tests and issue competency certification for our employees and business partners under two schemes: Training Instructor and Basic Engine Mechanics. Throughout 2022, LSP AMMAN certified 126 employees, including 85 Training Instructors and 41 Basic Engine Mechanics.

Moving forward, we aim to introduce ten new competency schemes annually over the next five years, with a minimum of 50 competency schemes by 2027. By enhancing our employees’ knowledge and capabilities, we aim to contribute to SDG 4 (Quality Education).



Through LSP AMMAN, we believe that investing in the skills and knowledge of our workforce is not only essential for our success, but also for the sustainability of our business and the communities where we operate.



- Our ELP covers various key topics such as Environmental Management Systems, Hazardous and Non-Hazardous Waste Management, Air Pollution Control, and Community Development.

Fostering Environmental Stewardship

To support our commitment to sustainability, we launched the Environmental Leadership Program (ELP) in 2021. The mandatory programme aims to standardise our management-level personnel's understanding of environmental management to ensure compliance with the applicable environmental regulations, policies, standards, and procedures.

As at the end of 2022, we have successfully delivered the programme to 181 participants in 15 separate courses. Through our ELP, we aim to develop a culture of environmental stewardship and ensure compliance with environmental regulations and standards. We believe that this programme equips our employees with the knowledge and skills necessary to minimise environmental risks and impacts in our operations, while also contributing to community development.



- The Operations Training programmes were designed to equip participants with the necessary knowledge and skills to perform their jobs safely and effectively.

Conducting Operations Training

As part of our commitment to safety and sustainability, the Operations Training provides our employees with knowledge on operational mining, the process and power plant, and high-risk activities.

In 2022, a comprehensive range of training programmes were conducted and attended by 26,768 participants, which totalled 221,409 hours of training. Approximately 26% of the training was related to high-risk work and activities.

Among the various classes conducted, the training programmes with the highest number of training hours included Working at Height Training, Confined Space Entry Training, Haul Truck Operation, Operation Spotter, and Drill & Blast Spotter. The Operation Training's focus on high-risk work and activity training ensures that all employees and contractors are aware of potential hazards and can take the necessary precautions to prevent accidents and injuries.

Other Key Training Programmes at AMMAN



Equipping employees with **essential working at height training**, ensuring safety in every step.



Through our **communication culture training**, we aim to enhance our employees' communication skills, nurturing a collaborative and inclusive environment for success.



Our **Supervisory Training and Coaching (STAC)** program empower future leaders with the skills and guidance to drive success and inspire excellence.



Our **team bonding workshop** fosters camaraderie and collaboration, forging a united workforce to create a legacy of best.



Engaging our Contractors in Training

In advancing our people and fostering our safety culture across the workforce, we also deliver the AMMAN Safety Training Program to our contractors. This consists of four training programmes:

- **Induction Training Program**, which focuses on training employees/workers during their initial days at the Batu Hijau mining site.
- **Three Days Safety Mandatory Training** is aimed at supervisors and leaders, providing them with comprehensive knowledge of safety responsibilities required by both the government and the Company.
- **Operating Equipment and Vehicles License Training** ensures that contractors have the necessary licenses and expertise before operating equipment and vehicles. **High-Risk Job Training Program** is designed for contractors engaged in high-risk tasks, equipping them with specialized knowledge and skills for working at heights, in confined spaces, and in other high-risk situations.
- **Supervisory and Coaching Training** for supervisors from across departments at AMMAN. It is divided into three sessions, including observation, coaching, and evaluation in the field to ensure participants apply the learning in their respective areas. All participating supervisors are expected to have good skills in providing direction and work instructions to achieve work objectives safely.

Employee Highlight

Dr. Jorina Waworuntu and her Journey at AMMAN

Dr Jorina is an Environmental Compliance Manager at AMMAN. Having joined before AMMAN acquired PT Newmont Nusa Tenggara, she is a witness to all the environmental improvements and good practices in her 23 years at the Batu Hijau site.



With her role as Manager, Dr Jorina co-leads the Environmental Department, consisting of approximately 50 staff and 60 contractors, to maintain environmental compliance with the applicable Indonesian standards, laws and regulations. With her team, Dr Jorina manages programmes and initiatives pertaining to environmental reclamation, education, monitoring and permitting, and waste management, amongst others.

Taking you 23 years back, how did you first get your start at AMMAN?

My interests and experiences all seemed to have aligned for me to get the opportunity to start as an Environmental Specialist at Batu Hijau. I did my undergraduate in Physics at the Bandung Institute of Technology, and I pursued a doctoral degree in Meteorology and Physical Oceanography at the University of Miami. My doctoral research in Water Mass Transformations in the Indonesian seas led me to the Sumbawa waters as part of the Arus Lintas Indonesia (ARLINDO) project. This, in turn, got me a foot in the door during the early stages of commissioning of the Batu Hijau mine.

In your current role as an Environmental Compliance Manager, what are some of your key responsibilities at AMMAN?

The basis of my role is to ensure compliance with the relevant standards, regulations and best practices in Indonesia and the mining industry. As a manager, it is also my responsibility to lead by example. In creating a legacy of best, we must ensure that we maintain and uphold our high standards across our business, and this starts with us and our team. By keeping steadfast to our Core Values and principles, we aim to influence those around us to safeguard our environment, becoming agents of change in doing so.

As a woman in a management position and in a male-dominated industry, how has AMMAN supported your career development?

AMMAN has always provided and ensured equal opportunity regardless of one's gender, I can say that my gender has never been a hindrance to my professional development in the Company. My experiences in the field have proved that both men and women are very much capable of the same work required and this culture of non-discrimination is what AMMAN has fostered throughout the business.

In your extensive journey with AMMAN, how has the environmental compliance and sustainability landscape changed over the years? and in your view, how has AMMAN embraced that?

The environmental and sustainability landscape is a continuously evolving landscape. We are seeing a greater focus on ESG topics within the context of investments, and expectations from regulatory bodies and our stakeholders have increased accordingly. There is an emphasis on ensuring the consistent implementation of our environmental and social programmes and initiatives. Although this has always been the case for mining companies in Indonesia, the last couple of years have highlighted its importance even more.

As such, AMMAN sets a high standard in its business and operations, spearheaded by the Board and senior management. There is ambition to ensure that we maintain our reputation as a transformative organisation. For instance, our initiatives at deploying renewable energy and supporting the low carbon energy transition through the provision of our products. Therefore, it

is crucial to maximise our efforts – regardless of our departments – to achieve the Company’s vision and mission of creating a legacy of best.

What has been some of your proudest achievements in working for AMMAN all these years?

I am fortunate enough to be working for a company that invests a great deal of effort in supporting the development of its community. At AMMAN, I have learned that business development can come hand-in-hand with community development. The work that we do now is for the lives of tomorrow.

At AMMAN, we have environmental awareness programmes that span beyond our people. An example would be our Clean Up Day programme that we launched in 2001, aimed at enhancing environmental stewardship among the communities around Batu Hijau. Throughout the span of two decades, this programme, which initially stemmed from a beach clean-up, has undergone significant advancements. It has led to the establishment of the School Waste Management Program (*Program Pengelolaan Sampah di Sekolah/PPSS*), which continues to operate to this day. This level of engagement with our communities is what inspires me to go to work every day.

Circling back to the topic of leaving a legacy, it brings me pride to see that the Environment team is continuously growing and evolving with regards to their capacity. Seeing so many young professionals joining the Company indicates that more and more people are interested and passionate about this line of work.

How has AMMAN implemented best practices in its mining activities?

As time progresses, AMMAN has become increasingly rigorous in developing our business responsibly, as well as in supporting local community development.

Specifically on our activities, we have conducted extensive concurrent reclamation program, implemented zero discharge mine water management and utilising the acid mine water in processing plant, implement large scale 3R in waste management such as rebuilding trucks, and utilizing used oil and coal ash. We have continuously maintained that our Deep-Sea Tailings Placement (DSTP) implementation is in alignment with

the applicable standards and regulations. Tailings are an unavoidable aspect of the mining industry, and our duty is to minimise their negative effects. We specifically selected DSTP because it effectively mitigates the impact on the clearing of biodiversity-rich forests surrounding the Batu Hijau mining pit and reduces the risks associated with seismic activity in the area. It is good to note that the biodiversity value in the deep sea is considered lower compared to densely covered forests, and organisms like meiofauna in the deep sea are proven to have the ability to recover and recolonize tailings sediment.

In addition to our mining operations, we have actively supported programs and initiatives that go beyond our core activities. For instance, we have formed partnerships to enhance the conservation efforts of Gili Balu and provided support for the development of the palm sugar industry.

Among AMMAN’s Core Values, which do you identify with the most?

To conduct our business in a responsible and sustainable way, I believe that all AMMAN’s Core Values should come hand in hand, hence why they are identified as such. As an Environment Compliance Manager, **Integrity** and **Health, Safety, Environment and Community** are fundamental in carrying out my responsibilities of managing our impacts and safeguarding the environment. With the rapidly evolving ESG and sustainability landscape, another key Core Value that is just as important is **Creativity and Innovation**. We must be able to apply creativity, innovation and consistency to develop breakthrough solutions to the challenges we face in the work that we do.

What advice do you have for young women, and perhaps young professionals, who would want to pursue a career in mining?

Both men and women are capable of the same things. My advice to young women and professionals who would want to advance in the industry is to keep on learning and to really unlock your potential in doing so. Because the environment around us is always changing, we must be true to our principles of doing good for those around us – the rest will fall into place on their own.

Upholding Human Rights



Management Approach

We are committed to respecting and safeguarding the human rights of everyone impacted by our operations, from exploration, mining, processing, to closure and rehabilitation. This includes our workforce, the communities we operate in, business partners and other stakeholders relevant to our business and subsidiaries.

Our Human Rights Policy, which can be accessed [here](#), underpins our commitment to respecting human rights as defined by key international and Indonesian standards, including:

- The International Bill of Human Rights
- The International Labour Organisation's 1998 Declaration on Fundamental Principles and Rights at Work, as amended in 2022

- The Voluntary Principles on Security and Human Rights (VPSHR)
- United Nations Guiding Principles on Business and Human Rights (UNGPs)
- The United Nations Declaration on the Rights of Indigenous Peoples
- Indonesian Law No. 39/1999 on Human Rights

At AMMAN, we acknowledge that our operations have the potential to impact human rights, both directly and indirectly. We take this responsibility seriously and we have implemented a periodic, independent human rights due diligence process that helps us identify, prevent, and mitigate negative human rights risks and impacts related to our activities. We regularly monitor our human rights performance and are committed to making improvements whenever necessary. We have

also established a grievance mechanism to provide effective access to remedy of adverse human rights impacts due to our activities, and more information can be found [here](#).

As part of our commitment to human rights, we provide regular training and awareness-raising activities to our employees. We also reflect this policy in our Code.

Building a Culture of Equal Opportunity and Non-Discrimination

At AMMAN, we adhere to the principles of equal opportunity, fair treatment, and non-discrimination to provide fair and equal employment opportunities.

We apply these principles in all aspects of employment, including but not limited to, recruitment, compensation, training, and promotion. These are outlined in our Code and Fair Employment Policy, accessible to all employees.

Furthermore, we are committed to preventing and addressing any form of harassment, intimidation, and exploitation, placing a particular focus on protecting the rights of women in the workplace. Our Code outlines strict disciplinary measures against any employee found guilty of bullying, discrimination, harassment, or inciting industrial unrest.

Preventing Child and Forced Labour

As stipulated in our Fair Employment Policy, we denounce child labour, forced labour and human trafficking in our business and throughout our supply chain. We comply with all applicable labour policies,

laws and regulations, including the Indonesian Labour Law and the ILO, which prohibits the employment of individuals below the age of 18 as well as forced labour. To maintain compliance, we have established recruitment guidance for our Human Resources (HR) Department, which outlines our commitment to refusing and withholding employment from underage applicants, applicable to our subsidiaries and business partners.

Upholding Workers' Rights to Association

To facilitate constructive engagement with our employees, AMMAN established a Bipartite Cooperation Institution (*Lembaga Kerja Sama/LKS Bipartit*) in March 2020, in compliance with applicable laws and regulations. The Institution serves as a forum for open communication, consultation, and coordination on labour issues between management and worker representatives. We hold formal meetings every semester between the LKS Bipartit and representatives of our management. The discussions held during these meetings are focused on a range of topics, and minutes of these meetings are reported to the provincial government's manpower office to maintain transparency.

Our HR Department conducts regular visits to other departments to socialise our commitments and address any issues that may arise promptly, improving internal accessibility and understanding. Furthermore, our Company Regulations, which safeguard employee rights to association, are mutually agreed upon by employee representatives, AMMAN, and the Government every two years.

We are proud to report that in 2022, there were no labour strikes or lockout incidents that led to any loss of days.

Strengthening our Security Practices

In implementing our Human Rights Policy, we developed a suite of comprehensive security guidelines, including Incident Deployment, Rules of Engagement and Resolution of Conflict, and Technical Instruction for Security Measures in The National Vital Object of AMMAN. These guidelines are essential for ensuring that our security personnel can manage potential conflicts surrounding our operations in a way that aligns with our commitment to respecting human rights principles. By implementing these guidelines, we can continue to promote a safe and secure environment for our employees and the communities we serve.

We have also invested in relevant training programmes for our security personnel to further reinforce our commitment to responsible and ethical security practices, including those related to VPSHR, the Criminal Law Code, and basic health and safety (H&S) standards. We trained 395 security personnel, including 100% of guards, supervisors and above. The training was delivered over three separate courses, and included personnel provided by third-party organisations.

The table below highlights the number of security personnel working at AMMAN.

Table 12: Total Number of Security Personnel

Position	2020	2021	2022
AMMAN Staff	15	14	14
Supervisor and above	22	22	25
Administration staff	2	5	4
Guard	408	539	373
Total	447	580	416

Throughout 2020 and 2021, we were required to ramp up our guard presence to keep our operational site and hotel-turned-quarantine centres safe amid the COVID-19 outbreak. As the government has since eased mobility restrictions, there was no longer a need to secure quarantine facilities starting from the first quarter of 2022. We plan to increase our security infrastructure and force in future to secure our planned expansion projects.

VPSHR Training for Security Personnel

The VPSHR training for security personnel was designed to educate participants on various aspects of human rights and security duties. Through this programme, participants were trained on 10 categories of human rights and the principles that underpin them. The training also covered security duties that are connected to human rights and how participants can effectively integrate them into their work assignments. We engaged PT G4S Security Service, a global security service provider, to deliver the training.

In the coming years, we intend to deliver our VPSHR training to other relevant departments at AMMAN.



^ We conducted online training for our security personnel on VPSHR, where they learned different types of human rights violations and the appropriate authorities for resolution.

Respecting the Rights of Indigenous Peoples

Mining companies, including ours, can bring long-term benefits to local communities, including Indigenous communities. However, we recognise that mining activities can have a negative impact on culturally significant land, potentially affecting Indigenous Peoples (IPs) and their way of life. To address this, our IPs Technical Standard sets out the minimum requirements for engaging with IPs to reach agreements around project development, assessing and managing potential impacts and reporting on progress. The Standard requires participatory consultation and engagement process with Indigenous communities, following the Free, Prior, and Informed Consent (FPIC)¹⁶ principles, when applicable. This approach ensures that we conduct our engagements in a culturally respectful and appropriate manner.

The 1996 Environmental Impact Assessment of Batu Hijau did not identify any Indigenous People and our proved and probable reserves are not located within or near Indigenous land. However, the Batu Hijau Expansion Environmental and Social Impact Assessment (ESIA), initiated in 2022, has identified one Tau Samawa community within our zone of influence. In line with our Indigenous Peoples Technical Standard, we have commenced the engagement process with these communities.

In addition, the existence of Indigenous land on or near our Elang exploration site is still being studied, as there are different definitions and approaches relating to this matter between national and international regulations, standards and guidelines. We will continue to review the presence and boundaries of Indigenous lands at Elang, and when required, follow our Technical Standard for Indigenous Communities and IPs.

Preserving Cultural Heritage

Our commitment to support the protection of indigenous cultural heritage sites is outlined in our Human Rights Policy, accessible [here](#). We have also been implementing our Cultural Heritage Management Standard since 2017 to ensure that these sites are protected and managed appropriately. The Standard stipulates the minimum requirements for identifying, protecting, and managing cultural heritage within our zones of influence, preventing any unauthorised or undesired disturbances caused by our activities.

In addition to these measures, we allocate a social budget to enhance sustainable tourism, with a specific focus on managing cultural tourism sites and traditions. This initiative aims to promote cultural awareness to preserve these sites even after mining activities end, while also providing income opportunities for local communities.



¹⁶ FPIC, which stands for Free, Prior, and Informed Consent, is an internationally recognised principle that upholds the rights of Indigenous peoples and local communities to participate in decision-making processes concerning projects or activities that may affect their lands, resources, and livelihoods, ensuring that their consent is obtained freely and after being provided with all relevant information.

Ensuring a Safe Working Environment



Management Approach

At AMMAN, we are committed to implementing responsible safety practices and management systems, which include Mine Safety and Occupational Health and Safety (OHS) to provide safe and healthy working conditions.

We take this commitment seriously to prevent harm, injuries, serious accidents, and work-related illnesses (WRI), and mitigate the risk of property damage and production interruption. Our commitment to OHS is detailed in our Health & Safety Policy, which is publicly available [here](#).

Maintaining our Regulatory Safety Compliance

Since 2018, we have been fully committed to implementing the Good Mining Practice, or SMKP, as mandated by the Indonesian Law No. 4 of 2009 and the MEMR Regulation No. 26 of 2018. In doing so, we have also conducted internal audits of our activities. The Good Mining Practice is a set of technical principles that we follow to ensure the responsible exploitation of minerals, while effectively managing and implementing OHS, industrial hygiene, and mining safety operations.

Maintaining our regulatory compliance with the applicable laws and regulations enables us to maintain our license to operate and uphold our commitment to sustainability, as well as to ensure that our operations have a positive impact on the environment and the communities in which we operate. We submit annual reports to the MEMR and the MoEF on the Company's performance, such as through our PROPER report. Our consistent compliance with national regulations is verified by an independent party.

We have also received two awards from the Ministry of Energy and Mineral Resources, namely the Mining Environment Aditama award (*Pengelolaan Lingkungan Hidup Pertambangan*) and the Mineral and Coal Conservation Utama award (*Konservasi Mineral dan Batubara*).

In December 2022, AMMAN was awarded the SNI ISO 45001:2018 certification from PT SUCOFINDO, a recognised certification body, for our Occupational Safety and Health Management Systems (*Sistem Manajemen Keselamatan dan Kesehatan Kerja/SMK3*). This certification reflects our strong commitment to ensuring the health and safety of our employees, while also enabling us to continuously improve our performance in this area.

Integrated Management Systems

Our commitment to safety and sustainability is embodied in our Environmental, Health, and Safety (EHS) Management System, which comprises the Environmental Management System (EMS) and Safety Management System (SMS). These integrated systems operate with shared frameworks, including risk management, to minimise environmental impact, comply with regulations, enhance safety protocols, and proactively address potential challenges.

The integrated system helps achieve SDG 8 (Decent Work and Economic Growth) by ensuring safe and secure working conditions for all workers.

Safety Management System (SMS)

In upholding one of our Core Values of 'Health, Safety, Environment and Community', we implement a comprehensive Safety Management System (SMS) across all areas of our operations. The SMS consists of our Health & Safety Policy, as well as Technical Standards, procedures, and guidelines that apply to various aspects of our operations.

Our SMS undergoes regular external reviews and audits to ensure it aligns with relevant standards, and the company has been ISO 45001:2018 certified since 2022. Some of the key components of our SMS includes:

- **Implementing processes to collect, analyse and report safety performance data** to continuously improve the Company's safety performance.

This includes regular reporting of safety metrics and notifiable events in compliance with the applicable Indonesian standards and regulations

- **Establishing a common and consistent framework for risk management** across AMMAN's operations and facilities, including site risk registers which are prepared and reviewed using a team-based risk process
- **Setting a minimum standard for the provision, selection, use and maintenance of Personal Protective Equipment (PPE)** for personnel working at or visiting the operation in accordance with the applicable Indonesian standards and legislations
- **Identifying and correcting workplace hazards** through daily inspections, and recording and reporting all findings from safety inspections
- **Implementing standards** to ensure chemical handling meets the applicable safety and environmental requirements
- **Developing an emergency procedure** and conducting routine emergency drills to test emergency response and performance
- **Documenting the occupational health programme record**, including employee health status and personal and occupational health histories
- Establishing a **comprehensive injury management system**, incident reporting and investigation procedures
- **Encouraging a safety culture** where every worker can communicate, consult and participate in OHS-related matters through the safety committee, departmental safety meetings and pre-shift meetings
- **Implementing induction and training programmes** for employees and contractors, including maintaining records in the Learning Management System
- **Establishing standards for first aid efforts** in workplace accidents and regularly inspecting First Aid, First Aid Box, Shower and Eyewash
- **Implementing a detailed contractor management processes**, including pre-qualification assessments, health and safety reporting as well as training
- Deploying initiatives aimed at **improving safety culture and behaviour**, such as the Vital Behaviour programme

Healthy Living at our Batu Hijau Site

Batu Hijau is more than just a mining site; it is a thriving community that serves as a home to our employees and their families. At AMMAN, we are committed to promoting a healthy work-life balance for our workforce and ensuring a safe environment for all.

Our town site covers 200 hectares and currently caters to the needs of over 5,000 workers and their families. To support their livelihoods, we have established recreational facilities such as a gym, swimming pool, playground, golf course, and tennis courts. We also have an international school on-site (primary and secondary), providing access to education for local and expatriate children.

We have partnered with local fitness trainers to provide classes at our gym and pool, encouraging everyone, especially children, to participate in sporting and recreational activities. Furthermore, we have a 24/7 medical clinic on-site, equipped to handle any potential emergency and cater to the everyday medical needs of our employees, their families, and the surrounding community.



Our Performance

The following table and figures outline our key OHS performance¹⁷. A full list of our OHS performance data can be accessed in the Appendix 1.

Table 13: Key Health & Safety Metrics

	2020		2021		2022	
	Employees	Contractor	Employees	Contractor	Employees	Contractor
Fatalities	0	0	0	1	0	0
Lost Time Injuries (LTI)	4	8	1	8	1	5
Total Recordable Injuries (TRI)	4	22	1	20	8	18

Whilst there was some variability in the safety performance for employees over the past few years, the combined TRIFR rate for all workers continued to decrease.

¹⁷ Scope of workforce data: 2020 and 2021 – includes AMNT and AMIG. 2022 – includes AMNT, AMIG and AMIN. Rates calculated based on 200,000 hours worked.

Figure 24: Non-fatal Days Lost Cases

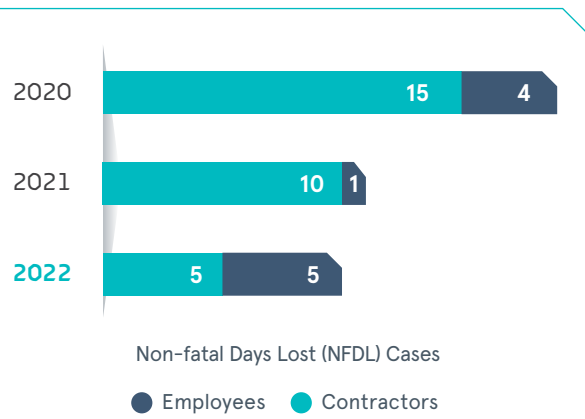


Figure 25: Total Recordable Injury Frequency Rate

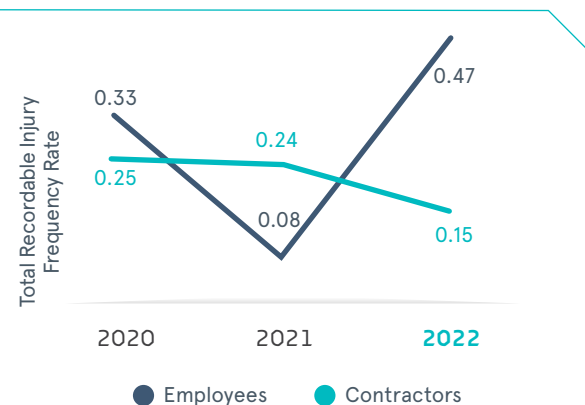
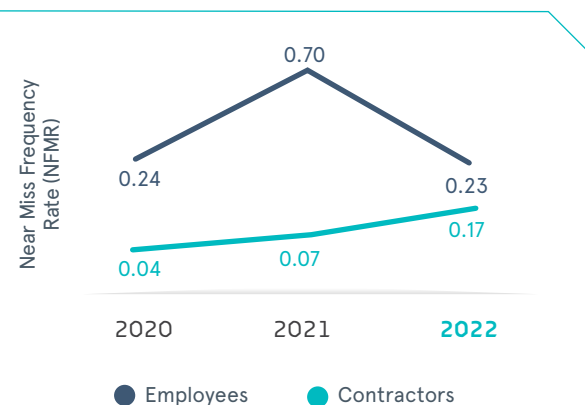


Figure 26: Near Miss Frequency Rate



Our Programmes and Initiatives

Maintaining Workforce Safety through Training

As part of our initiative to continuously improve our safety performance, we conducted extensive series of health, safety and emergency response training sessions for both employees and contractors in 2022. Our employees underwent an average of 22 training hours, while our contractors received an average of 13 training hours during this period.

These comprehensive training sessions encompassed a diverse range of modules, selected from a pool of 59 available options. Among 59 modules available, some key training modules are listed below:

- **General Induction:** Ensuring all workers are equipped with essential knowledge and guidelines relevant to our operations and safety protocols.
- **Process & Support Safety:** Focusing on maintaining the highest safety standards during various processes and providing support to enhance overall safety measures.
- **Mining Safety:** Addressing specific safety concerns and measures within the mining environment to protect our workforce effectively.
- **Hazard Identification and Risk Management:** Equipping employees and contractors with the skills to identify potential hazards and manage risks efficiently.
- **Log Out Tag Out (LOTO) First Aid:** Vital training covering procedures for locking and tagging equipment to prevent accidents and comprehensive first aid training to respond promptly to emergencies.
- **Working at Heights and Basic Sea Survival:** Preparing personnel to work at elevated locations and providing essential sea survival techniques for those operating in marine environments.



Key Focuses on Ensuring a Safe Working Environment at AMMAN

Health of Employees

At AMMAN, we promote occupational health by conducting pre-employment health screenings, annual health check-ups, special health assessments, and post-employment health evaluations. Additionally, the Company provides fitness facilities for employees living within AMMAN's premises, offers suitable accommodation and nutritious meals, and operates primary healthcare facilities for consultations to maintain employee's optimal health.

Our goal is to ensure that employees are in excellent physical condition and possess high productivity while performing their duties.

Competency of Employees

To meet the National Work Competency Standards for every job category, we conduct competency tests to assess technical, operational, and safety-related knowledge. This process begins with a review of worker competency certificates based on their area of expertise, followed by performance evaluations conducted by assessors appointed by the Company. We also assess the attitudes and track records of our employees to ensure they can carry out operational tasks and managing risks associated with their work activities.

The Functionality of Work Equipment

We are determined to comply with the Equipment Feasibility Standards for mining operational safety. We conduct both internal and external feasibility inspections for all equipment prior to entering our sites. Upon arrival at the site, the equipment undergoes further inspections, and we conduct

periodic maintenance checks for equipment used by AMMAN and our contractors. Our drivers and equipment operators are required to conduct pre-start inspections for all equipment to be used in their operational activities, ensuring that all equipment used is in proper working condition.

Providing a Decent Work Environment

To ensure a healthy, safe, and secure work environment, we have conducted a Health Risk Assessment to identify potential health risks in the workplace. Based on the assessment, we have established controls according to the Hierarchy of Control (HoC) and conducted regular monitoring by both internal and independent parties.

We take immediate corrective actions and report our work environment accountability to the government. Our goal is to maintain a healthy work environment and keep our employees safe and secure while on the job.

HSE Leading Factors

We take a proactive approach to foster a safety culture that promotes productive performance across all organisational components. This includes:

- Conducting safety meetings (such as pre-shift inspections, monthly safety meetings, and safety committee meetings)
- Performing inspections (such as pre-use and general inspections)
- Encouraging interaction (such as safety interactions and observation tasks)
- Managing employee health (such as medical check-ups, drug and alcohol testing)

Note: In HSE, the term 'leading factor' refers to the primary or most significant cause of an incident or accident.

08 Preserving Environment





Upholding
Ethics



Advancing
People



**Preserving
Environment**



Managing
Resources

We are committed to responsibly managing our environmental impacts as an integral part of our business to ensure a healthy and sustainable, environmental future.

To achieve this, we incorporate a life cycle perspective to drive continuous improvement in our environmental stewardship and sustainable operational practices. The aim is to minimise risks to both human health and the environment, and this commitment is upheld throughout all stages of mining, from exploration, project development, to operations and closure.

Our implementation of the Environmental Management System (EMS), developed in alignment with ISO 14001:2015, underpins this commitment. The EMS implementation is subject to both internal audit reviews and external ISO certification audits, which further support our commitment to environmental stewardship.

The Preserving Environment pillars comprises material topics "Tailings Management", "Biodiversity", "Air Quality" and "Climate Change (GHG)".



Avoided approximately

40,000 tCO₂e

from the

**Sumbawa Solar PV
Power Plant**



Formed a partnership with the Department of Maritime Affairs and Fisheries of West Nusa Tenggara Province to improve the management of

**Gili Balu
Conservation
Area**

from 2022 and 2026



Conducted the fourth

**Deep Sea Tailings
Placement (DSTP)
Due Diligence**

with no unacceptable
impacts identified



Environmental Management Policy

As an integral part of the EMS, our Environmental Policy outlines our commitments to responsibly manage our impacts on the environment. These commitments include striving to go beyond compliance when appropriate, implementing risk management processes, establishing measurable environmental objectives and targets, providing training to our workers, monitoring and evaluating our performance, and engaging with stakeholders as required. The Policy can be accessed [here](#).

In addition, we have developed and implemented nine Technical Standards which define the minimum requirements to protect human health

and the ecosystem, prevent uncontrolled releases of emissions and effluents to the environment, manage process fluids, and set requirements for closure and reclamation.

These Technical Standards are listed as follows:



While our management approach aligns closely with the IFC PS, the ESDD completed in 2022, identified some areas for improvement, specifically relating to IFC PS 1 (Assessment and Management of Environmental and Social Risks), PS 3 (Resource Efficiency and Pollution Prevention), PS 4 (Community Health, Security and Safety), and PS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources). These recommendations include updating the Emergency Response Plan with risks associated with the LNG facilities, reviewing the Company’s grievance mechanism, assessing the capacity of wastewater discharge ponds to address the overflow during exceptionally high rainfall discharge events, managing traffic and road repair caused by the increased traffic

during the construction of new projects, improving the identification of Critical Habitats¹⁸, and updating the Batu Hijau Biodiversity Management Plan to achieve the objectives of PS 6. Moving forward, and in the spirit of continuous improvement, these findings will be incorporated into the planned improvements for our EMS.

In addition to implementing robust procedures, we conduct comprehensive monitoring programmes to assess environmental impacts and performance. The results of these programmes are reported internally through management reviews and externally to regulatory bodies annually in accordance with the applicable regulatory requirements.

¹⁸ As defined by IFC PS 6, a Critical Habitat is an area with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species, (ii) habitat of significant importance to endemic and/or restricted-range species, (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species, (iv) highly threatened and/or unique ecosystems, and/or (v) areas associated with key evolutionary processes.

Responsible Tailings Management

Management Approach

Tailings management refers to the process of handling waste materials, also known as tailings, that are produced during mining and mineral extraction. Tailings can contain heavy metals, chemicals, and other pollutants that can harm the environment and human health if not managed properly.

The proper management of tailings helps to minimise the impact on the environment by preventing leaks and spills, maximising metal recovery and controlling the release of pollutants.

At AMMAN, our approach to tailings management includes:

- Detailed modelling and impact assessments
- Robust engineering and environmental controls from the ore processing plant to the outfall location
- Detailed and iterative scientific studies
- A comprehensive and assured Environmental, Human Health, and Social monitoring program
- A planned and practiced Emergency Response Plan
- Engagement with potentially affected people

Selection of Tailings Disposal Method

The Batu Hijau mining operation is situated on a mountain with a vast natural forest, making it a challenge to establish Tailings Storage Facilities (TSFs) without clearing a significant amount of land. Additionally, the site is situated on Sumbawa Island, which is prone to seismic activity and high annual rainfall.

To ensure that the disposal of tailings is carried out safely, extensive scientific studies have been conducted since 1994. These studies examined various physical, biological and oceanographic processes, including climate and the properties of the tailings.

After assessing and comparing various tailings storage options on their potential environmental risks and social impacts, and consulting with the Government of Indonesia, it was concluded that DSTP was the preferred method of disposal. This method eliminates the need for, and risks associated with, tailings dams for the storage of large volumes of tailings, and aligns with the aim of minimising harm to people and the environment, as well as mitigating the risks associated with earthquakes.

To regulate the operation of the DSTP, a specific permit was issued, which outlines operational parameters, management practices, monitoring requirements, and reporting obligations. The DSTP permit has been continuously extended by the Government of Indonesia since the start of the Batu Hijau operations in 1999, with the latest extension being granted in March 2022.

It is important to note that several of the requirements outlined in the Global Industry Standard on Tailings Management (GISTM) are not relevant to DSTP, as the GISTM primarily focuses on the management of tailings on land. The challenges and risks associated with DSTP are distinct from those of terrestrial tailings management. Nevertheless, we are aligning our practices to several requirements of the GISTM which are applicable to DSTP to achieve the ultimate goal of minimising harm to people and the environment.



AMMAN Tailings Facility

The tailings at AMMAN consist of a slurry, comprising 25% to 30% of solids, which are first sent to a deaeration tank to eliminate air bubbles. Subsequently, the tailings flow through an overland steel pipeline before being discharged through a seabed pipeline outfall at a water depth of 125 metres.

The table below provides an overview of the deep-sea tailings facility at AMMAN:

Table 14: Deep Sea Tailings Facility

Facility name	Deep Sea Tailings Placement (DSTP)
Location	Batu Hijau Project, Senunu Canyon and Lombok Basin, situated southwest of Sumbawa Island
Ownership status	Owned and operated by AMNT, a subsidiary of AMMAN
Operational status	Active
Construction method	Other ¹⁹ DSTP includes tailings deaeration tank, onshore pipe (6km), offshore pipe (3.4km) with discharge depth at 125 Metres Below Sea Level (MBSL), with most tailings settling at 3000–4000 MBSL. DSTP does not require the use of a tailings dam which eliminates associated risks.
Maximum permitted total tailings discharge	51,100,000 tonnes (dry basis) per year, as per Tailings Dumping Technical Approval S.219/2022
Current amount of tailings discharged	866,767,353 cumulative tonnes (dry basis) by the end of 2022 40,242,758 tonnes (dry basis) in 2022
Consequence classification	Not applicable ²⁰ . Our DSTP does not require construction of a tailings dam which eliminates associated risks and consequences.
Date of most recent independent technical review	The latest independent technical review of marine environmental impacts was conducted in 2022 by SAMS Enterprise, and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency. Between 2020 and 2022, a five-yearly audit was conducted by SUCOFINDO, an independent auditor on behalf of the MoEF.
Material findings	None. There were no major non-compliances or material findings in 2020–2022.
Mitigation measures	Not required. We operate our DSTP in compliance with the Government of Indonesia's Tailings Dumping Technical Approval S.219/2022.
Site-specific Emergency Preparedness and Response Plan (EPRP)	Yes. We have two offshore tailings pipelines, one of which is operational while the other serves as a backup. If there is ever an offshore leak (which occurred once during operations in 2005), we will halt operations and switch to using the spare pipeline before resuming normal activities.
Stakeholder engagement and training	In 2022, a tailings socialisation activity was combined with a training drill for the DSTP Emergency Response Plan. The purpose of the activity was to ensure relevant parties are aware of their responsibilities, and to foster cooperation between regional government agencies and local communities in how to manage, respond and recover from tailings spills.

¹⁹ DSTP does not fall into the categorisation of construction method defined by the International Council on Mining and Metals (ICMM) which are downstream, upstream, or centreline.

²⁰ The Consequence Classification Matrix outlined in Requirement 4.1 of the GISTM is not applicable to DSTP as it provides consequences for dam failure, which is not a relevant scenario for AMMAN.



Monitoring of Deep Sea Tailings pipeline thickness

Tailings Management Processes

We have developed and implemented a Tailings and Heap Leach Management Technical Standard which sets the minimum requirements for the design and management of TSFs, DSTP systems and Heap Leach Facilities to protect the ecosystem, prevent uncontrolled releases to the environment, manage process fluids, and set requirements for closure and reclamation. This standard applies to all our operations throughout the

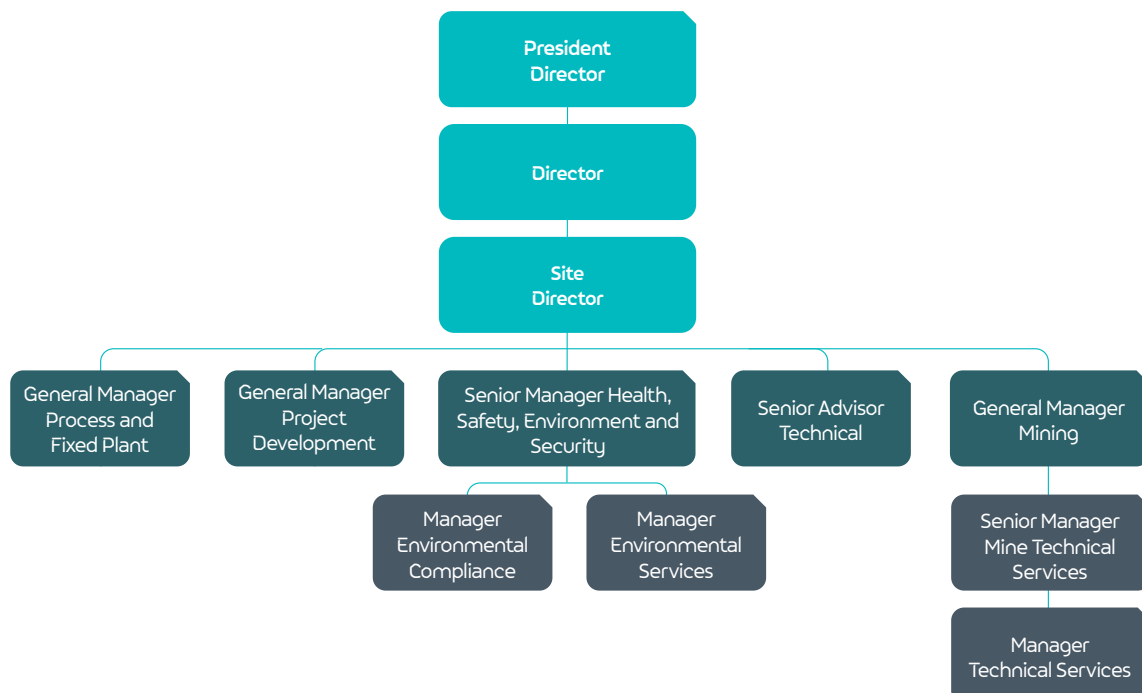
entire mining process, including exploration, design, construction, operation, closure, and post-closure phases for onshore and offshore tailings facilities.

We are committed to ensuring the maintenance and safe operation of our tailings system to the highest international standard. Since 1994, we have updated our models and impact assessments six times through Addendums to the Environmental Impact Assessment, starting from 1996.

In 2021, we completed a specific Environmental and Social Impact Assessment (ESIA) to assess various options associated with expanding the DSTP. The report concluded that the risk factors associated with DSTP have been effectively minimised through design safeguards and operating procedures.

The most senior role responsible for management of our tailings activities is held by our Batu Hijau Site Director, who simultaneously acts as our Mine Technical Head. The Site Director's primary responsibility is to deliver mining and processing operations in accordance with GIIP, which includes the management of tailings. The Board of Directors is accountable for ensuring that adequate resources are available for overseeing and supervising tailings management. Furthermore, the other departments offer support in line with their respective primary tasks and functions.

Figure 27: Tailings Management Structure

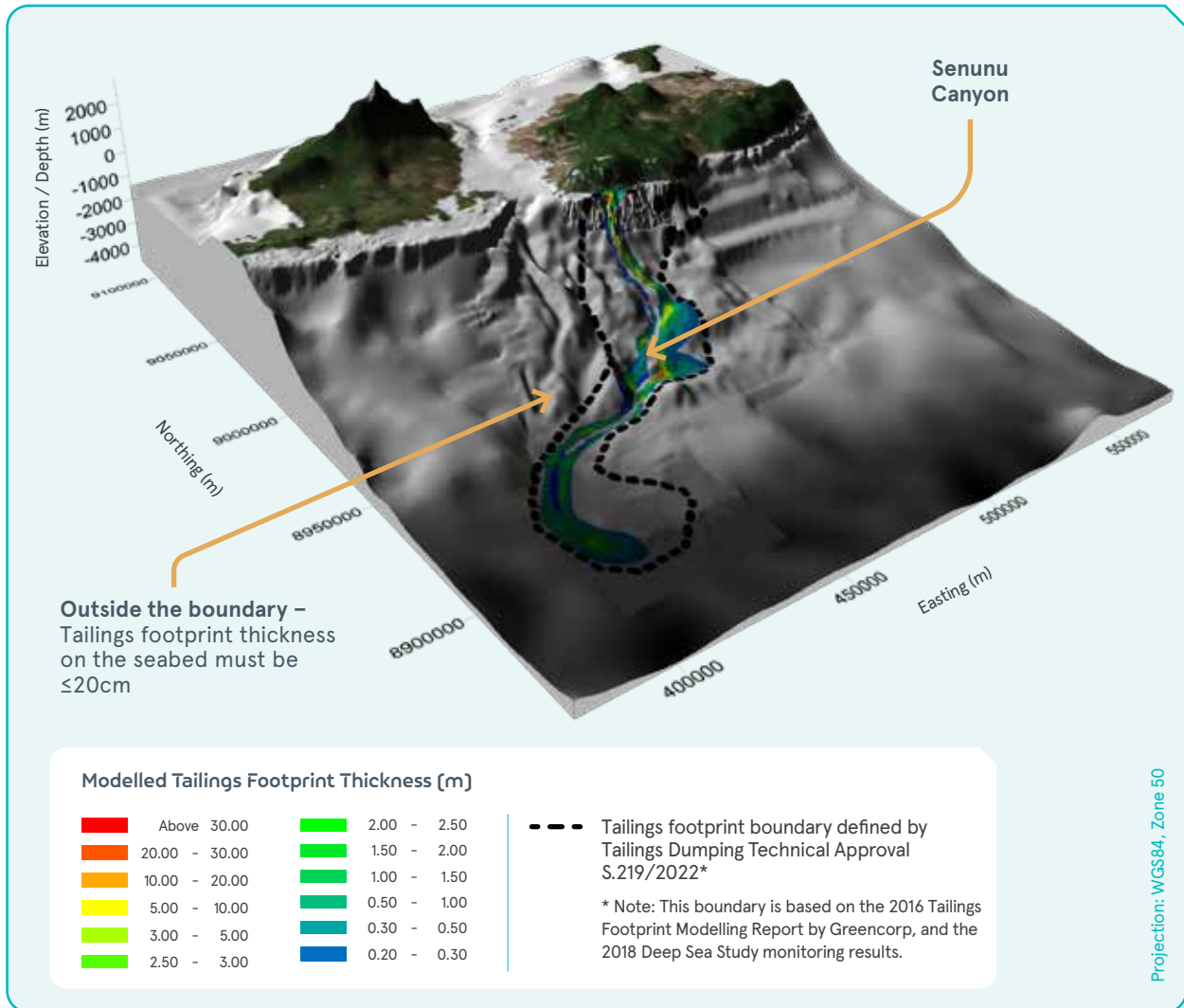


Tailings Monitoring

Modelling of Tailings Impacts

The 1996 Batu Hijau Environmental Impact Assessment, based on modelling, predicted that the impact of tailings would be confined to depths greater than 100m below sea level, and monitoring results over the past 20 years have confirmed this prediction. The tailings footprint remains consistent with the initial prediction, and recent modelling shows that the tailings will continue to accumulate within Senunu Canyon, and in compliance with the applicable regulations.

Figure 28: Tailings Flow Model Footprint to 2027



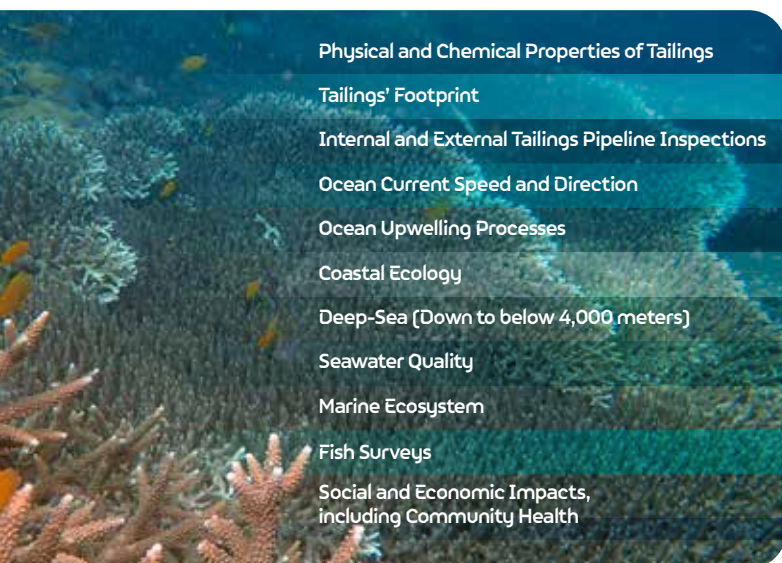
Life-of-Mine sub-sea tailings flow model footprint to 2027. Note this is an assumed depositional footprint (not actual) modelled in 2014 using DHI Water Modelling Software.

Monitoring of Tailings Impacts

At AMMAN, we have internal controls and procedures to monitor the composition of the tailings prior to discharge and take action as appropriate. This includes conducting continuous monitoring and adjustment of pH and metal concentrations to control the tailings quality.

To mitigate any potential environmental and social impacts associated with DSTP, we undertake regular and comprehensive monitoring and scientific research studies for environmental, human health and social aspects. Scientific studies are conducted at varying frequencies, ranging from six months to every five years. Additionally, daily or continuous effluent monitoring and monthly seawater column surveys are performed.

These monitoring programmes are supported by various independent scientific studies and include:



These studies, and the associated compliance/performance audits and inspections, are undertaken by several external institutions including:

- Research and Innovation National Body (BRIN), previously Indonesian Science Institute (LIPI)
- Experts from various Universities in Indonesia (including University of Mataram, and IPB University)
- Ministry of Environment and Forestry (MoEF)
- SUCOFINDO – a private company engaged by MoEF to audit the DSTP
- Ministry of Energy and Mineral Resources (MEMR)
- Regional Environmental Agencies (DLHK NTB and DLH KSB)
- Ministry of Marine and Fisheries Affairs (KKP)
- Regional Marine Fisheries Agency (DKP NTB and DKP KSB)
- CSIRO Australia – Due Diligence Studies
- SAMS Scotland – Due Diligence Studies

Emergency Response Planning

We implement a comprehensive and risk-based Emergency Preparedness and Response Plan (EPRP) to ensure the safety of our operations. As part of the Hazardous Material and Hazardous Waste Management Emergency Programme, our tailings emergency programme has been established through several rounds of internal stakeholder engagements and is reviewed periodically to ensure its effectiveness. We also conduct related annual socialisation and training events involving local communities and regional government agencies, as described further below.

We also follow Risk Management Procedures to identify potential tailings emergency risks and the process is

documented in our risk register. The tailings spill risk has been modelled to inform the emergency response planning. Our commitment to continuous improvement in this area is one of our key priorities, and we remain dedicated to ensuring the safety and sustainability of our operations.

Engagement with Local Community

Our long-standing social and community programmes have consistently shown that DSTP has no impact on community livelihood and health. Additionally, our perception survey conducted in 2020 revealed a high level of community acceptance towards the DSTP. To maintain strong community ties, we regularly engage with local residents through socialisation meetings.

Tailings Disposal Rates

Table 15: Our Tailings Disposal Rates

	2020	2021	2022
Total tailings (tonnes dry basis)	34,315,738	28,430,109	40,242,758
Concentrate production (tonnes dry basis)	578,965	477,151	792,892
Tailings intensity (tailings / concentrate produced)	59.3	59.6	50.8

Our Programmes and Initiatives

DSTP Due Diligence Study

We conducted the fourth environmental assessment of our DSTP monitoring programme in 2022. The assessment involved on-site sample collection and independent verification of the results, supported by experts from Scottish Association for Marine Science (SAMS) and CSIRO. The study focused on evaluating the tailings footprint using advanced protocols for collection and sampling. The SAMS Field Survey team confirmed that AMMAN's environmental monitoring of the inshore environment is conducted to a high scientific standard in line with international best practice.

At AMMAN, we diligently adhere to the established protocols for DSTP monitoring.


We make it a priority to revisit the same sampling stations over time, ensuring the collection of reliable and comprehensive long-term observations of the marine environment surrounding Batu Hijau.

Key findings of DSTP Due Diligence

To ensure accuracy, duplicate samples collected during the survey were sent to CSIRO for cross-comparison with data from our own laboratories. Results from the 2022 Due Diligence study were also compared with previous studies conducted by CSIRO.

According to CSIRO's independent analysis in 2022, the footprint of DSTP discharge from Batu Hijau is primarily localised at a water depth >125 MBSL and in sediments



 DSTP Due Diligence study utilising monitoring equipment (top) and analysis of samples in AMMAN laboratory (bottom).

near the pipe outlet. The metal concentrations in the tailings liquid and marine sediments were below regulatory limits and complied with Indonesian regulations. In addition, measurements of concentrations of metals in demersal fish and filter-feeding organisms²¹ indicate that the DSTP did not impact these organisms, and that they are safe for human consumption.

Further reading on the results of the DSTP Due Diligence study can be found on our website through this [link](#).

²¹ Demersal fish, also known as groundfish, live and feed on or near the bottom of the sea. Meanwhile, Filter-feeder organisms feed by straining suspended matter and food particles from water.

Socialisation of our Tailings Management with Local Communities

At AMMAN, we conduct annual socialisation activities to inform the surrounding community about our tailings monitoring efforts, as required by our tailings disposal permit.

In 2021, we organised a socialisation event about our tailings monitoring efforts in Sekongkang Village, Maluku Sub-district, and invited the surrounding communities to participate. We conducted a joint sampling activity with our Environmental Department personnel, sharing an overview of our intertidal survey research activities, such as surveys of seagrass, coral, and major biota in the ecosystem.

In 2022, the tailings socialisation activity was combined with a training drill for the DSTP Emergency Response Plan. The purpose of the activity was to ensure relevant parties are aware of their responsibilities, and to foster cooperation between regional government agencies and local communities in how to manage, respond and recover from tailings spills.

Participants in the training included local communities, village officials, representatives of the West Sumbawa Regency Environmental Service and officers from the National Board for Disaster Management (*Badan Nasional Penanggulangan Bencana/BNPB*) as well as the police force.



Presentation of our tailings monitoring activities to the local community representatives



Practical activity of taking samples from intertidal ecosystem and examine them



Emergency drill to respond pipeline leaks and tailings spills.



Socialisation session and discussion of DSTP emergency response with local communities.

Safeguarding Biodiversity

Management Approach

Since construction started in 1987, a total of 3,291 hectares of the Batu Hijau concession area has been cleared for mining activities, waste rock stacking, infrastructure development, and exploration. This clearance includes expansion efforts at the Batu Hijau site starting in 2021 for a new waste rock dump, expansion of our ore processing plant, construction of a liquefied natural gas (LNG) gas terminal and power plant, construction of a smelter and precious metal refinery, and other related activities.

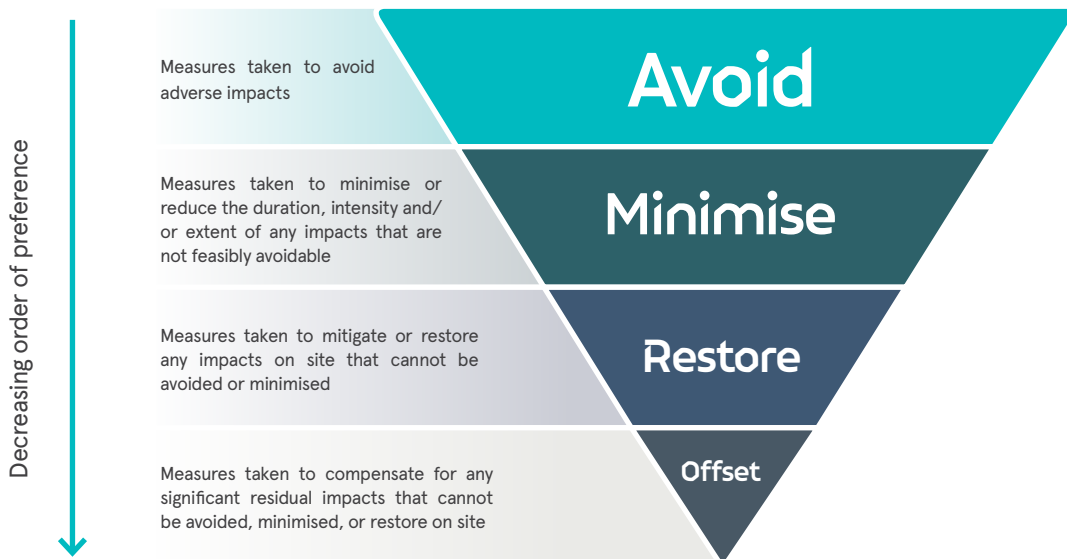
At AMMAN, our Biodiversity Management Technical Standard serves as a guideline for effectively managing biodiversity impacts across our operations. To achieve this, we have developed and implemented a Biodiversity Management Plan (BMP) that necessitates an awareness of the area's biodiversity context, identifies risks, and includes a Biodiversity Action Plan (BAP) based on the Mitigation Hierarchy.

A BAP is a plan that deals with important elements of biodiversity management and the challenges associated with designing and implementing mitigation measures. It is created in response to existing and anticipated



project impacts that are identified through an EIA, RKL-RPL, and data from previous baseline studies, and is subject to ongoing review to ensure the actions are achieving the required outcomes. The BAP is established for each priority biodiversity feature to ensure that the Mitigation Hierarchy is implemented systematically and consistently, as follows:

Mitigation Hierarchy



The BMP aims to achieve a "net gain"²² for critical habitats and "no net loss"²³ for natural habitat and other species. In utilising the Mitigation Hierarchy, avoidance is given priority, while offsets are only undertaken if significant residual impacts remain and are unavoidable after all previous steps in the Mitigation Hierarchy have been fully assessed and implemented.

Policies and Practices for Areas with Protected Conservation Status and/or Critical Habitat

Our BMP requires the identification of critical habitats and areas of importance to endangered species to prioritise conservation activities outlined in the BAP. The BMP outlines criteria for identifying critical habitats in accordance with globally recognised standards and lists several features that qualify and potentially trigger the

assessment of critical habitats. As per the requirements of IFC PS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources), we assessed broad Critical Habitat Areas (CHA) surrounding the Batu Hijau site and divided them into Discrete Management Units (DMU) in both marine, coastal and terrestrial categories.

We continue to review the DMUs to more accurately determine the specific habitats of endangered species. To achieve a "net gain" of critically endangered species and align with the IFC PS requirements on critical habitat, we intend to conduct further investigations into this issue, and provide robust management measures that avoid critical habitat areas if required.

Our Performance

All our proven and probable reserves in Batu Hijau and Elang Project are situated near natural reserves, protected forests, and habitats of endangered species. The following table outlines the location of our reserves take out near protected areas or areas with significant biodiversity value:

Table 16: Sites near Protected Areas or Areas with Significant Biodiversity Value

Name of Mining Site	Percentage of mining site near protected area	Reserves grade ²⁴ (in percentage of metal content)		Endangered Species (IUCN Status ²⁵)
		Proved	Probable	
Batu Hijau	100% of mining area is less than 5km from the Jereweh Nature Reserve Area	Cu 0.43 % Au 0.48 g/t Ag 1.34 g/t	Cu 0.33 % Au 0.19 g/t Ag 0.77 g/t	<ul style="list-style-type: none"> • Flores Hawk-eagle (CR) • Yellow-crested Cockatoo (CR) • Chestnut-capped Thrush (EN) • Tenggara Hill Myna (EN) • Scarlet-breasted Lorikeet (EN)
Elang Project	100% of proposed mining area is less than 5km from Protected Forest Area as designated by Indonesia's MoEF	Cu 0.35 % Au 0.35 g/t Ag 1.00 g/t	Cu 0.25 % Au 0.24 g/t Ag 0.89 g/t	<ul style="list-style-type: none"> • Flores Hawk-eagle (CR) • Yellow-crested Cockatoo (CR) • Tenggara Hill Myna (EN)

²² Net gains are additional conservation outcomes that can be achieved for the biodiversity values for which the critical habitat was designated. Net gains may be achieved through the development of a biodiversity offset and/or, through the implementation of programs that could be implemented *in situ* (in its original space) to enhance habitat and protect and conserve biodiversity.

²³ No net loss is defined as the point at which project-related impacts on biodiversity are balanced by measures taken to avoid and minimize the project's impacts, to undertake on-site restoration and finally to offset significant residual impacts, if any, on an appropriate geographic scale (e.g., local, landscape-level, national, regional).

²⁴ The reserve grade is based on the reserves estimate as of December 31, 2022.

²⁵ In the IUCN Red List of Threatened Species, Critically Endangered (CR) species are considered to face an extremely high risk of extinction in the wild, while Endangered (EN) species are considered to face a very high risk of extinction in the wild.

As part of our commitment to maintaining a balanced ecosystem, we identify endangered species and protected habitats and implement appropriate protective measures.

The AMNT BMP recognises three critically endangered species in the Batu Hijau area: the Flores Hawk-eagle (*Nisaetus floris*), the Yellow-crested Cockatoo (*Cacatua sulphurea*), and the Hawksbill Turtle (*Eretmochelys imbricata*). In addition, the surrounding project area is home to four endangered species: the Chestnut-capped Thrush (*Geokichla interpres*), Tenggara Hill Myna (*Gracula venerata*), the Scarlet-breasted Lorikeet (*Trichoglossus forsteni*), and the Green Turtle (*Chelonia mydas*). The Batu Hijau site area also includes several endemic species.

There are three protected forests, as indicated by MoEF, in the vicinity of AMMAN's IUPK area:

- Natural Reserve Area Jereweh (adjacent to Batu Hijau)
- Natural Reserve Pedauh (distance 4 km away)
- Danau Rawa Taliwang Nature Recreational Park (distance approximately 22 km)

The closest marine protected area to the Batu Hijau site is the Taman Pulau Kecil (TPK) Conservation Area. It is located at a distance of approximately 40 km and situated in Sumbawa Barat Sub-district, which was established as a Regional Water Conservation Area covering 6,728 hectares through the Sumbawa Barat Regent's Decree No. 9/2014. Furthermore, the Batu Hijau site falls within the Tatar Sepang Important Bird Area (IBA), where a variety of migratory species have been sighted.

Watershed Rehabilitation

As part of our obligation under the MoEF Regulation and Forest Area Use Agreement (*Persetujuan Penggunaan Kawasan Hutan/PPKH*), we have undertaken watershed rehabilitation programmes called *Rehabilitasi Daerah Aliran Sungai* (Rehab DAS). Since 2019, the program's planting initiatives have covered a total of 6,129 hectares in Lombok and Sumbawa. In the current reporting year, we rehabilitated an area of 138 hectares in the Suela Sub-district, East Lombok Regency. Monitoring indicates that the protected forests we have planted are growing well.

In addition to watershed rehabilitation, we also conduct revegetation as part of our concurrent reclamation programmes, which is discussed further on page 121-125. We are also actively managing acid rock drainage, which is detailed on page 111-114.

Our Programmes and Initiatives

Gili Balu Conservation Area

Located in West Sumbawa Regency, Gili Balu comprises eight small islands with a total area of 5,845 hectares. We have been working to conserve the marine environment of Gili Balu since 2010. This involves monitoring the health of mangroves, seagrass beds, and natural coral reefs, as well as placing reef balls²⁶ and protecting Green Turtles (*Chelonia mydas*).

The success of our efforts is evident from the designation of Gili Balu as a Conservation Area via a Decree from Ministry of Marine Affairs and Fisheries in 2021, as well as the presence of adult green turtles which were identified at the site where reef balls were deployed.

To further enhance the positive impact on the Gili Balu conservation area, we have partnered with the Office of Maritime Affairs and Fisheries of West Nusa Tenggara Province. This partnership aims to improve the management of Gili Balu during the period 2022 to 2026, and we have committed to provide financial support, facilities, trainers, personnel, and media design and production to help achieve the objectives.

²⁶ Reef ball is a registered trademark for a type of artificial reef that mimics the structure and function of natural coral reefs. It is made of a special type of concrete and is designed to provide habitats for marine life, including fish and corals.

The partnership aims to unlock Gili Balu’s great potential in ecological, economic, and socio-cultural aspects, as illustrated below.

Figure 29: Our 5-Year Gili Balu Marine Conservation Partnership



The partnership was launched on World Environment Day, June 5th 2022, with numerous activities such as reef ball dive monitoring, beach clean-up, snorkelling and composting organic waste.

Programmes covered in Gili Balu conservation partnership involve the following activities:

- **Monitoring of fish habitat and population**
 - **Target:** Obtain habitat data and information in the monitoring area periodically
 - **Programme:** Monitoring the mangrove ecosystem, seagrass beds, and coral reefs in Gili Belang as well as habitat inventory and mapping in Gili Balu
- **Protection and rehabilitation of fish populations and habitat**
 - **Target:** Coral reef covers on reef balls increase by 75%
 - **Programme:** Deployment of artificial reefs (reef balls) in Gili Kenawa
- **Capacity building of the local communities**
 - **Target:** 100 people obtain the benefits of capacity building programmes
 - **Programme:** Provide assistance to Local Tourism Community (*Pokdarwis*) to improve eco-tourism at Gili Balu by providing training to providers of water sports services, diving, tour guides, and hospitality
- **Provision and maintenance of facilities and infrastructure in Gili Balu**
 - **Target:** Provide facilities and infrastructures for capacity building and provide technical guidance to fishermen
 - **Programme:** Provide capacity building for fishermen groups and technical guidance about sustainable fisheries
- **Improvement of the service for sustainable tourism and fisheries**
 - **Target:** Increase public understanding and awareness for conservation activities and the marine environment
 - **Programme:** Provide campaign materials via pamphlets or digital means all around Gili Balu island, Poto Tano wharf, public areas, educational institutions, etc.

The conservation efforts of Gili Balu play a significant role in achieving Sustainable Development Goal 5, which aims to promote sustainable tourism that provides employment opportunities and showcases local culture and products. It also contributes to SDG 14 by preserving marine areas.



^ The signing of the partnership agreement between Department of Maritime Affairs and Fisheries of West Nusa Tenggara Province and AMMAN for the conservation programme in Gili Balu



^ Beach Clean Up at Kenawa Island by AMMAN employees and business partners and the local communities



^ Monitoring of reef balls by AMMAN and environmental activists



^ Demonstration of composting organic waste during the launching of Gili Balu Conservation Program on June 5, 2022, which coincides with the World Environment Day

Sea Turtles Conservation Programme

The conservation of sea turtles is a high priority for both AMMAN and the Government of Sumbawa Barat Regency, with a specific focus on four species: green, hawksbill, olive ridley, and leatherback turtles. Our turtle conservation programme involves several initiatives, including:

- The conservation of turtle eggs and the release of hatchlings through internal or joint programmes with central/regional government. Over 55,588 hatchlings have been released into the sea from eight different beaches in West Sumbawa Regency between 2005 and 2022.
- Monitoring of sea turtles through internal or joint programmes with the government. In the turtle nesting centre of Talonang, it was found that the number of turtles laying eggs is stable throughout the year, with a maximum of eight to 11 turtles laying eggs in a single night, with peak season from November to April.
- Educational programmes on sea turtle conservation in schools which are designed to raise awareness of protecting sea turtles. Since 2004 these programmes have reached 450 students and teachers in 12 schools and communities across six villages.

Reef Ball Programme

A reef ball is a concrete structure used underwater to attract and support coral reef larvae. Licensed by the Reefball Foundation, it is recognised as a highly effective method for global coral reef restoration. The programme focuses on restoring and conserving coral reef communities in Batu Hijau waters that have been damaged by destructive fishing practices, such as those involving the use of explosives or poisons, as well as other human-caused factors.

Reef balls were deployed from 2004 to 2019 in various locations around Batu Hijau, including Benete, Maluku, Lawar, and Kenawa, and AMMAN has deployed a total of 2,017 reef balls since acquiring the site. Additionally, we partnered with the University of Mataram to assist in constructing and deploying 15 reef balls in Gili Trawangan.



The latest monitoring showed that reef balls from this programme have been populated with a mix of hard and soft corals. Following the deployment of the reef balls, the coral communities are observed to be successfully regenerating.

Protecting Air Quality

Management Approach

Air pollution generated by production activities and supporting facilities is a significant environmental challenge for mining companies. Implementing effective air quality management, utilising technology, and process improvements can help companies like AMMAN comply with increasingly stricter air quality regulations.

At AMMAN, we are committed to reducing the emission of air pollutants from our operations, and comply with the emission limits and ambient air quality²⁷ standards in Indonesia. We aim to avoid or mitigate negative environmental impacts by implementing comprehensive strategies as outlined by our Pollution Prevention and Pollution Abatement processes. We avoid the release of air pollutants to the environment whenever possible. If avoidance is not feasible, we adopt measures to control the intensity of the mass flow of the releases. This approach applies to the release of pollutants into the air in routine, non-routine, and accidental circumstances that could have local, regional, or transboundary impacts.

The AMMAN Air Management Technical Standard lays out the minimum requirements for evaluating and controlling air quality, including not only greenhouse gas emissions, but also fugitive dust, noise, vibrations, odours, and ambient air, to safeguard human health and the environment.

In addition, our Air Management Plan encompasses various strategies, operational controls, a monitoring plan, and emergency preparedness measures. Before constructing new mining operations or industrial facilities, we establish baseline concentrations of regulated ambient air quality pollutants and enlist specialists to install pollution controls such as low NO_x burners, Selective Catalytic Reduction (SCR) systems, and emission filters for power plant exhaust emissions.

Air Quality Monitoring

We have implemented a comprehensive programme to monitor and maintain air pollution controls, including regular inspections and audits. Qualified personnel are employed to conduct and document maintenance, calibration, and inspections of emissions control and monitoring equipment.

Based on the Air Management Technical Standard, AMNT has established an Air Emission Internal Standard which outlines the limit of air emissions in accordance with the Government of Indonesia's standards, and IFC Emission Guidelines. Our standard is designed to ensure that the quality of air emissions does not exceed the relevant regulations and permits. If the results of the emission analysis exceed the internal standards, they must be reported as a non-conformance/upset condition and corrective action must be taken and remedied promptly.

²⁷ Ambient air quality refers to the condition of the air surrounding people in the environment. It is the measure of the presence and concentration of various pollutants.

Our Performance

The air quality issues most relevant to our operations include nitrogen oxides (NO_x), sulphur oxides (SO_x), carbon monoxide (CO), Particulate Matters (PM), Mercury (Hg), and Lead (Pb). We implement measures to minimise related emissions and routinely monitor the effectiveness of these measures. In 2022, we successfully reduced the PM emissions by increasing the frequency of filter baghouse maintenance and replacement at the coal power plant. We also switched from the shared continuous emissions measurement to temporary manual quarterly measurement for two (out of four) of the exhaust stacks. Manual monitoring of these two stacks will continue, until individual and separate CEMS are installed in each stack, as required by the government.

Table 17: Air Emissions by Pollutants

Air Emission	Unit	2020	2021	2022
CO	Tonnes	179	145	294
NO _x (excluding N ₂ O)	Tonnes	2,289	1,707	2,815
SO _x	Tonnes	837	811	776
PM	Tonnes	233	176	107
Hg	Tonnes	<0.001	<0.001	<0.001
Pb	Tonnes	<0.001	<0.001	<0.001

Notes:

- a. Data above only pertains to AMNT. AMIN is not yet operational and is not required to monitor emissions generated by its contractors.
- b. All air emissions are measured by direct manual tests, except for two of the coal power plant exhaust stacks which use the Continuous Emission Monitoring Systems (CEMS). Up until March 2022, all air emissions from the coal power plant were measured using a shared CEMS.
- c. CO emissions are measured from the diesel power plant, generator (starting from 2022), and incinerator.
- d. NO_x, SO_x, and PM emissions are from the coal power plant, diesel power plant, generator (starting from 2022), and incinerator. PM emissions are not measured from the mining operation given its remote location from local communities.
- e. Hg and Pb emissions are from the incinerator, while the air emissions of Hg from the coal power plant was included from 2022.
- f. PM represents PM2.5, PM10, and larger particulates.
- g. AMMAN is not required to and does not monitor Volatile Organic Compounds (VOCs).

Our Programmes and Initiatives

Our management standard aims to maintain the ambient air quality in line with national standards and minimise the impact of operational emissions on the public.

To achieve this, the management actions include:

- **Limiting vegetation/forest clearing** to only necessary areas and postponing it until absolutely necessary for the advancing mining operations, to minimise the adverse effects resulting from alterations in land cover and soil exposure
- Using **well-maintained power tools, equipment, trucks, and light vehicles** and carrying out preventive maintenance programmes
- **Watering the haul roads** and unpaved access roads during the dry season
- Giving **special attention to maintaining the grinding and other processing equipment** at the processing plant



As such, our ambient air quality management actions support the achievement of SDG 3 (Good Health and Well-being) by reducing the risk of respiratory diseases and other health issues associated with air pollution.



Monitoring Air Pollutants using CEMS

The Continuous Emission Monitoring System (CEMS) is a set of equipment that measures the concentrations or emission rates of gases or particles using pollutant analysers, conversion equations, graphics, and computer programs. As part of compliance with national regulations, we use the CEMS to measure the concentration of pollutants originating from four boilers in the coal-fired power plant. Thermo Scientific instruments are used to monitor NO_x , SO_2 , CO_2 , and Hg concentrations, while OPAL Environmental equipment is used to measure opacity, flow rate, and oxygen parameters.

In 2022, we integrated the CEMS with the MoEF's Continuous Industrial Emission Monitoring Information System (*Sistem Informasi Pemantauan Emisi Industri Kontinyu/SISPEK*). By integrating this system, the government can monitor air emissions in real-time and compare them against the threshold specified in regulations. This integration additionally helps us minimise any potential data input errors.



^ CEMS Analyser rooms at AMMAN's power plant.

Managing GHG Emissions

Management Approach

A rapid transition to low-carbon economies requires a substantial increase in the production of critical minerals, including copper. Managing GHG emissions is not only important for the environment, but also for the long-term success and resilience of businesses.

At AMMAN, we recognise the importance of managing GHG emissions at our operations, particularly considering we are the second largest copper-and-gold mine in the country and hold the world's fifth largest copper reserve.

By effectively managing our GHG emissions, we aim to contribute to global and national efforts to address the physical risks associated with climate change and the transitional risks and opportunities arising from the shift towards a low-carbon future.

By expanding production, we aim to help the world meet the growing demand of critical minerals. However, we are also committed to evaluating opportunities to reduce and manage GHG emissions, and aim to identify more comprehensive and business-appropriate long-term GHG emissions reduction initiatives as part of the next revision to our 2020 – 2024 Emissions Reduction Strategy. Until then, we are actively investigating various options for GHG abatement, improving our energy efficiency, and reducing our carbon intensity, and will continue to closely monitor progress against our existing strategy. By adopting this approach, we can reduce operational costs and comply with both existing and emerging regulations.

As stipulated in our Emissions Reduction Strategy, we are dedicated to fulfilling the following commitments:

- Continue to improve our understanding of the various sources and contributions to our GHG emission profile
- Plan, implement, and evaluate efforts to **reduce emissions** in the form of GHG and air pollutants from all emission sources
- Optimise **capacity building** through joint discussion activities, training and certification to involve all employees in emissions reduction programmes
- Strive to **reduce emissions in our main activities** through various means, such as reusing waste, replacing equipment with energy-efficient alternatives, modifying equipment, and utilising renewable energy sources
- Support **community-based emissions reduction programmes**
- Implement **performance improvement opportunities** based on life cycle assessment principles

Our Performance

At AMMAN, our GHG reporting is undertaken in accordance with the GHG Protocol's Corporate Accounting and Reporting Standard. Our main sources of emissions are from our coal power plant, diesel power plant, consumption of B30 biodiesel²⁸, gasoline, and aviation fuel. In 2022, our Scope 1 GHG emissions increased by 11% primarily due to increased fuel consumption from expansion projects and land clearing, while our GHG emissions intensity decreased materially by 53%, related to the increase of concentrate production. As AMMAN relies entirely on self-generated electricity, the GHG emissions associated with electricity generation, are included as part of our Scope 1 emissions²⁹.

²⁸ B30 Biodiesel is a blend of biodiesel fuel and petroleum-based diesel fuel, with 30% biodiesel and 70% petroleum diesel. The use of B30 biodiesel is a mandatory program established by the Government of Indonesia for industries.

²⁹ Scope 2 emissions are indirect emissions from the consumption of purchased electricity, heat or steam, while Scope 1 emissions are direct emissions from sources that are owned or controlled by AMMAN. Therefore, our self-generated electricity is accounted for in Scope 1 calculations, not Scope 2.

Table 18: Our GHG Emissions Performance

Disclosure	Unit	2020	2021	2022
Gross Scope 1 GHG emissions	tCO ₂ e	1,875,314	1,668,518	1,859,902
Scope 2 GHG emissions	tCO ₂ e	0	0	0
Scope 1 & 2 GHG Intensity	tCO ₂ e / Tonne of concentrate production	3.2	3.5	2.3
The percentage covered by emissions-limiting regulations	Percentage (%)	0%	0%	0%

For reference, our energy performance can be found on page 108.

Notes:

- Scope 1 GHG emissions are calculated from AMNT, encompassing CO₂, CH₄, and N₂O, resulting from various sources including coal-fired and diesel-powered plants, biodiesel (B30) usage, gasoline and aviation fuel consumption, HFCs released from refrigerant usage, and SF₆ stored in tanks. All Scope 1 GHG emissions are computed as non-biogenic. As AMMAN relies entirely on self-generated electricity, the GHG emissions associated with electricity generation, are included as part of our Scope 1 emissions.
- AMIN is still in construction and not operational. Therefore, the Scope 1 GHG emissions being produced by this entity are considered to be negligible.
- A CEMS is employed to directly measure CO₂ emissions from our coal power plant, whereas CO₂ emissions from diesel-fired power are measured through manual testing.
- Emissions factors used for N₂O and CH₄ in the coal power plant and the diesel power plant are based on US Environmental Protection Agency (EPA)'s direct emissions from stationary combustion. Emissions factors for CO₂, N₂O, and CH₄ in biodiesel, gasoline, and aviation fuel are based on US EPA's direct emissions from mobile combustion.
- Global Warming Potential (GWP) values for CO₂, CH₄, N₂O, HFCs, and SF₆ are based on the Intergovernmental Panel on Climate Change (IPCC)'s Fifth Assessment Report and the GHG Protocol.

Calculation Remarks

The Emission Factors (EF) used for our GHG emissions calculations are listed below.

Table 19: Emission Factors

Fuel type	CO ₂	CH ₄	N ₂ O
Sub-Bituminous Coal	N/A (AMMAN directly measures the emissions through CEMS)	11.0 g CH ₄ /MMBtu	1.6 g N ₂ O/MMBtu
B30 Biodiesel (for Diesel Power Plant)	N/A (AMMAN directly measures the emissions through manual testing)	0.00009 kg CH ₄ /L	0.00002 kg N ₂ O/L
B30 Biodiesel (for Vehicles)	2.6367 kg CO ₂ /L	0.0005 kg CH ₄ /L	0.0019 kg N ₂ O/L
Motor Gasoline	2.3197 kg CO ₂ /L	0.0211 kg CH ₄ /L	0.0008 kg N ₂ O/L
Aviation Gasoline	2.1955 kg CO ₂ /L	0.0267 kg CH ₄ /L	0.0004 kg N ₂ O/L

Our GHG Management Programmes and Initiatives

Advancing GHG Emissions Reduction through the Sumbawa Solar PV Power Plant

Supportive of Indonesia's national agenda of increasing the share of renewable energy to more than 23% by 2025 and 31% by 2050, we co-installed a solar power

plant in 2022 to support this ambition. The Sumbawa Solar PV Power Plant, which consists of 49,875 monocrystalline bi-facial (double-sided) modules covering an area of 36 hectares, has a peak capacity of 26.8 MWp and can generate up to 42 GWh of power per year. The electricity generated is distributed to AMNT's processing plants and 33kV substations.

Between June and December 2022, the Sumbawa Solar PV Power Plant helped us avoid approximately 40,000 tCO₂e³⁰ emissions by displacing coal and diesel power generation. The solar plant is expected to help us avoid up to 100,000 tCO₂e per year, contributing to SDG 13 (Climate Action) by promoting renewable energy adoption and reducing our GHG emissions.

The solar power plant also reduces our reliance on coal and/or diesel usage for power generation, minimises fly ash bottom ash (FABA) from coal combustion, and decreases air emissions for AMMAN.

Life Cycle Assessment (LCA) and Environmental Product Declaration (EPD)

A Life Cycle Assessment (LCA) is a compilation and evaluation of the input, output and potential environmental impact of a system product throughout its life cycle. In 2022, we completed a LCA study according to the requirements set in established international standards such as the ISO 14040:2006 and 14044:2006 on LCA, the European Standard for Environmental Product Declarations (EPDs) of Construction Products, and the Product Category Rules (PCR 2019:14) for Construction Products.

The study focused on our mining and processing area and had a cradle-to-gate system boundary. The following table provides simplified inventory data with a life cycle inventory summary of the inputs and outputs with 2020 as a base year.



▲ The Sumbawa Solar PV Power Plant will supplement electricity supply to our processing plants and substations, paving the way for a cleaner and greener future.

Table 20: Our Life Cycle Inventory (2020)

Materials	Unit	Amount (per tonne of concentrate)
Natural materials	tonne	132.7
Water	m ³	509.5
Solid supporting materials	kg	1,285.5
Liquid supporting materials	L	452.3
Electricity	kWh	1,457.0
Emission to air	kg	1,855.6
Emission to water	kg	27.3
Solid waste	kg	37.5

In an LCA, a 'hotspot' refers to a point in the life cycle of a product or system, where the environmental impact is significantly higher than in other stages. The identified hotspots under our control are:

- Emissions from blasting
- Emissions from electricity generation
- Emissions from B30 Biodiesel combustion
- Mineral ore extraction from the mining process
- Groundwater extraction for the operational process
- Placement of tailings generated from the ore processing plant at sea (DSTP)
- Occupation and transformation of land used in the operational process

³⁰ The amount of electricity generated from solar power plant is calculated and then multiplied by the Emission Factor (EF). CO₂ EF is from AMNT Internal Emission Factor, while EF for CH₄, N₂O are from US EPA Direct Emissions from stationary combustion. The GWP value is calculated using the IPCC's Fifth Assessment Report.

The LCA enables us to improve our environmental performance by identifying areas where we can reduce our environmental impacts and improve sustainability. As a result, we can reduce costs associated with energy consumption, waste disposal, and raw material use, as well as ensure compliance with environmental regulations and standards.

Since completion of the LCA, we have been preparing to register an Environmental Product Declaration (EPD), a standardised document that provides information about a product's environmental and human health impact based on the ISO 14025 standard and the LCA. This EPD will highlight our dedication to providing transparent, comparable, objective, and third-party verified data regarding our products and services

Improving Fuel Efficiency of CAT 793C Haul Trucks Through Pulley Upgrades

Previously, the usage of standard pulleys with a diameter of 297 mm on our Haul Truck (HT) 793C vehicles sometimes led to overheating and vehicle operation failure, causing temporary disruptions to transportation operations and activities. In addition, the usage of large pulleys can increase the amount of B30 biodiesel fuel required to drive the radiator cooling fan.

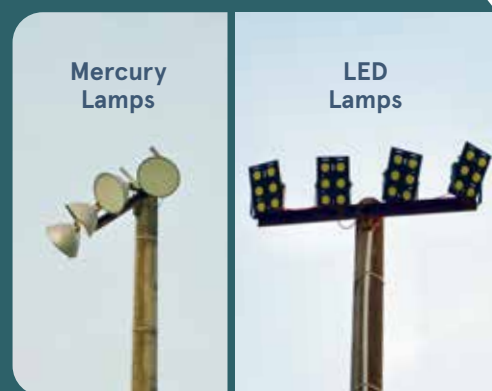
After conducting field trials, we found that installing a smaller crankshaft pulley of 275mm, reduced the speed of the radiator cooling fan, and the energy requirements for the engine to rotate the fan – which in turn led to a reduction in fuel consumption.

Whilst the exact impact and benefit is still being determined, this initiative improves energy efficiency, reduces GHG emissions and fuel costs, as well as lowers haul truck maintenance requirements and costs.



Replacing Mercury Lamps with LEDs

A gradual replacement of 2000-watt mercury lamps with 500-watt LED lamps is being implemented in certain operational areas within the mining site. The objective is to reduce annual CO₂ emissions through savings in electricity consumption within the mine area and eliminate the negative effects of mercury lamps which can be harmful to both workers and the environment. The replacement process has been ongoing since 2018 and is expected to continue throughout 2023.






09 Managing Resources





Upholding
Ethics



Advancing
People



Preserving
Environment



Managing
Resources

Mining activities require significant investments in critical resources such as land, water, and energy. At AMMAN, we adopt a comprehensive approach that includes the efficient use of resources and proactive environmental and social management practices. This involves the ongoing monitoring of our resource usage and management, engagement with stakeholders, and adherence to the applicable laws, regulations, and industry standards.

We believe that effective management of energy, water, waste, and land is crucial for ensuring the longevity of our business and operations.

Our commitment is to apply sustainable and responsible practices throughout the entire value chain, from the extraction of natural resources to the reclamation of used land. By doing so, we strive to create a positive impact on the environment, our stakeholders, and the communities we operate in.

Our material topics "Energy Management", "Water Management", "Waste & Hazardous Materials Management" and "Mine Closure" are consolidated under this Managing Resources pillar.



Conducted an
energy audit

by a third party to assess our energy consumption and distribution across our operational sites



Reduced the weight of hazardous waste generated by

34%
in 2022 compared to 2020



Completed
55 hectares
of land reclamation

Promoting Energy Efficiency



Management Approach

We acknowledge that our business and operations use a significant amount of energy. As such, we strive to prioritise operational efficiency and are committed to ensuring that our business partners adopt effective energy management practices across the value chain.

We are actively working to reduce energy intensity and improve operational efficiency. We are also exploring opportunities to incorporate renewable energy into our operations to minimise our footprint and address the issue of climate change. In doing so, we aim to uphold our commitment to responsible energy consumption.

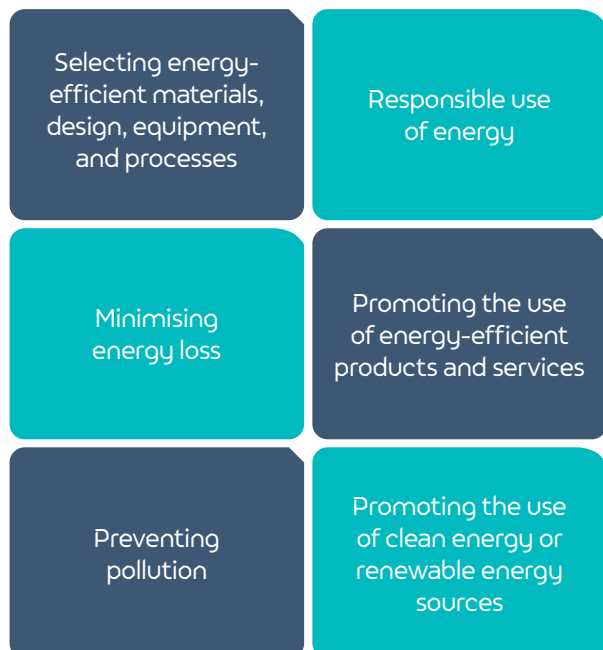
Our Energy Management Technical Standard aims to provide a consistent approach to energy management by improving efficiency and reducing operating costs. It encompasses design activities, supply chain management, and maintenance activities, amongst others.

We review our energy management performance at an annual basis, or as needed, to identify opportunities to optimise energy use, mitigate negative impacts, and enhance the use of renewable energy sources.

Energy Management

Our approach to energy management is rooted in the following principles:

Figure 30: Our Approach to Energy Management



At AMMAN, we have developed an Energy Management System to ensure compliance with our Environmental Policy, Environmental Management System, Energy Management Standard, and the ISO 50001 principles³¹.

This system includes an Energy Management Plan (EMP) that requires our operations to:

- Conduct **annual reviews of energy usage and cost control**, led by the Power Business Unit (PBU) and Finance Department
- Evaluate our **energy balance** and identify areas of significant energy use
- Explore opportunities for **energy conservation and optimisation**, including reducing and improving energy efficiency, increasing the use of renewable energy sources, and mitigating environmental and social impacts

- Report on our **PROPER³² compliance** with the electricity generated by coal, biodiesel, and solar PV power plants

Energy Efficiency

To continuously improve our environmental performance, we have established various initiatives and targets focused on reducing energy consumption and improving operational efficiency. These include:

- Developing AMNT's **Emissions Reduction Strategy and Energy Efficiency Strategy 2020-2024**
- Establishing **renewable energy and energy efficiency targets and KPIs** in our 2021 – 2023 ESG Roadmap
- Identifying **potential energy efficiency projects** by reviewing the PROPER efficiency opportunities register

Energy Monitoring and Reporting

At AMMAN, we have implemented a rigorous system to monitor and report energy consumption, and use advanced equipment and qualified personnel. We utilise the findings of our energy audits to assess the efficiency of our action plans, Energy Performance Indicators (EnPIs), Significant Energy Use (SEUs), and Energy Baseline (EnB). Potential energy performance improvements or opportunities are identified through quantitative comparison of EnPI performance and the relevant EnB, and these are reported annually to the Board. Our focus on energy management enables us to reduce costs, increase operational efficiency, and enhance sustainability performance.



³¹ While AMMAN's Energy Management System has yet to be formally ISO 50001 certified, it adheres to the principles outlined in the Standard.

³² PROPER (*Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup* or Company Performance Rating Program in Environmental Management) is the Government of Indonesia's programme that assesses and rates the environmental performance of Indonesian companies and provides incentives for improved performance. The programme evaluates a company's environmental management systems, compliance with environmental regulations, and overall environmental impact.

Our Performance

Our overall energy consumption in 2022 grew in proportion to the larger scale of production. However, we were able to increase the percentage of energy consumed from renewable sources, in line with SDG 7 (Affordable and Clean Energy), and lower our energy intensity in comparison to the previous year. We also continued to generate 100% of our own electricity.

The following table presents our energy performance:

Table 21: Our Energy Performance

Disclosure	Unit of Measurement	2020	2021	2022
Total energy consumed	Gigajoules (GJ)	20,442,086	18,258,237	20,620,382
Percentage of energy consumed from the grid	Percentage (%)	0%	0%	0%
Percentage of energy consumed from renewable sources	Percentage (%) of total energy consumed	13.4%	12.9%	14.3%
· 30% of B30 Biodiesel consumption	Gigajoules (GJ)	2,743,136	2,358,771	2,874,300
	Percentage (%) of total energy consumed	13.4%	12.9%	13.9%
· Electricity generation from Sumbawa Solar PV Power Plant	Gigajoules (GJ)	0	0	84,002
	Percentage (%) of total energy consumed	0	0	0.4%
Concentrate production	Tonnes (dry basis)	578,965	477,151	792,892
Energy intensity	GJ/ Tonne of concentrate production	35.3	38.3	26.0

As reference, our GHG emissions performance can be found on page 100.

Notes:

- Total energy consumption includes the total fuel consumption at AMNT (including power generation as operations are not connected to the national grid) and generated electricity from the Sumbawa Solar PV power plant. 0.2% of AMNT's overall electricity generated is provided (free of charge) to the local Tongo Village as part of our Community Development programme. This share of electricity is not considered as sold electricity and is therefore not deducted from our total energy consumption.
- We consider that the 30% biodiesel portion in B30 biodiesel is obtained from renewable sources. Therefore, we calculated the percentage of energy consumed from renewable sources by adding 30% of the B30 biodiesel consumption in GJ (using the B100 biodiesel conversion value) from 2020 to 2022 to the electricity generated by the Sumbawa Solar PV Power Plant in GJ in 2022.
- AMIN operations are still under construction and consumed a negligible amount of energy and fuel compared to AMNT, and have therefore been excluded from these figures.

Calculation Remarks:

The conversion to GJ is as below ³³:

(a) 1 litre Diesel for mobile combustion	=	0.0364 GJ
(b) 1 litre Diesel for Power Plant	=	0.0363 GJ
(c) 1 litre Biodiesel B100	=	0.0367 GJ
(d) 1 tonne Coal	=	18.67 GJ (2020) 18.48 GJ (2021) 18.44 GJ (2022)
(e) 1 MWh Electricity	=	3.6 GJ
(f) 1 litre Gasoline	=	0.0329 GJ
(g) 1 litre Aviation Turbine Fuel	=	0.035 GJ

³³ Reference sources of conversion values are: (a), (c), (e), (f), and (g) are Net Calorific Values (NCV) sourced from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, (b) is diesel energy values obtained from AMNT's power plants, and (d) is the average NCV obtained from AMNT's Coal Certificate of Analysis, converted to GJ/tonnes.



Our Programmes and Initiatives

Evaluating Opportunities

In 2022, we conducted an external energy audit using data from 2020 to 2021 as a baseline. The audit assessed our energy consumption and distribution across our operational sites to identify opportunities for energy conservation, and recommended optimising the use of the solar PV farm and installing more efficient power generation units. These recommendations will be integrated into our 2023 operational plans.

In addition, we have commenced construction of a 450MW combined cycle power plant (CCPP), to be fuelled by LNG. This will replace a significant portion of our current reliance on coal and biodiesel, and the plant is expected to be commissioned by 2025.

Reducing the Load in Auxiliary Power Plants to Improve Efficiency

To promote energy efficiency in our auxiliary power plants, we concentrate on decreasing their load through the implementation of the following measures:

- **Replaced old lighting with LED lighting**, which reduces the usage from 400 watts/lamp to 120 watts/lamp while maintaining the same amount of luminous capacity.
- **Modified the raw cooling pump impeller by using a higher-profile lead blade** and maintaining its high performance. As a result, now we are able to rely on only three out of four pumps, reducing total power consumption from 4 MW to 3 MW, with the fourth pump serving as a spare.
- **Maintaining the steam air ejector's high performance** to avoid operating the steam hogger, which releases heat and steam to the atmosphere, while the steam air ejector recycles the heat and steam into the system.
- **Modified piping for the closed cooling system in the coal plant**, resulting in only two out of four pumps being required to service four units of the coal plant. Currently, we are trialling an additional balance line for units #51-#54, which has resulted in reduced water consumption.

Preserving Water Resources

Management Approach

At AMMAN, we recognise that responsible water and wastewater management is essential for ensuring sustainable water usage and protecting our natural resources. We are committed to implementing sound water and wastewater management practices that align with our sustainability commitments and GILP.

We established our Water Management Technical Standard to ensure that water is valued and managed as a precious resource. Our Water Management Plan operationalises this standard and provides a system to implement effective water management practices across the value chain.

Throughout our operations, we made significant progress in enhancing our wastewater treatment performance through the principles of reduce, reuse, and recycle (3Rs). In addition, we implemented a comprehensive protection programme for our water springs to ensure their sustainability.

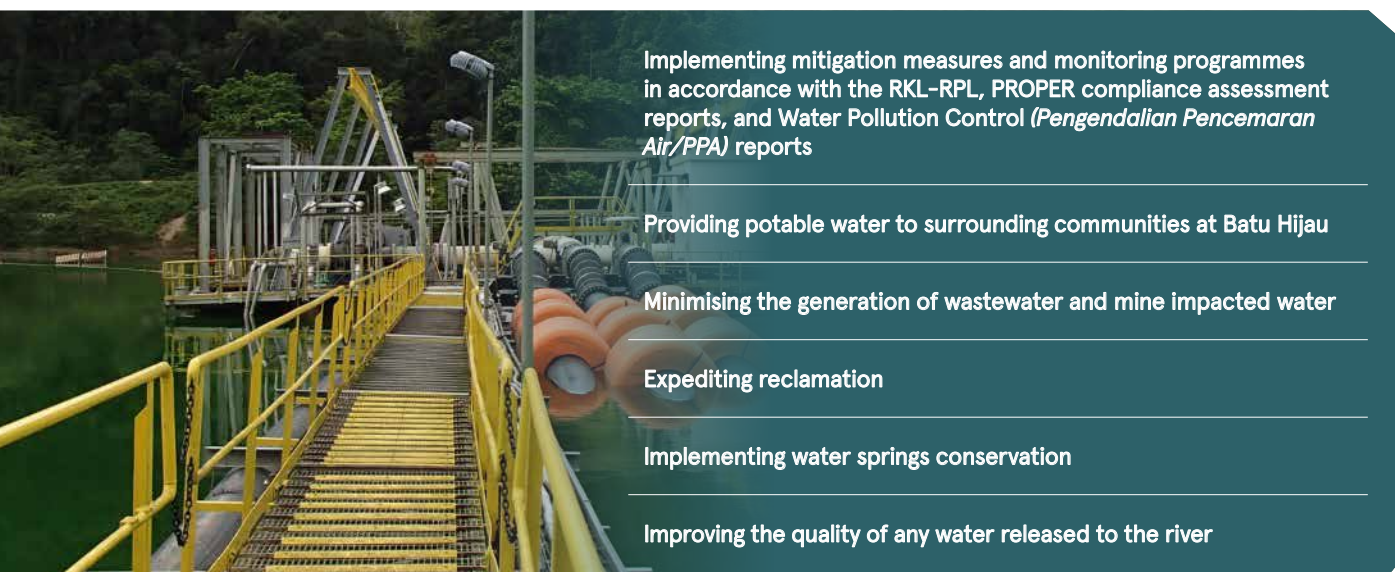
As part of our approach to valuing water as a resource, we have a water accounting system that considers the cost of water. This system evaluates opportunities to optimise water usage through efficient reuse, enhancement of other watershed supplies, and mitigate negative environmental and social impacts. We have adopted various measures to promote water efficiency, including prioritising the use of treated wastewater over alternate fresh or seawater sources for different purposes.

Our Mine Water Management (MWM) System plays a crucial role in safeguarding water quality. It captures and retains polluted water, preventing its flow downstream, while also treating it. The system is designed to redirect uncontaminated runoff water and water from reclamation areas whenever feasible. Water impacted by mining is carefully retained for reuse, further enhancing our commitment to sustainable water management.

Water Management Plan

Our Water Management Plan features a detailed set of procedures to govern the implementation of our water management system, as outlined below.

Figure 31: Our Water Management Plan



Water Treatment Facility

At AMMAN, we utilise multiple water sources to support our operations, including mine impacted water, seawater, groundwater, and collected acid rock drainage (ARD). We obtain our operational water supply from the Batu Hijau mine pit water and runoff water, which we collect and store during the rainy season. In addition, we primarily use seawater for power plant cooling processes and the ore processing plant, as well as to support operational water needs during the dry season. To meet our potable water needs, we have established a groundwater bore field located in the Sejong Valley and near the Batu Hijau townsite area and installed three water treatment plants (WTP).

Our Batu Hijau site operates a closed water cycle system for all water affected by mine operations that enables us to operate efficiently. Our wastewater processing facilities include:

- Eleven Holding Ponds for ARD
- Two Wastewater Treatment Plants (WWTP), which are the Santong and Power Plant WWTP
- Five sewage treatment plant facilities in the Batu Hijau area, a sewage treatment plant for Elang and a sewage treatment plant at the smelter area

The Santong WWTP is temporarily decommissioned due to mine expansion. We are currently completing an options study to construct and install desalinated and demineralised water facilities to supply some of the freshwater needs of the Batu Hijau town area. This will enable us to meet our overall freshwater needs without relying solely on groundwater.



^ Sewage Treatment plant at our townsite.

Acid Rock Drainage

At AMMAN, we implement a variety of measures to minimise the negative impacts associated with ARD, as required by government regulations. These include:



- Separating clean jungle runoff from entering mining areas via a **diversion channel**
- Diverting surface water from the reclamation area via a **reclamation diversion**
- Managing the ARD using **ponds and sediment control structures**
- Pumping the ARD to the ore processing plant as process water
- **Neutralising it with lime** at the ore processing plant

For a more detailed explanation of our reclamation practices, please refer to page 121-125.



^ Holding pond for Acid Rock Drainage.

The table presented below provides an overview of ARD risk (exposure and mitigation strategies) at our operations:

Table 22: Acid Rock Drainage at AMMAN

Indicator	2020	2021	2022	Notes
Percentage of mine sites where acid rock drainage is predicted to occur	100%	100%	100%	ARD is predicted to occur in all AMMAN mine sites, especially in the waste rock and ore stockpiles area.
Percentage of mine sites where acid rock drainage is actively mitigated	100%	100%	100%	100% of AMMAN's mine sites apply ARD management strategies as required by the Government of Indonesia's regulations.
Percentage of mine sites where acid rock drainage is under treatment or remediation	100%	100%	100%	

Our Performance

Water Withdrawal, Discharge, and Consumption

In 2022, we extracted a combined volume of 225 million m³ of water³⁴ from both groundwater and seawater sources. Overall, including surface water captured and recycled at our operations, our total water consumption amounted to 274 million m³.

According to the Aqueduct tool developed by the World Resources Institute (WRI), the Sumbawa Island is classified as a region with a low to medium level of baseline water stress, ranging from 10% to 20%, implying a lower likelihood of a high-stress water³⁵ situation occurring. Nevertheless, we recognise that Sejorong Well, one of our primary water sources, can become stressed during the dry season, and account for this in our operational plans.

The table presented below displays our water performance:

Table 23: Our Water Performance

Disclosure	Unit of Measures	2020	2021	2022	Note
Total water withdrawn	Thousand m ³	262,702	224,885	224,566	a
· Fresh Water (<1,000 ppm Total Dissolved Solids)	Ground Water	Thousand m ³	2,591	2,592	3,073
· Other Water (>1,000 ppm Total Dissolved Solids)	Sea Water	Thousand m ³	260,111	222,293	221,493
Total water consumed	Thousand m ³	297,170	284,506	274,014	a
· Fresh Water (<1,000 ppm Total Dissolved Solids)	Ground Water	Thousand m ³	2,591	2,592	3,073
· Other Water (>1,000 ppm Total Dissolved Solids)	Surface Water	Thousand m ³	34,468	59,621	49,448
	Sea Water	Thousand m ³	260,111	222,293	221,493
Percentage of freshwater withdrawn/ consumed from area with High or Extremely High Baseline Water Stress	Percentage	0%	0%	0%	b
Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number	0	0	4	c

Notes:

- Water withdrawn includes fresh groundwater from wells, and intake of seawater at Senunu and cooling water at Benete. The consumption figures for surface water sources include ARD collected from the Santong 3 dam, runoff water from the ore processing plant collected in a storm water pond, and filtrate water from the filtration plant. These sources are all used for processing plant activities. Additionally, the figures account for runoff and effluent from the Power Plant, which is collected in a runoff basin and used for power plant utilities such as cleaning and watering.
- Although not defined as highly stressed by the WRI Aqueduct tool (WRI), the water extracted from the Sejorong Well can become stressed during the dry season, but is a small proportion of the total freshwater withdrawn/consumed (<1%) and we account for this in our operational plans.
- The incidents of non-compliance include Category 3 incidents or above as per AMMAN's impact definitions. These are significant incidents that may lead to administrative penalty orders, indicated by a red rating on the PROPER evaluation, or may escalate to environmental law enforcement if corrective measures are not taken.
- AMIN operations are still under construction and consumed a negligible amount of water compared to AMNT, and have therefore been excluded from these figures.

³⁴ 1 m³ (cubic metre) is equivalent to 1,000 litre.

³⁵ High-stress water areas are locations where the demand for water exceeds the available supply, leading to a water scarcity situation.

Water-Related Incidents

In 2022, there were four significant incidents of non-compliance associated with water quality permits, standards, and regulations. Three of these incidents were caused by very heavy rainfall, and involved the overflow of mine water from sediment-settling ponds. To minimise any potential impacts during the events, we undertook several actions including but not limited to improving pumping arrangements, operating the emergency liming system, managing water channels and floodgates, repairing electrical power lines for pumping, and removing pipe restrictions to increase flow rates. After the events, we conducted downstream water quality monitoring, which indicated that all parameters met the required standards as per our permit regulations. Ecological monitoring also indicated that the condition of the river's biota had returned to normal. Our planned measures to prevent similar incidents occurring in future include redirecting additional runoff from clean/undisturbed areas, increasing the target of desilting sediment ponds, improving maintenance of the water pumping system, and upgrading the electrical system.

There was also one incident relating to ARD discharge into the Sejong River through an uncovered, unused pipeline. Our immediate response was to block the pipe and redirect the water into the mine water management system. Subsequent water quality monitoring downstream confirmed that the water in the river had returned to normal, with no long-term environmental impacts. We have since implemented preventative measures such as improving the management of unused and underground pipes.

Our Programmes and Initiatives

Utilising Acid Rock Drainage

In our Mine Water Management process, all ARD is directed to the Sediment Control Structure (SCS) pond, and used in the ore processing plant. Lime is added in the plant to adjust the pH to a range of 8.9 to 10 to facilitate flotation, which also effectively neutralises the ARD. After completing the flotation process, all process water exits the plant as tailings, and is discharged through our DSTP.

Additionally, treated ARD is used for watering hauling roads at the mine and main crusher, within the mine water management area.

By utilising and/or treating ARD, we avoid direct discharge into rivers or the sea, reduce freshwater usage, and reduce the impacts of acidification which aligns with the principles of UN SDG 12 (Responsible Consumption and Production) and SDG 14 (Life Below Water).



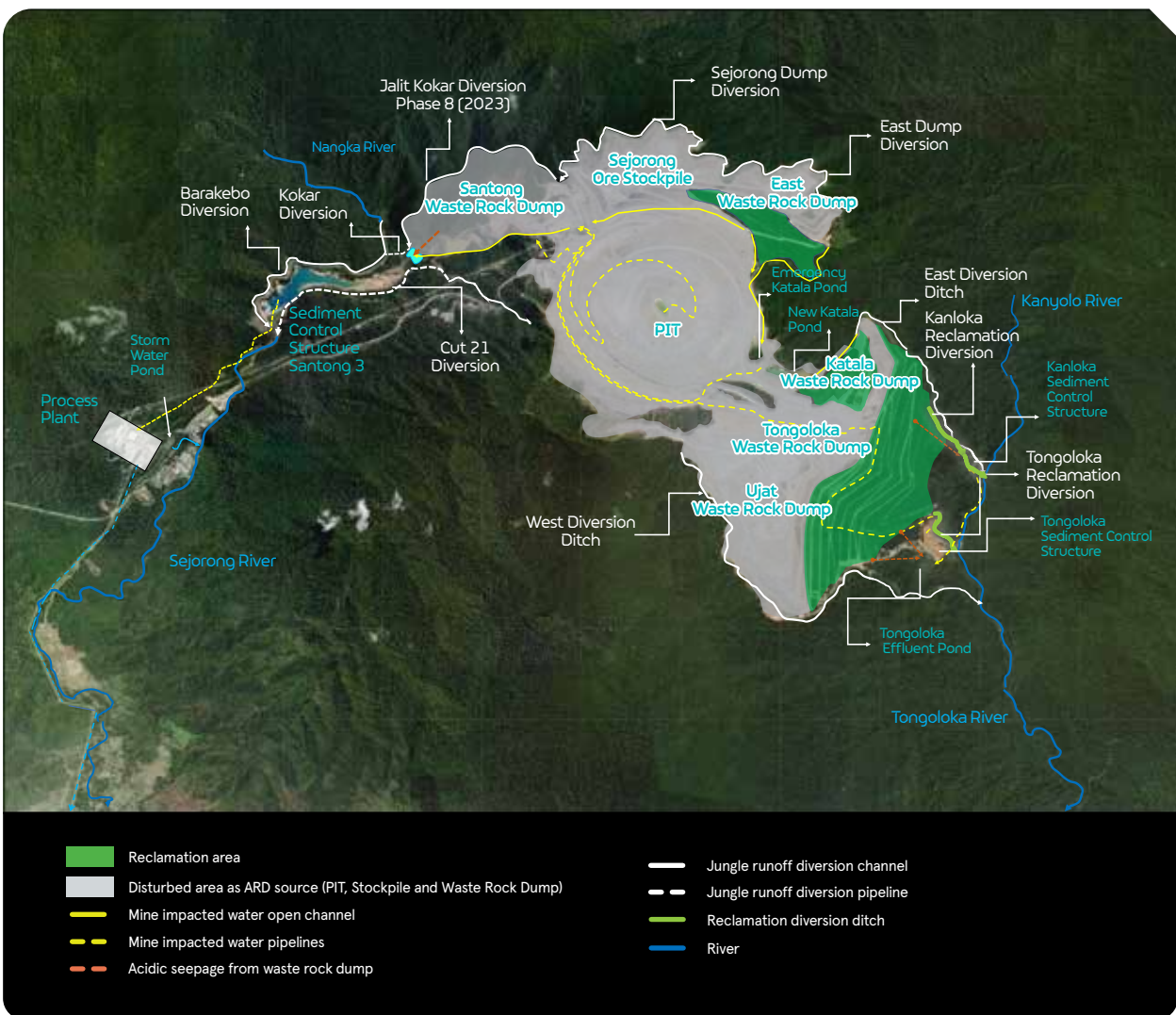
▲ Utilising treated water from SCS as a source for processing plant (top) and for watering hauling roads (bottom).

Separating Runoff Water

Prior to 2006, we channelled runoff water from our reclamation surface, as well as ARD, into our SCS pond – which increased the total volume of water requiring treatment. To align with GILP, we subsequently separated clean jungle runoff from contacting mine impacted areas, by constructing diversion channels. We also have constructed a canal system that diverts the runoff water from the established reclamation areas (after five years of planting), away from ARD impacted water.

These jungle runoff and reclamation diversions contribute to water conservation by directing runoff water into ambient water bodies, namely the Sejorong and Tongoloka rivers. The initiative successfully reduced the processing load at the SCS, and represents an innovative system to manage runoff water until it returns to the river, while also supporting SDG 12 (Responsible Consumption and Production), and SDG 14 (Life Below Water).

Figure 32: Water Management System at Batu Hijau



△ In the photo above, the white lines indicate jungle runoff diversions, while green lines indicate reclamation diversions at the Batu Hijau Mine.

Managing Waste

Management Approach

At AMMAN, we aim to ensure the safe and sustainable management of waste generated by our active and inactive operations. We are committed to safeguarding human health and the environment through the implementation of a comprehensive Waste Management Technical Standard. This standard serves as a robust framework for effectively managing both hazardous and non-hazardous waste, as well as wastewater generated by our operations.

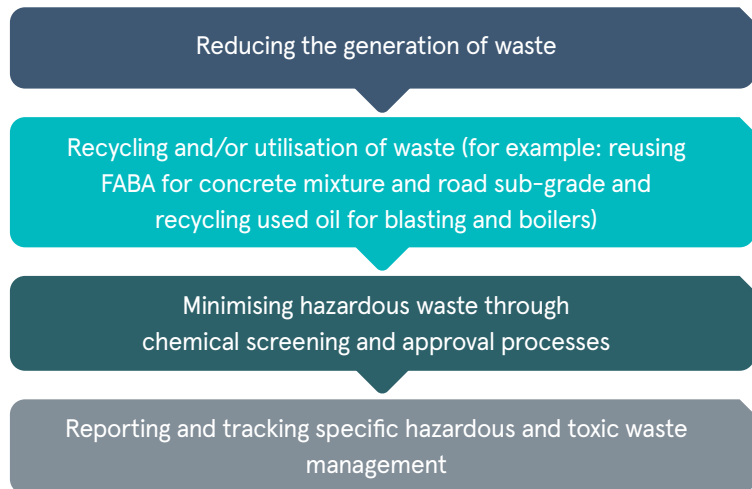
By adhering to this standard, we ensure the proper handling, storage, treatment, and disposal of waste materials, minimising their potential risks and environmental impacts. Through continuous monitoring, compliance assessments, and improvement initiatives, we strive to protect human health, prevent pollution, and contribute to sustainable practices in waste management, thereby upholding our commitment to environmental stewardship.

Waste Management

Our Waste Management Technical Standard requires the implementation of the 3Rs (Reduce, Reuse, and Recycle) programmes where applicable, which forms the key strategy that we use to minimise waste disposal. Our programmes target non-hazardous waste streams such as scrap metal, plastics, and cardboard, which are recycled in compliance with relevant regulations. Furthermore, we compost organic waste as part of our efforts to reduce waste.

We identify and manage potential risks associated with the transportation, handling, storage, and disposal of hazardous waste.

To achieve this, we have developed a Waste Management Plan that outlines site-specific procedures in accordance with the waste management hierarchy, which includes:



Our Environmental Risk Register documents and reviews the identified risks and controls on an annual basis. Our operational processes are mercury and cyanide-free, as these substances are not required for mineral extraction.

At AMMAN, we ensure compliance with the Indonesian regulations and licensing requirements for the handling, transportation, and storage of hazardous waste while minimising any potential adverse impacts on workers and the environment. Transport companies and drivers are licensed and certified by the government to transport hazardous waste from AMMAN to licensed disposal facilities offsite. GPS systems are used to monitor and track all vessels and vehicles transporting hazardous waste, and we conduct due diligence inspections on these transport companies every three years.

Waste and hazardous material management efforts are coordinated among business partners (e.g., contractors & sub-contractors) following the waste management, hazardous management, and contract management procedures. AMMAN end-users identify the risk level when creating contract requests and these are evaluated by environmental compliance personnel. Specific requirements and obligations are stated in the contract, and we hold kick-off meetings prior to commencing work to ensure these are clear. Field compliance checks and inspections are regularly conducted for contractors operating on site, and formal evaluations of contractor performance (including environmental performance) are completed periodically.

AMMAN implements a comprehensive waste management system that is comprised of the following components:

Figure 33: Our Waste Management System

Dedicated waste disposal locations for different waste types to support waste segregation
Composting Facilities for organic waste
Recycling facilities and storage areas for materials to be sent to external recycler
Sanitary landfill for non-hazardous waste
Sewerage Treatment Plants
Spill kits and Personal Protective Equipment (PPE) in case of an incident
Appropriately designed hazardous waste facilities to prevent any possible leakage
On-site incinerator for hazardous waste
Storage facilities for hazardous and toxic waste before transporting it offsite

Waste Rock and Hazardous Materials Management

Our waste rock and hazardous materials are managed in accordance with AMMAN's Waste Rock & Ore Stockpile Management, and Hazardous Materials Management Technical Standards, respectively. These Standards comply with the applicable laws and regulations in Indonesia.

Our Waste Rock and Ore Stockpile Management Technical Standard focuses on mitigating environmental and human health impacts, reducing closure and reclamation liabilities. It covers waste rock disposal, ore stockpile facilities, and infrastructure utilising waste rock for construction.

Our Hazardous Materials Management Technical Standard provides guidelines for effectively managing hazardous materials, including hydrocarbons and radioactive elements. It ensures safe handling throughout procurement, transportation, storage, and usage, applicable to our operations and contractor-managed facilities on-site. Furthermore, this Standard specifically references international conventions, such as the International Convention on Radioactive Materials, which establishes stringent regulations to safeguard against the hazards associated with the use of radioactive substances.

By incorporating these conventions into our Hazardous Materials Management Technical Standard, we demonstrate our commitment to promoting global best practices and ensuring the highest level of safety and environmental protection in all our operations.

In addition, as outlined in our Waste Management Technical Standard, we are committed to decommission any waste facilities, and hazardous wastes generated during decommissioning, in accordance with applicable Indonesian regulations. These requirements have been incorporated into our closure and reclamation plan.

Waste Monitoring

To ensure adherence to appropriate and responsible waste management practices, we implement a waste management awareness programme and regularly conduct internal audits and inspections of relevant operational areas, including contractors. The primary objective of these measures is to verify the proper implementation of waste management practices throughout our organisation.

In accordance with AMMAN's Waste Management Guidance, all waste generators are required to maintain a logbook to record the quantity of waste generated and the method of disposal, which must be reported regularly to the Environmental Department. Hazardous and toxic waste logbooks are uploaded quarterly to SIRAJA³⁶, the online Government reporting system, while non-hazardous and toxic waste logbooks are reported quarterly to the Government via the Pertek Report³⁷.

³⁶ SIRAJA is an online portal by the Ministry of Environment and Forestry (MoEF) for companies to report their hazardous waste generation and management. It is designed to provide real-time information on environmental permits and compliance monitoring, including data on air quality, water quality, and waste management.

³⁷ Pertek is a technical approval from the government in the form of provisions regarding standards for the Protection and Management of the Environment for Businesses and Activities following statutory regulations. A Pertek report is a document that describes the overall implementation of the technical approval.

Spill Management and Response

At AMMAN, we have robust procedures in place to manage environmental incidents, including hydrocarbon spills. Our focus is on prompt response and effective mitigation measures. We ensure that our emergency response protocols, incident investigation, and reporting procedures are well-documented. All incidents and their corrective actions are recorded in an online database for efficient management and follow-up. This allows us

to address waste-related issues and prevent future incidents by monitoring trends and implementing proactive measures.

Our spill response team is highly trained and equipped to act quickly in the event of a spill. They are well-prepared to implement appropriate measures promptly, minimising any potential environmental impact and preventing further damage. Furthermore, we provide our employees with regular training on preventative measures to reduce the occurrence of such incidents.



Our Performance

The non-hazardous and hazardous wastes generated by our operations are listed as follows:

Table 24: Our Waste Performance

Disclosure	Unit of Measurement	2020	2021	2022
Total weight of non-mineral waste generated	Tonnes	48,198	42,561	54,511
Total weight of waste rock generated	Tonnes	209,930,986	173,305,294	227,083,190
Total weight of hazardous waste generated	Tonnes	22,183	16,081	14,724
Total weight of hazardous waste recycled	Tonnes	24,704	24,071	16,500
Number of significant incidents associated with hazardous materials and waste management	Number	0	0	1

Notes:

- Our non-mineral waste comprises scrap metal, used High Density Polyethylene (HDPE) pipes, chopped plastics, pressed cardboard, used tyres, and organic waste, which are classified as non-hazardous.
- Our hazardous waste (excluding tailings), includes substances like FABAs, used oil, contaminated materials, sludge oil, and oily rags.
- The weight of hazardous waste generated and recycled refers to the total amount of waste generated and recycled within a given year. The recycled waste includes both carry-over waste from the previous year and a portion of the waste generated in the current year. As a result, the weight of recycled waste may exceed the weight of generated waste for that particular year.
- AMIN's EPC contractor generated construction waste in 2022, including scrap metal, wood pallets, paper boxes, and wall panels. Waste recording commenced in 2023 based on the logbook of waste transported offsite.
- In 2022, AMIN did not generate hazardous waste since its main activity was camp construction and the smelter operations had not yet commenced. AMIN's EPC contractor did not generate any used oil from their rented ready-to-use vehicles.
- Significant incidents are incidents with an impact level of Category 3 or higher which involve hazardous materials and waste management. (Refer to Appendix 3 for AMMAN's impact)

Waste Management Incidents

In May 2022, a fuel truck in the mining area skidded and overturned which resulted in a fuel spill of up to 5,000 litres. There were no injuries and the contaminated area was promptly cleaned up by the following day. Preventive actions taken include conducting risk assessments for each ramp with an incline grade above 12%, improved planning and repair of drainage on mine roads, and the display of the mine road condition monitoring at weekly meetings.



Our Programmes and Initiatives

Utilisation Of Used Tyres for Portable Electric Pole Bases

Across our operational areas, the generation of solid waste mostly comprises of used tyres from hauling vehicles, which is classified as non-hazardous waste. On average, approximately 5,000 tonnes of used tyres have been generated annually over the past five years. Initially, these tyres were stored in the waste rock stockpiling area within the mine site. However, we have adopted a reuse approach and repurposed the used tyres into the base of portable electric poles, which can be easily relocated as needed. This innovative practice not only repurposes used tyres, but also brings about cost savings and contributes to SDG 12 (Responsible Consumption and Production).



^ Repurposing used tyres for portable electric pole bases.

Utilisation of FABA as Road Base Material for Mine Reclamation Access Roads

The process of generating electricity in our power plant results in the production of a residue known as FABA from the combustion process. Previously, FABA was transported by licensed third-party providers to cement factories on Java Island, which incurred high transportation fees and posed the risk of spillage.

To optimise available resources, from 2018 we started using FABA as a substitute material for the base of mine reclamation access roads that require repairs and maintenance. The soil used in these roads was previously sourced from stockpiles which had been specifically designated for mine closure purposes. With a technical permit from the MoEF to utilise this hazardous waste, FABA improves road infrastructure while optimising soil utilisation for mine closure.



^ The process of FABA utilisation as a road base include (1) mixing FABA and soil (2) application of the mixture onto the road and (3) compaction of the mixture.

Clean Up Day Program at AMMAN

Since 2001, we have held an annual programme to commemorate World Environment Day on June 5th. Initially known as Beach Clean Up Day (BCU) and later renamed to Clean Up Day (CUD), this programme actively involves employees from various departments, business partners, and members of the community, including students from nearby schools. The primary focus of the programme is cleaning the beach near the mine townsite and/or cleaning other public areas. With an impressive average participation of over 4,000 individuals, each participant collects an average of more than 3 kg of waste during the cleaning activity.

Apart from cleaning the surrounding areas, CUD also plays a role in providing environmental education to the local community, especially schools, with five primary objectives in mind.



^ Clean-up Day Program

Figure 34: Clean-up Day (CUD)

Knowledge

- The programme aims to **educate communities** on creating and maintaining a sustainable environment.
- This involves conducting activities such as the 3R waste management programme, tree planting, and environmental-themed contests like drawing, poetry, and quiz.

Skill

- CUD helps communities acquire **skills to solve environmental problems** by organising various training sessions.
- These sessions include composting, plant nurseries, coral transplanting, bird watching, and green school training.

Awareness

The programme seeks to **raise awareness and sensitivity** to the environment by organising various activities such as environmental film screenings, fairy tale performances, and Miss/Mister Environment selection events.

Behavioural

- CUD aims to **instil a set of values and motivation** in the community to actively participate in protecting the environment.
- This involves engaging the community in activities such as cleaning, tree planting, and fun bike rides.

Participation

- The programme **provides opportunities for communities** to actively participate in creating a sustainable environment.
- This includes organising clean village competitions, green schools, and the Waste Management Programme in Schools (PPSS).



Figure 35: School Waste Management Program

School Waste Management Program
>2,700 Participants
 from 12 schools in Maluku Sub-district joined PPSS program in 2022

School Waste Management Programme

Since 2016, we have been conducting a community-based environmental programme, called the School Waste Management Program (*Program Pengelolaan Sampah di Sekolah/PPSS*). The programme aims to promote proper waste management practices in nearby schools within our operational area.

The PPSS programme aims to achieve several goals, including increasing knowledge, understanding, and awareness of waste management among students and other school members, encouraging their active participation in waste management activities, and achieving waste reduction targets.

Schools that effectively implement the programme are awarded and supported with waste management facilities to improve their Environmental Management and Protection (*Perlindungan dan Pengelolaan Lingkungan Hidup/PPLH*) standards.

The program has been successful in reducing the amount of waste generated by participants by

53%

from

472 kg/ day

or 125 tons/ year



to

223 kg/ day

or 59 tons/ year

Reduced energy usage and operation costs of waste-loading trucks, as the waste-loading frequency decreased from

twice a week to **once a week**

66 tons/ year

of waste reduced

3.7 tons/ year of microplastic pollution reduced

Ensuring Responsible Mine Closure

Management Approach

At AMMAN, we are responsible for planning and managing mine closure and reclamation activities throughout the entire project life cycle, from exploration to post-closure, for all our operations. As of 2022, a total of 775 hectares has been reclaimed, out of 3,291 hectares that has been cleared at the Batu Hijau Mine for mining and supporting facilities.

We follow compliance programmes within the project area under the PPKH from the MoEF. These programmes include returning disturbed areas to forest or other approved land use, undertaking progressive reclamation as soon as possible, and rehabilitating off-site watersheds.

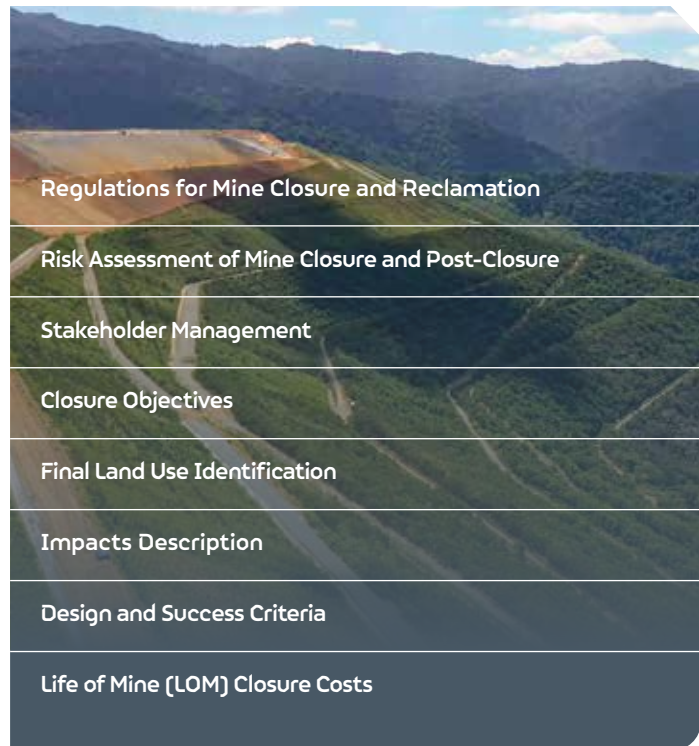
The aim of reclamation is to establish a stable landscape that is aesthetically and environmentally compatible with the surrounding, undisturbed area. This involves ensuring geotechnical stability, creating a dry cover to prevent the formation of ARD, supporting the recolonisation of flora and fauna, and empowering local communities.

Closure and Reclamation Technical Standard

Our Closure and Reclamation Technical Standard sets the minimum requirements for the planning and management of closure and reclamation activities at our mine sites, covering the entire project life cycle, from exploration to post-closure. This ensures that the mine closure process is planned and implemented simultaneously with the operational stage while taking into consideration input from all relevant stakeholders for an integrated approach.

According to our Standard, our multidisciplinary Closure and Reclamation Technical Team (CRTT) will develop a Closure and Reclamation Plan (CRP) that includes estimated costs prior to the exploration phase. For any new site, facility, or alteration to an existing one, the CRP will undergo evaluation from both a technical and financial standpoint to identify closure-

related aspects and associated expenses. The CRP must adhere to the minimum requirements, which include:



Reclamation Plan and Monitoring

In compliance with the regulations set by the MEMR, our comprehensive 2021 – 2025 Reclamation Plan has been thoroughly revised and approved by the MEMR in 2022, reflecting our commitment to responsible reclamation strategies.

To showcase the ecological succession process towards climax forest post-reclamation, we implement comprehensive monitoring programmes such as soil nutrient cycling, vegetation analysis, local climate conditions, fauna assessment, and surface water monitoring. In the latest evaluation by MEMR, we received certification on our ongoing reclamation activities that have successfully met the established criteria. These criteria cover aspects such as land preparation, erosion and mine water management, ground and tree coverage, tree species diversity, and maintenance. The certification confirms that our forest ecosystems are approaching baseline conditions, as evidenced by the healthy regrowth of local species crucial for wildlife and fauna habitat restoration.

Life-Of-Mine Closure Plan

At AMMAN, we ensure thorough documentation and annual review of mine closure risks in our Risks and Aspects Register and integrate the mitigation strategies into our existing environmental programmes and closure plan.

We have prepared a closure plan based on the Phase 7 mine plan (life-of-mine 2032), which was approved by the MEMR in 2019. It has been developed in accordance with Indonesian requirements and must be updated whenever the mine plan significantly changes. The closure plan is currently being revised as part of the Phase 8 mine plan planning process, and is expected to be submitted for approval in 2023.

Our closure planning includes studies such as the Pit Lake Study (which models the water quality and level in the mining pit after closure) and regular community consultation to promote a collaborative and inclusive approach. Stakeholder input is sought to shape the post-closure vision, leading to the integration of specific non-woody species such as bamboo, rattan, and palm sugar, into reclamation activities. This supports sustainable resource utilisation by local communities and promotes environmental stewardship.

Mine Closure Cost

As per government regulations, we follow an approved methodology to estimate rehabilitation costs using specific unit costs and volumes. To meet the requirements, we provide a Bond to the government, which serves as financial assurance for the calculated closure and reclamation costs.

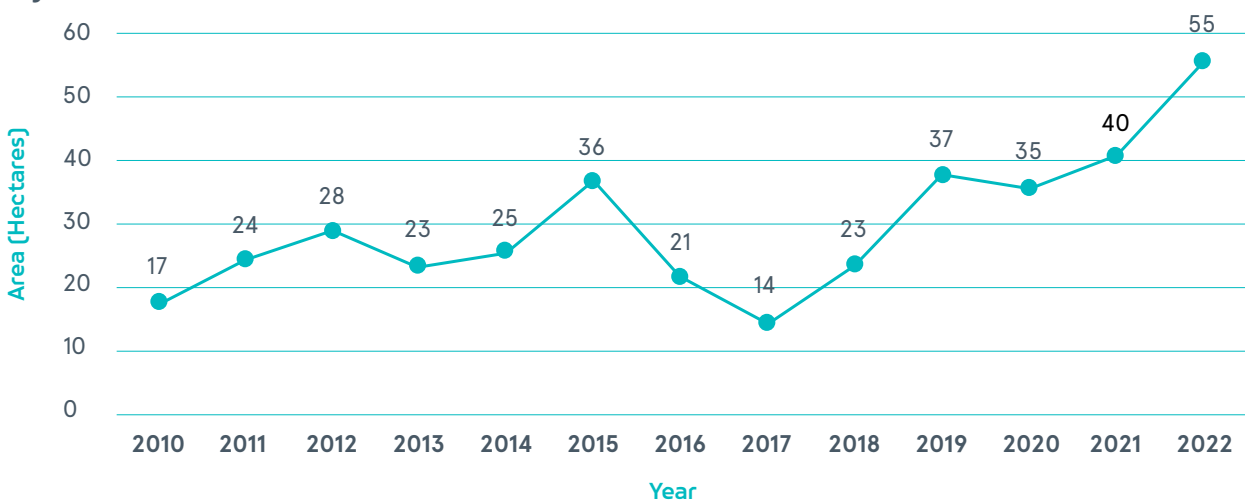
At present, the government holds two Bonds from AMMAN, namely:

1. **Closure Bond** valued at USD 225.5 million which will be funded in several instalments until 2028, as approved by the government and in accordance with applicable regulations. The Closure Bond aligns with the activities described in the closure plan and ensures that sufficient funds are available for closure in the event that AMMAN is unable to complete the work.
2. **Reclamation Bond** valued at USD 30 million for the 2016–2022 period, which provides assurance that funds are available for repair and maintenance, in the event that the quality of reclamation falls short of the required standards. The Reclamation Bond is based on the reclamation plan that is submitted to the government every five years and the amount is adjusted annually based on the government assessment of the quality of reclamation completed.

Our Performance

The following chart presents the area of land reclamation from 2010 to 2022.

Figure 36: Our Reclaimed Area from 2010 to 2022



Notes:

Reclamation activities from 2010 to 2017 were conducted by PT. Newmont Nusa Tenggara before the company underwent a name change to PT. Amman Mineral Nusa Tenggara

Our Programmes and Initiatives

Concurrent Reclamation at AMMAN

At AMMAN, we consistently implement concurrent reclamation, also known as progressive rehabilitation, as part of our mining operations.

This approach involves reclaiming and rehabilitating land continuously throughout the lifespan of the mine, as it becomes available for restoration. The key steps in the reclamation process are outlined below.

1. Land clearing and soil salvaging

Soil conservation in cleared areas is a key priority to ensure the availability of adequate material for future reclamation and post-mining activities. The soil plays a crucial role as a growth medium and water storage for plants during the dry season. It also serves as capping material in managing acid rock drainage.



2. Recontouring

We arrange and reshape the final waste dumps through recontouring, an essential step in creating a stable and functional reclaimed area. We carefully plan and execute the recontouring process to ensure that the final land shape aligns with the intended post-mining land use objectives. This may involve the redistribution of soil, rocks, or other materials to achieve a more natural and aesthetically pleasing landscape.



▲ Arranging and reshaping the piles using heavy machines.

3. Soil Placement and Compaction

The next step in the reclamation process involves the spreading of soil. The soil used for reclamation can be obtained from land clearing activities or from a designated soil stockpile.

Prior to land clearing, thorough soil sampling is conducted to determine important soil characteristics such as thickness, soil particle distribution, pH value, and net carbonate value. This information is essential for assessing soil suitability and identifying necessary amendments or treatments for reclamation.

The collected soil is evenly distributed over the recontoured areas to establish a favourable soil profile for vegetation and ecological restoration. Careful attention is paid to ensure uniform coverage and adequate soil depth for the planned post-mining land use.



^ Soil placement (top) and soil compaction (bottom) using heavy machine.

4. Revegetation

The process of revegetation encompasses a series of activities aimed at restoring plant life to the reclaimed areas. These activities include:

- a. **Land preparation** involves specific measures are taken such as the installation of mountain belts, also known as energy breaks, at 15-meter intervals. These belts are created using cuttings from the Gamal tree (*Gliricidia sepium*). In addition, palm fibre dispersion aprons and coconut fibre nets (coconets) may be used to aid in soil stabilisation and erosion control.
- b. **Hydroseeding** is a technique employed to disperse seeds effectively using a cannon or hose in the revegetation areas. It involves a mixture of seeds, water, fertiliser, tackifier (substance that improves seed adhesion to the soil), dye (for identification purposes), and mulch materials. Hydroseeding enhances seed germination and promotes early plant growth.
- c. **Planting trees** of native plant species. These species are chosen based on their ability to thrive in the specific ecological conditions of the area. Both fast-growing and slow-growing tree species are included, ensuring a diverse and resilient plant community. The planting density is maintained at 1,667 seedlings/ha. A total of 88,926 seedlings consisting of 36 species were planted in 2022.



^ Spreading coconut fibre nets (coconet).



^ Hydroseeding process.



^ Tree planting.

5. Maintenance of Land and Vegetation

To ensure the ongoing health and vitality of the reclaimed areas, we undertake maintenance of land and vegetation as required, and in 2022, a total area of 345.2 hectares was subject to maintenance activities. The specific activities involved are as follows.

- a. **Weed removal** involves removing unwanted vegetation, particularly clearing creeping legume cover crops and is carried out by removing weeds along the planting paths to reduce competition and promote the growth of desired plant species.
- b. **Fertilisation** is carried out to support the growth of plants that exhibit slower growth or are less healthy. Organic NPK (nitrogen, phosphorus, and potassium) and compost are used as fertilisers. Fertilisation is typically conducted concurrently with enrichment planting to provide additional nutrients for plant development.
- c. **Enrichment planting** is implemented in reclamation areas that are over two years old. It is to increase species diversity and restore forest hydrological functions. Various tree species, including those with commercial wood value as well as ecological and hydrological significance, are planted to re-establish forest vegetation stratification.
- d. **Hydroseeding reapplication** is performed to increase the density of cover vegetation, which plays a crucial role in reducing erosion and sedimentation. It is mainly carried out in areas where the cover vegetation has been disturbed, often due to surface landslides.

Our monitoring demonstrates the presence of diverse indicator species in the reclamation area, including birds, bats, large mammals, and herpetofauna. This indicates the successful restoration of habitat quality for these animals, as the reclamation area now offers them adequate food sources, nesting sites, and breeding grounds.



▲ Camera trap shows Javan Deer (*Rusa timorensis*), Long-tailed Macaque (*Macaca fascicularis*), and Wild Boar (*Sus scrofa*) in reclamation area. Camera trap installed to monitor wildlife activity.

Appendix I : OHS Performance

Incident Type	2020			2021			2022 ³⁸		
	Employees	Contractors	Total	Employees	Contractors	Total	Employees	Contractors	Total
Fatality	0	0	0	0	1	1	0	0	0
Lost Time Injury (LTI)	4	8	12	1	8	9	1	5	6
Restricted Work Injury (RWI)	0	7	7	0	2	2	4	0	4
Non-fatal Days Lost (NFDL) Cases	4	15	19	1	10	11	5	5	10
Medical Treatment Injury (MTI)/ No-Days-Lost (NDL) Cases	0	7	7	0	9	9	3	13	16
Total Recordable Injuries (TRI)	4	22	26	1	20	21	8	18	26
Near misses	3	4	7	9	6	15	4	20	24
Rate³⁹									
Fatality Rate	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
Lost Time Injury Frequency Rate (LTIFR)	0.33	0.09	0.12	0.08	0.10	0.09	0.06	0.04	0.04
Total Recordable Injury Frequency Rate (TRIFR) or All Incident Rate (AIR)	0.33	0.25	0.26	0.08	0.24	0.22	0.47	0.15	0.19
Near Miss Frequency Rate (NMFR)	0.24	0.04	0.07	0.70	0.07	0.15	0.23	0.17	0.18

³⁸ Scope of workforce data: 2020 and 2021 – includes AMNT and AMIG. 2022 – includes AMNT, AMIG and AMIN

³⁹ Rates calculated based on 200,000 hours worked.

Appendix II: Risk Management Definitions and Risk Matrix

Risk Matrix

		Consequence				
		1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
Likelihood	A Almost Certain	High 11	High 16	Extreme 20	Extreme 23	Extreme 25
	B Likely/ Probable	Medium 7	High 12	High 17	Extreme 21	Extreme 24
	C Possible	Low 4	Medium 8	High 13	Extreme 18	Extreme 22
	D Unlikely	Low 2	Low 5	Medium 9	High 14	Extreme 19
	E Rare	Low 1	Low 3	Medium 6	Medium 10	High 15

Likelihood Definitions

Likelihood	Description	Time Period	Event History
A Almost Certain	Will occur in most circumstances	Greater than once per month	Happen all the time
B Likely (Probable)	Expected to occur in most circumstances	Greater than once per year	Has occurred before here or in similar circumstances elsewhere
C Possible	Might occur in some circumstances	Greater than once per 10 years	Has happened elsewhere under slightly similar circumstances
D Unlikely	Unlikely to occur in most circumstances	Greater than once per 100 years (Life-of-Mine)	Have heard of it happening elsewhere but not often
E Rare	May occur in exceptional circumstances	Less than once per 100 years	Conceivable but highly improbable

Consequence/ Impact Definitions

Consequence/Impact Definitions					
	A Insignificant	B Minor	C Moderate	D Major	E Catastrophic
Financial (Cost)	< USD \$10k	USD \$10k – \$100k	USD \$100k – \$1M	USD \$1M – \$10M	> USD \$10M
Health and Safety	First Aid Injury; Nuisance value; Minor reversible health effects (e.g. minor irritations, nuisance noise).	Medical Treatment Injury; Restricted Work Injury; Minor reversible health effects requiring treatment (e.g. sunburns).	Single Lost Time Injury; Moderate reversible health effects.	Multiple Lost Time Injuries; Admission to intensive care unit or equivalent; Serious, Chronic, irreversible health effects resulting in long term impairments or shortened life.	Fatality(s) or permanent disability; Immediate irreversible health effects resulting in permanent disability or death.
Environment	No or very low environmental impact; Impact confined to small area; Spill/leak to surface without residual contamination; Wildlife mortality which is not caused by pollution/contamination; Exceedance of internal company standard.	Low Environmental Impact; Rapid cleanup by site staff and/or contractors; Impact contained to existing disturbed area; Spill/leak to surface which may result in residual contamination (area <9m ² or depth <1.5m).	Moderate environmental impact; Cleanup by site staff and/or contractors; Impact confined within working area boundary; Spill/leak to surface which may result in residual contamination (area >9m ² or depth >1.5m), or spill/leak to a water body; Disposal of hazardous waste which does not comply with regulations; Unauthorized land clearance; Wildlife mortalities due to pollution/contamination with likely recovery period less than 3 months.	Major environmental impact; Considerable cleanup effort required using site and external resources; Impact may extend beyond the working area boundary; Wildlife mortalities due to pollution/contamination with likely recovery period more than 3 months; Impact to sensitive / threatened species.	Severe/ catastrophic environmental impact; Extensive cleanup involving external resources; Impact extends to a regional scale; Local species destruction.
Community/ Reputation	Isolated complaint; No media enquiry; No official correspondence/ complaint letter.	Small numbers of sporadic complaints; Official correspondence/ complaint letter received; Some adverse local/ regional media attention for a brief period; Criticism by local and national NGOs.	Serious rate of complaints, repeated complaints from the same area (clustering); Some adverse national media/public/national NGO attention for an extended period; Minor international media coverage.	High level of concern or interest from local community; Persistent adverse national media/public/national and international NGO attention; Repeated international media coverage; Social license to operate under threat.	Extended blockage of operations by community; Persistent adverse international media and/or damaging NGO campaign both nationally and internationally; Loss of social license to operate; Stoppage of operations.
Legal Compliance/ Permitting	Minor technical/ legal compliance issue unlikely to attract a regulatory response.	Technical/legal compliance issue which may attract a low-level administrative response from a regulator; Incident requires reporting in routine reports (e.g. monthly).	Breach of regulation with possible prosecution and/or penalties; Continuing occurrence of minor breaches; Incident requires immediate (within 48 hours) notification.	Major breach of regulation resulting in investigation by regulator; Prosecution, significant penalties, operating restrictions or other action likely.	Serious breach of regulation resulting in investigation by regulator, operation suspended, and/or license revoked.

Appendix III: Acronyms and Abbreviations

AMIG	PT Amman Mineral Integrasi	EITI	Extractive Industries Transparency Initiative
AMIN	PT Amman Mineral Industri	ELP	Environmental Leadership Program
AMMN	PT Amman Mineral Internasional Tbk.	EMS	Environmental Management System
AMMAN	Collective group of companies AMIG, AMIN, AMNT, and AMMN	EN	Endangered
AMNT	PT Amman Mineral Nusa Tenggara	EnB	Energy Baseline
ANP	Amman Nusa Propertindo	EnPI	Energy Performance Indicators
ARD	Acid Rock Drainage	EP	Equator Principles
ASA Foundation	Asian Soccer Academy Foundation	EPA	United States Environmental Protection Agency
BAP	Biodiversity Action Plan	EPC	Engineering, Procurement and Construction
BKKBN	National Population and Family Planning Board	EPD	Environmental Product Declarations
BMP	Biodiversity Management Plan	EPRP	Emergency Preparedness and Response Plan
BNSP	<i>Badan Nasional Sertifikasi Profesi/</i> National Professional Certification Agency	ESDD	Environmental and Social Due Diligence Assessment
BPJS	<i>Badan Penyelenggara Jaminan Sosial/</i> Social Security Agency	ESG	Environment, Social, and Governance
CCPP	Combined Cycle Power Plant	ESIA	Environmental and Social Impact Assessment
CEMS	Continuous Emission Monitoring System	FABA	Fly Ash and Bottom Ash
CH₄	Methane	FPIC	Free, Prior, and Informed Consent
CHA	Critical Habitat Areas	GHG	Greenhouse Gas
CO	Carbon Monoxide	GIIP	Good International Industry Practice
CO₂	Carbon dioxide	GJ	Gigajoules
CR	Critically endangered	GRDP	Gross Regional Domestic Product
CSIRO	Commonwealth Scientific and Industrial Research Organisation	GWP	Global Warming Potential
CUD	Clean Up Day	HFCs	Hydrofluorocarbons
DMU	Discrete Management Units	IA	Internal Audit
DPR RI	Dewan Perwakilan Rakyat Republik Indonesia/ <i>House of Representatives of the Republic of Indonesia</i>	IFC PS	International Finance Corporation Performance Standards
DSTP	Deep-Sea Tailings Placement	ILO	International Labour Organisation
EIA	Environmental Impact Assessment	IPCC	Intergovernmental Panel on Climate Change

JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”	PROPER	<i>Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup/</i> Corporate Performance Rating Assessment Program in Environmental Management
KPI	Key Performance Indicator	PV	Photovoltaic
LCA	Life Cycle Assessment	QA/ QC	Quality Assurance and Quality Control
LED	Light-emitting Diode	RIPPM	<i>Rencana Induk Pengembangan dan Pemberdayaan Masyarakat/</i> Community Development and Empowerment Programme Masterplan
LKS Bipartit	<i>Lembaga Kerja Sama Bipartite/</i> Bipartite Cooperation Institution	RKL-RPL	<i>Rencana Pengelolaan Lingkungan Hidup- Rencana Pemantauan Lingkungan Hidup/</i> Environmental Management and Environmental Monitoring Plan
LNG	Liquid Natural Gas	SAMS	Scottish Association for Marine Science
LoM	Life of Mine	SASB	Sustainability Accounting Standards Board
LSP	<i>Lembaga Sertifikasi Profesi/</i> Professional Certification Organisation	SCM	Supply Chain Management
MBSL	Metre Below Sea Level	SCS	Sediment Control Structures
MEMR	Ministry of Energy and Mineral Resources	SEP	Stakeholder Engagement Plan
MLS	PT Macmahon Labour Services	SEU	Significant Energy Use
MoEF	Ministry of Environment and Forestry	SF6	Sulphur Hexafluoride
MSME	Micro, Small and Medium Enterprises	SMS	Safety Management System
MSS	PT Medcopower Solar Sumbawa	SO2	Sulphur Dioxide
N₂O	Nitrous oxide	SR	Sustainability Report
NDC	Nationally Determined Contribution	tCO₂e	Tonne Carbon Dioxide Equivalent
NGO	Non- Governmental Organisation	TSF	Tailings Storage Facilities
NO_x	Nitrogen oxide	UN SDGs	United Nations' Sustainable Development Goals
OHS	Occupational Health and Safety	UNFCCC	United Nations Framework Convention on Climate Change
OJK	<i>Otoritas Jasa Keuangan/</i> Financial Services Authority	USAID	United States Agency for International Development
OS	Operational Safety	VPSHR	Voluntary Principles on Security and Human Rights
PD	President Director	WBS	Whistleblowing System
PMR	Precious Metal Refinery	WRI	Work-related Illness
PPKH	<i>Persetujuan Penggunaan Kawasan Hutan/</i> Forest Area Use Approval	WRI	World Resources Institute
PPSS	<i>Program Pengelolaan Sampah di Sekolah/</i> School Waste Management Program		

Appendix IV:

Glossary

Acid Rock Drainage	The process by which sulphide minerals are exposed to air and water and, through a natural chemical reaction, produce sulphuric acid.
Active Conflict	A conflict, both state-based and non-state, is deemed to be active if there are at least 25 battle-related deaths per calendar year in one of the conflict's dyads, as per the definition set by the Uppsala Conflict Data Program (UCDP).
Areas of Protected Conservation	Areas located within International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI), Ramsar Wetlands of International Importance, UNESCO World Heritage Sites, Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme, Natura 2000 sites, sites that meet the IUCN's definition of a protected area and sites may be listed in the World Database of Protected Areas (WDPA) and mapped on Protected Planet.
Block	A defined portion of a mineral deposit or ore body. It represents a specific volume or area of the deposit that is demarcated for mining and extraction.
Business Partners	Any individual, corporation, limited liability company, partnership, joint venture, association, or other entity, regardless of form, that is or has been in a commercial or business relationship with AMMAN, including but are not limited to suppliers, contractors, subcontractors, and joint venture (JV) partners.
Child Labour	Employment or work performed by children who are below the minimum legal age for employment, as defined by the Indonesian laws and international standards.
Code of Business Ethics and Conduct ("Code")	The Code of Business Ethics and Conduct is a comprehensive set of guidelines and principles that govern the behaviour and actions of all our employees and business partners. It serves as a framework for promoting ethical behaviour, integrity, and responsible business practices throughout AMMAN.
Contractors	Individuals who are not on AMMAN's payroll, but are engaged in our business, activities and/or operations, and are supervised on a day-to-day basis, including independent contractors and those employed by third parties (e.g., temporary agencies and labour brokers).
Deep-Sea Tailings Placement (DSTP)	A well-established process which mitigates the environmental impact of onshore mining. Mine waste, typically rock waste and water is discharged offshore via a pipeline into a submarine canyon for disposal by gravity flows into the deep-sea.
Economic Value Distributed	Accumulated spending on operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments.
Economic Value Generated	Revenues generated from our business and operations during the reporting year.
Economic Value Retained	AMMAN's retained earnings, calculated by subtracting the economic value distributed from the economic value generated
Employees	Individuals who are contractually employed by and under direct control and supervision of AMMAN.
Endangered Species Habitat	A location in or near areas where IUCN Red List of Threatened Species that are classified as Critically Endangered (CR) or Endangered (EN) are extant.
Extant Species	A species that is a resident, present during breeding or non-breeding season, or if it makes use of the area for passage.
Forced or Compulsory Labour	All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily, as stipulated by the International Labour Organization (ILO) Convention No. 29, 'Forced Labour Convention'.

Greenhouse Gas (GHG)	Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds. This property causes the greenhouse effect. GHGs include carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), and fluorinated gases (F-gases) such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF ₆).
Grievance	Issues between a company and an affected stakeholder that should be received and resolved through a formal grievance mechanism.
Grievance Mechanism	A formalised means through which individuals or groups can raise concerns about AMMAN's impacts on them.
Gross Emissions	GHGs emitted into the atmosphere before accounting for offsets, credits, or other similar mechanisms that have reduced or compensated for emissions.
Indigenous Lands	<p>Lands occupied by people who self-identify as "Indigenous" per Article 33 of the United Nations Declaration on the Rights of Indigenous Peoples and the ILO Convention No. 169, and likely have one or more of the following characteristics based on the working definition of "Indigenous Peoples" adopted by the United Nations: historical continuity with pre-colonial and/or pre-settler societies; strong link to territories and surrounding natural resources; distinct social, economic, or political systems; distinct language, culture, and beliefs; and form non-dominant groups of society.</p> <p>Note: Customary territory is customary land in the form of land, water, and/or waters along with natural resources on it with certain borders, which is owned, utilised, and preserved from generation to generation and in a sustainable manner to fulfil the needs of the community and which is obtained through inheritance from their ancestors or ownership claims in the form of <i>ulayat</i> land or customary forest. The customary forest shall be carried out through applications to the Minister of Environment and Forestry by customary stakeholders.</p>
Local Employees	Individuals from West Nusa Tenggara Province, employed by AMMAN.
Local Suppliers	Businesses or vendors from Indonesia, providing goods and/or services to support AMMAN's business, activities and/or operations.
Lost Time Injury (LTI)	A work-related injury or accident that results in an employee's absence from work on the next calendar day after the injury.
Lost Time Injury Frequency Rate (LTIFR)	Number of Lost Time Injuries that occurred during the reporting period, per 200,000 hours worked.
Material Topics	Topics identified through a materiality assessment process that are considered significant, relevant and impactful to AMMAN's business, operations and stakeholders.
Medical Treatment Injury (MTI)	An occupational injury which requires medical treatment beyond first aid, but which is not a Lost Time Injury or a Restricted Work Injury.
Mine Closure	Mine closure refers to the process of ceasing mining operations at a site and transitioning it to a safe and sustainable post-mining phase. It encompasses the activities, strategies, and procedures undertaken to ensure the responsible closure of a mine, including the decommissioning of infrastructure, reclamation of land, and ongoing monitoring and management of post-closure impacts.

Mine Water	<p>Mine water refers to water that has been exposed to or influenced by mining activities. It encompasses both inflow (water entering mining areas) and outflow (water leaving mining areas). It can originate from precipitation, surface water bodies, or groundwater systems.</p> <p>As mine water interacts with minerals, metals, and chemicals during mining, the composition and properties of mine water may vary for different mining areas.</p>
Mineral Resources	Concentrations or occurrences of minerals, such as metals, minerals and/or industrial minerals, in the Earth's crust that have been identified, estimated, and interpreted based on geological evidence and limited sampling. These resources have the potential for future extraction, although their economic viability may not be fully established.
Near	Within 5 kilometres (km) of the boundary of an area.
Near Miss	An unplanned incident in which no property or environmental damage or personal injury occurred, but where significant damage or personal injury easily could have occurred but for a slight circumstantial shift.
Near Miss Frequency Rate (NMFR)	Number of Near Misses that occurred during the reporting period, per 200,000 hours worked.
No-Days-Lost (NDL) Cases	Occupational injuries which require medical treatment beyond first aid, but which are not Lost Time Injuries or a Restricted Work Injuries. Equivalent to Medical Treatment Injuries.
Nonfatal, Days Lost (NFDL) Cases	Occupational injuries that result in loss of one or more days from the scheduled work or days of limited or restricted activity while at work. This is equivalent to the sum of Loss Time Injuries and Restricted Work Injuries and excludes Fatalities.
Non-technical Delays	Site shutdowns or project delays due to non-technical factors, including those resulting from pending regulatory permits or other political delays related to community concerns, community or stakeholder resistance or protest, and armed conflict.
Non-mineral Waste	Anything for which AMMAN has no further use and which is discarded, intended to be discarded, or released into the environment, including includes scrap metal, reject coal, used oil, tires, batteries, and other solid wastes.
Passage	All areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.
Probable Reserves	Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.
Proved Reserves	Reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings, or drill holes; grade and/or quality are computed from the results of detailed sampling, and (b) the sites for inspection, sampling, and measurement are spaced so closely and the geographic character is so well-defined that size, shape, depth, and mineral content of reserves are well-established.
Reclamation	The process of restoring and rehabilitating land disturbed by mining activities to a stable condition that supports a safe, healthy, and productive post-mining land use. It involves activities aimed at minimizing environmental impacts, stabilizing landforms, restoring soil fertility, and promoting the establishment of self-sustaining ecosystems.

Recycled Materials	Waste materials that have been reprocessed or treated by means of production or manufacturing process and made into a final product or a component for incorporation into a product.
Renewable Energy	Energy from sources that are replenished at a rate greater than or equal to their rate of depletion, such as geothermal, wind, solar, hydro, and biomass.
Reserves	A portion of a mineral deposit that has been demonstrated, through detailed exploration, to be economically and technically feasible to extract using current mining methods and under prevailing economic and operating conditions.
Restricted Work Injury (RWI)	An occupational injury that results in the injured person being unable to perform one or more of their routine functions for a full working day or more due to restrictions.
Scope 1 GHG Emissions	Direct GHG emissions that are emitted from sources and activities owned and/or controlled by AMMAN.
Scope 2 GHG Emissions	Indirect GHG emissions associated with the consumption of purchased electricity, heat or steam. However, AMMAN does not purchase electricity, so we do not have any Scope 2 GHG emissions.
Significant Incident	An occurrence that falls under AMMAN's impact definition category three and above.
Stakeholder Mapping	A systematic process of identifying, categorising, and analysing our stakeholders to gain an understanding of their interests, influence, and relationships with our business and operations.
Strikes and Lockouts	Work stoppages involving 1,000 or more workers lasting one full shift or longer.
Tailings	A by-product of mining, consisting of the processed rock or soil left over from the separation of the commodities of value from the rock or soil within which they occur.
Total Recordable Injury Frequency Rate (TRIFR) or All Incidence Rate (AIR)	Number of Fatalities, Lost Time Injuries, Restricted Work Injuries, and Medical Treatment Injuries, per 200,000 hours worked.
Volatile Organic Compounds (VOCs)	Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and methane, that participates in atmospheric photochemical reactions, except those designated by the U.S. Environmental Protection Agency (EPA) as having negligible photochemical reactivity.
Waste Rock	Mineral materials and low-grade ore with no economic interest at the time of mining.
Water consumption	Total volume of water utilised by AMMAN in the operations. It includes water that evaporates during withdrawal, usage and discharge; water that is directly or indirectly incorporated into our product; and water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.
Workforce	Individuals engaged in AMMAN's business and operations, including both employees and contractors.

Appendix V: SASB Index in Reference to Metals and Mining Sustainability Accounting Standard (December 2021)

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
Greenhouse Gas Emissions			
1. Gross global Scope 1 emission 2. Percentage covered under emissions-limiting regulations	EM-MM-110a.1	<p>1. Gross global Scope 1 emission: 1,859,902 tCO₂e 2. Percentage covered under emissions-limiting regulations: 0%</p> <p>Notes:</p> <ul style="list-style-type: none"> AMMAN's GHG reporting is in accordance with the GHG Protocol. AMMAN's operations are not connected to the national grid. We generate our own power and account for related GHGs as part of our Scope 1 emissions. 	<p>Managing GHG Emissions Page 100</p>
Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	EM-MM-110a.2	<p>At AMMAN, we recognise the importance of managing GHG emissions from our operations. By effectively doing so, we aim to contribute to global and national efforts to address the physical risks associated with climate change and the transitional risks and opportunities arising from the shift towards a low-carbon future.</p> <p>By expanding production, we aim to help the world meet the growing demand of critical minerals. However, we are also committed to evaluating opportunities to reduce and manage GHG emissions, and aim to identify more comprehensive and business-appropriate long-term GHG emissions reduction initiatives as part of the next revision to our 2020 – 2024 Emissions Reduction Strategy. Until then, we are actively investigating various options for GHG abatement, improving our energy efficiency, and reducing our carbon intensity, and will continue to closely monitor progress against our existing strategy. By adopting this approach, we can reduce operational costs and comply with both existing and emerging regulations.</p> <p>In 2022, one of notable initiatives was the commissioning of the Sumbawa Solar PV Power Plant, which provides renewable energy to our operations, and is projected to help us avoid up to 100,000 tCO₂e of GHG emissions per year.</p> <p>As stipulated in our Emissions Reduction Strategy, we are dedicated to fulfilling the following commitments:</p> <ul style="list-style-type: none"> Continue to improve our understanding of the various sources and contributions to our GHG emission profile Plan, implement, and evaluate efforts to reduce emissions in the form of GHG and air pollutants from all emission sources Optimise capacity building through joint discussion activities, training and certification to involve all employees in emissions reduction programmes 	<p>Managing GHG Emissions Page 99</p>

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
		<ul style="list-style-type: none"> Strive to reduce emissions in our main activities through various means, such as reusing waste, replacing equipment with energy-efficient alternatives, modifying equipment, and utilising renewable energy sources Support community-based emissions reduction programmes Implement performance improvement opportunities based on life cycle assessment principles 	
Air Quality			
Air emissions of the following pollutants: (1) CO, (2) NO _x (excluding N ₂ O), (3) SO _x , (4) PM ₁₀ , (5) mercury, (6) lead, and (7) VOCs	EM-MM-120a.1	<ol style="list-style-type: none"> Total CO Emissions: 294 tonnes Total NO_x Emissions: 2,815 tonnes Total SO_x Emissions: 776 tonnes Total Particulate Matters (PM): 107 tonnes Total Mercury (Hg) Emissions: 0.001004 tonnes = 1.004 kilograms Total Lead (Pb) Emissions: 0.000038 tonnes = 0.38 kilograms <p>Notes:</p> <ul style="list-style-type: none"> The PM figures cover PM_{2.5}, PM₁₀, and larger particulates. Volatile Organic Compounds (VOCs) have not been measured at AMNT. 	Protecting Air Quality Page 97
Energy Management			
<ol style="list-style-type: none"> Total energy consumed Percentage grid electricity Percentage renewable 	EM-MM-130a.1	<ol style="list-style-type: none"> Total Energy Consumed: 20,620,382 GJ Grid electricity: 0% Renewables: 14.3% <ol style="list-style-type: none"> 13.9% from use of B30 biodiesel 0.4% from 26.8 MWp Sumbawa Solar PV Power Plant (energized: mid-2022) <p>Notes:</p> <ul style="list-style-type: none"> AMMAN is reliant on self-generated power and does not purchase electricity from the grid. The use of B30 biodiesel (containing 30% palm oil-derived fuel) is mandatory for certain industries, such as mining and power generation. 	Promoting Energy Efficiency Page 108
Water Management			
<ol style="list-style-type: none"> Total freshwater withdrawn Total fresh water consumed Percentage of each in regions with High or Extremely High Baseline Water Stress 	EM-MM-140a.1	<ol style="list-style-type: none"> Total freshwater withdrawn: 3,073 thousand m³ Total freshwater consumed: 3,073 thousand m³ Total freshwater withdrawn by operations in water-stressed areas: 0% Total freshwater consumed by operations in water-stressed areas: 0% <p>Notes:</p> <ul style="list-style-type: none"> According to the Aqueduct tool developed by the World Resources Institute (WRI), the location where AMMAN operates, Sumbawa Island, is classified as a region with a low to medium level of baseline water stress, ranging from 10% to 20%, implying a lower likelihood of a high-stress water situation occurring. Although not defined as highly stressed by the WRI Aqueduct tool (WRI), the water extracted from the Sejorong Well can become stressed during the dry season, but is a small proportion of the total freshwater withdrawn/consumed (<1%) and we account for this in our operational plans. 	Preserving Water Resources Page 112

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
Number of incidents of non-compliance associated with water quality permits, standards, and regulations	EM-MM-140a.2	<p>Four significant water-related incidents were recorded in 2022.</p> <p>Our definition of a significant incident is an incident which has a consequence of Category 3 or above as defined by AMMAN's impact definitions. These are significant incidents that may lead to administrative penalty orders, indicated by a red rating on the PROPER, or may escalate to environmental law enforcement if corrective measures are not taken.</p> <p>In 2022, there were four significant water-related incidents, the majority of which were caused by very heavy rainfall. Three of these cases involved the overflow of mine water from sediment-settling ponds, while the fourth case involved the discharge of mine water into the Sejorong river through an uncovered, unused pipeline. We promptly responded to these incidents and implemented preventive measures to avoid similar occurrences in the future.</p>	Preserving Water Resources Page 113
Waste & Hazardous Materials Management			
Total weight of non-mineral waste generated	EM-MM-150a.4	54,511 tonnes	Managing Waste Page 117
Total weight of tailings produced	EM-MM-150a.5	40,242,758 tonnes	Responsible Tailings Management Page 87
Total weight of waste rock generated	EM-MM-150a.6	227,083,190 tonnes	Managing Waste Page 117
Total weight of hazardous waste generated	EM-MM-150a.7	14,724 tonnes	Managing Waste Page 117
Total weight of hazardous waste recycled	EM-MM-150a.8	16,500 tonnes	Managing Waste Page 117
Number of significant incidents associated with hazardous materials and waste management	EM-MM-150a.9	<p>1 incident</p> <p>Significant incidents are incidents with an impact level of Category 3 or higher which involve hazardous materials and waste management.</p> <p>In May 2022, a fuel truck in the mining area skidded and overturned which resulted in a fuel spill of up to 5,000 litres. There were no injuries and the contaminated area was promptly cleaned up by the following day. Preventive actions taken include conducting risk assessments for each ramp with an incline grade above 12%, improved planning and repair of drainage on mine roads, and the display of the mine road condition monitoring at weekly meetings.</p>	Managing Waste Page 118

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
Description of waste and hazardous materials management policies and procedures for active and inactive operations	EM-MM150a.10	<p>At AMMAN, we are committed to ensuring the safe and sustainable management of waste generated by our active and inactive operations.</p> <p>We implement a set of comprehensive standards which are Waste Management, Tailings Management, Waste Rock Management, and Hazardous Materials Technical Standards. These standards are carried out in accordance with the applicable laws and regulations set by the Government of Indonesia.</p> <p>Our Waste Management Technical Standard requires the implementation of 3R (reduce reuse, recycle) programmes where applicable, this forms the key strategy that we use to minimise waste disposal. To achieve this, we have implemented a Waste Management Plan that outlines site-specific procedures in accordance with the waste hierarchy, which includes:</p> <ul style="list-style-type: none"> · Reducing the generation of waste · Recycling and/or utilisation of waste · Minimising hazardous waste through site chemical introduction processes · Reporting and tracking specific hazardous and toxic waste management <p>Transport companies and drivers in our operations are licensed and certified by the government to transport hazardous waste from AMMAN to licensed disposal facilities offsite. GPS systems are used to monitor and track all vessels and vehicles transporting hazardous waste, and we conduct due diligence inspections on these transport companies every three years.</p> <p>Waste and hazardous material management efforts are coordinated among business partners (e.g., contractors & sub-contractors) following the waste management, hazardous management, and contract management procedures. AMMAN end-users identify the risk level when creating contract requests and these are evaluated by environmental compliance personnel. Specific requirements and obligations are stated in the contract, and we hold kick-off meetings prior to commencing work to ensure these are clear. Field compliance checks and inspections are regularly conducted for contractors operating on site, and formal evaluations of contractor performance (including environmental performance) are completed periodically.</p> <p>All of AMMAN's operations are mercury and cyanide-free, as the process of mineral extraction does not require using the chemicals.</p>	<p>Managing Waste</p> <p>Page 115-117</p>

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
		<p>As outlined in our Waste Management Technical Standard, we are committed to decommission any waste facilities, and hazardous wastes generated during decommissioning, in accordance with applicable Indonesian regulations. These requirements have been incorporated into our closure and reclamation plan.</p> <p>To prevent spills, we provide training to our employees, and have established a spill response team ready to act promptly in the event of a spillage.</p> <p>To ensure continuous adherence to waste management practices, we implement a waste management awareness programme and regularly conduct internal audits and inspections of relevant operational areas, including contractors</p>	
Biodiversity Impacts			
Description of environmental management policies and practices for active sites	EM-MM-160a.1	<p>At AMMAN, we are committed to upholding our environmental responsibilities and minimising any negative impacts on the environment throughout the operational lifecycle, including development, operations, closure and rehabilitation. To minimise the negative impacts, our Environmental Policy is supported by the implementation of an ISO 14001-certified Environmental Management System (EMS). The Policy outlines our commitments to managing the environment, by ensuring compliance, implementing risk management, carrying out environmental action and capacity building, and conducting stakeholder engagements.</p> <p>In addition, AMMAN has developed and implemented nine Technical Standards which define the minimum requirements to protect the environment, encompassing:</p> <ol style="list-style-type: none"> 1. Water Management 2. Tailings and Heap Leach Facility Management 3. Closure and Reclamation Management 4. Waste Rock and Ore Stockpile Management 5. Hazardous Materials Management 6. Air Management 7. Waste Management 8. Biodiversity Management 9. Energy Management <p>In accordance with the IFC Performance Standard (IFC PS) #6, we assessed broad Critical Habitat Areas (CHA) surrounding the Batu Hijau site and divided them into Discrete Management Units (DMU) in both marine, coastal and terrestrial categories. To achieve a “net gain” of critically endangered species and align with the IFC PS requirements on critical habitat, we intend to conduct further investigations into this issue, and provide robust management measures that avoid critical habitat areas if required.</p>	<p>Preserving Environment Page 81-82</p>

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
		<p>In 2022, we conducted an Environmental and Social Due Diligence Assessment (ESDD) to evaluate the potential impacts and risks of our business plan. The assessment was conducted against the IFC PS, Equator Principles (EP) 4, and applicable regulations and standards in Indonesia.</p> <p>While our management approach aligns closely with the IFC PS, the ESDD identified some areas for improvement, specifically in IFC PS 1 (Assessment and Management of Environmental and Social Risks), PS 3 (Resource Efficiency and Pollution Prevention), PS 4 (Community Health, Security and Safety), and PS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources). These recommendations include updating the Emergency Response Plan with risks associated with the LNG facilities, reviewing the Company’s grievance mechanism, assessing the capacity of wastewater discharge ponds to address the overflow during exceptionally high rainfall discharge events, managing traffic and road repair caused by the increased traffic during the construction of new projects, improving the identification of Critical Habitats, and updating the Batu Hijau Biodiversity Management Plan to achieve the objectives of PS 6. Moving forward, these findings will be incorporated into the planned improvements for our EMS.</p> <p>In addition to implementing robust procedures, we also conduct comprehensive monitoring programmes to assess environmental impacts and performance. The results of these programmes are reported internally through management reviews and externally to regulatory bodies annually in accordance with compliance obligations.</p>	
<p>Percentage of mine sites where acid rock drainage is:</p> <ol style="list-style-type: none"> 1. predicted to occur 2. actively mitigated 3. under treatment or remediation 	<p>EM-MM-160a.2</p>	<ol style="list-style-type: none"> 1. Predicted to occur: 100% 2. Actively mitigated: 100% 3. Under treatment or remediation: 100% <p>Notes:</p> <ul style="list-style-type: none"> · Acid rock drainage (ARD) is predicted to occur in all AMMAN mine sites, especially in the waste rock and ore stockpiles area. · 100% of the AMMAN’s mine site applies ARD management under the Government of Indonesia’s regulations. 	<p>Preserving Water Resources Page 112</p>

Accounting Metric	Code	Data	Reference in Sustainability Report 2022										
Percentage of 1. proved reserves 2. probable reserves in or near sites with protected conservation status or endangered species habitat	EM-MM-160a.3	1. 100% of the Batu Hijau mining area is situated less than five kilometres from the Jereweh Nature Reserve Area.	Safeguarding Biodiversity Page 91										
		<table border="1"> <thead> <tr> <th colspan="2">Reserves grade (in % of metal content)</th> </tr> <tr> <th>Proved</th> <th>Probable</th> </tr> </thead> <tbody> <tr> <td>Cu 0.43 %</td> <td>Cu 0.33 %</td> </tr> <tr> <td>Au 0.48 g/t</td> <td>Au 0.19 g/t</td> </tr> <tr> <td>Ag 1.34 g/t</td> <td>Ag 0.77 g/t</td> </tr> </tbody> </table> <p>Endangered species in the area are:</p> <ul style="list-style-type: none"> • Flores Hawk-eagle (CR) • Yellow-crested Cockatoo (CR) • Chestnut-capped Thrush (EN) • Tenggara Hill Myna (EN) • Scarlet-breasted Lorikeet (EN) 		Reserves grade (in % of metal content)		Proved	Probable	Cu 0.43 %	Cu 0.33 %	Au 0.48 g/t	Au 0.19 g/t	Ag 1.34 g/t	Ag 0.77 g/t
Reserves grade (in % of metal content)													
Proved	Probable												
Cu 0.43 %	Cu 0.33 %												
Au 0.48 g/t	Au 0.19 g/t												
Ag 1.34 g/t	Ag 0.77 g/t												
		2. 100% of the Elang Project, a proposed mining area, is situated less than five kilometres from a Protected Forest Area as designated by the Indonesia MoEF.											
		<table border="1"> <thead> <tr> <th colspan="2">Reserves grade (in % of metal content)</th> </tr> <tr> <th>Proved</th> <th>Probable</th> </tr> </thead> <tbody> <tr> <td>Cu 0.35 %</td> <td>Cu 0.25 %</td> </tr> <tr> <td>Au 0.35 g/t</td> <td>Au 0.24 g/t</td> </tr> <tr> <td>Ag 1.00 g/t</td> <td>Ag 0.89 g/t</td> </tr> </tbody> </table> <p>Endangered species in the area are:</p> <ul style="list-style-type: none"> • Flores Hawk-eagle (CR) • Yellow-crested Cockatoo (CR) • Tenggara Hill Myna (EN) 	Reserves grade (in % of metal content)		Proved	Probable	Cu 0.35 %	Cu 0.25 %	Au 0.35 g/t	Au 0.24 g/t	Ag 1.00 g/t	Ag 0.89 g/t	
Reserves grade (in % of metal content)													
Proved	Probable												
Cu 0.35 %	Cu 0.25 %												
Au 0.35 g/t	Au 0.24 g/t												
Ag 1.00 g/t	Ag 0.89 g/t												
Security, Human Rights & Rights of Indigenous Peoples													
Percentage of 1. proved and 2. probable reserves in or near areas of conflict	EM-MM-210a.1	<p>None of AMMAN's proved and probable reserves are located within or near areas of conflict.</p> <p>Our proved and probable reserves, which we define using national standards and JORC Code Compliance, are not deemed to be in or near areas of conflict as defined by the Uppsala Conflict Data Programme.</p>	Responsible Supply Chain Management Page 46										

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
Percentage of 1. proved and 2. probable reserves in or near indigenous land	EM-MM- 210a.2	<p>We do not currently disclose the percentage of (1) proved and (2) probable reserves in or near Indigenous lands.</p> <p>The 1996 Environmental Impact Assessment of Batu Hijau did not identify any Indigenous People and our proved and probable reserves are not located within or near Indigenous land. However, the Batu Hijau Expansion Environmental and Social Impact Assessment (ESIA), completed in 2022, identified one Tau Samawa community within our zone of influence. In line with our Indigenous Peoples Technical Standard, we have commenced the engagement process with these communities.</p> <p>In addition, the existence of indigenous land on or near our Elang exploration site is still being studied, as there are different definitions and approaches relating to this matter between national and international regulations, standards and guidelines. We will continue to review the presence and boundaries of Indigenous lands at Elang, and when required, follow our Technical Standard for Indigenous Communities and IPs.</p>	<p>Upholding Human Rights Page 73</p>
Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	EM-MM- 210a.3	<p>At AMMAN, we are committed to respecting and safeguarding the human rights of everyone impacted by our operations, from exploration, mining, and processing to closure and rehabilitation. We adhere to our Human Rights Policy which defines human rights as per international and Indonesian standards, including but not limited to the International Bill of Human Rights, The Voluntary Principles on Security and Human Rights (VPSHR), The International Labour Organization (ILO) 1998 Declaration on Fundamental Principles and Rights at Work, UN Declaration on the Rights of Indigenous Peoples, and Indonesian Law No. 39/1999 on Human Rights.</p> <p>To foster a responsible supply chain, we implement policies and practices that apply to all our entities and projects, and closely monitor our procurement performance. We conduct inherent-risk assessments for our primary Tier One suppliers and effectively communicate and enforce our expectations regarding ethics, human rights, and social as well as environmental performance to our business partners and supply chain.</p> <p>We conduct environmental and social impact assessments in line with GIIIP for major new expansions and developments, and have implemented a periodic, independent human rights due diligence process that helps us identify, prevent, and mitigate negative human rights risks and impacts related to our activities. We regularly monitor our human rights performance and are committed to making improvements whenever necessary. We have also established a grievance mechanism to provide effective access to remedy of adverse human rights impacts due to our activities. As part of our commitment to human rights, we provide regular training and awareness-raising activities to our employees.</p>	<p>Upholding Human Rights Page 70-73</p> <p>Promoting Corporate Governance, Compliance and Transparency Page 36-37</p> <p>Responsible Supply Chain Management Page 46</p>

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
		<p>Furthermore, we effectively communicate our Human Rights Policy to our security personnel. We have also developed a suite of comprehensive security guidelines and training for security personnel, which encompasses our Code of Business Ethics and Conduct as well as VPSHR.</p> <p>We acknowledge that mining companies can contribute long-term benefits to local communities in our areas of operation, including Indigenous communities. To this end, we ensure that our engagements with Indigenous Peoples involve culturally appropriate representative bodies and adhere to the principles of Free Prior Informed Consent (FPIC), as outlined in our community and Human Rights Policies.</p> <p>Furthermore, we are aware of the different approaches to IPs at national and international levels, i.e., government regulations and ILO Convention No. 169, and are committed to considering the relevant stakeholders throughout the mining project cycle following our Technical Standard.</p> <p>Currently, we do not own or control any operations or projects in Conflict-Affected and High-Risk Areas as defined by the Uppsala Conflict Data Programme, nor do we source minerals from third parties. However, if this situation changes, we are committed to implementing the Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict Affected and High-Risk Areas.</p>	
Community Relations			
Discussion of the process to manage risks and opportunities associated with community rights and interests	EM-MM-210b.1	We are committed to promoting sustainable development that fosters shared benefits with the local communities near our operations. To achieve this, we strive to effectively cooperate with our stakeholders, particularly our local communities. We have conducted several studies to identify and map our stakeholders, including, but not limited to a social baseline mapping and needs assessment in 2012 and 2016 and a stakeholder mapping study in 2022. Subsequently, we developed a Stakeholder Engagement Plan (SEP) that identifies and engages with local stakeholders who are impacted by our project activities or are otherwise important for our business continuity.	Supporting Local Communities Page 55

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
		<p>In line with the Indonesian laws and regulations, we develop a Community Development Program Masterplan (Rencana Induk Pengembangan dan Pemberdayaan Masyarakat/RIPPM), in accordance with Ministry of Energy and Mineral Resources (MEMR) Decree No. 1824/2018, on a periodic basis. It is a comprehensive plan that aims to provide guidance for the implementation of our community development programmes. The RIPPM also serves as an instrument in our risk management strategy and stakeholder engagement efforts to secure a social license to operate. The RIPPM concentrates on eight programs that adhere to the MEMR Decree No. 1824/2018. These programs cover education, health, improving real income or employment opportunities, achieving economic independence, promoting social and cultural development, preserving the environment, strengthening community institutions, and enhancing supporting infrastructure, which address the community's economic, environmental, social, and cultural rights and interests.</p>	<p>Responsible Supply Chain Management Page 46</p>
		<p>We recognize and value the critical contribution of communities surrounding our mines. As evidence of this, over half of our employees (56%) are residents from these communities. Additionally, we prioritize working with suppliers from both local and national levels, with 80% of our suppliers falling into these categories.</p>	<p>RIPPM 2020-2023: Executive Summary⁴⁰ Sustainability Performance Highlight Page 10 Empowering Our Workforce Page 63</p>
		<p>In addition, we are dedicated to the International Labour Organization's (ILO) principles for providing fair and decent work. This includes ensuring that our employees receive fair remuneration, which means paying wages that meet or exceed the minimum wage in our operating regions.</p>	<p>Fair Employment Policy⁴⁰ Transparency Initiatives Page 41</p>
		<p>We have provided reports in support of state-level EITI participation up to 2018. From 2019 onwards, the responsibility for EITI was transferred to the MEMR, focusing on disclosing information related to state-owned companies.</p>	<p>Safeguarding Community Health and Safety Page 57</p>
		<p>The ESDD we conducted in 2022 indicates that our policies and practices are in line with IFC PS 4 (Community), PS 5 (Land Resettlement), and PS 8 (Cultural Heritage). However, there are certain areas that require attention, specifically the implementation of mitigation measures for local traffic disruption during the Mining Phase 8 expansion, ensuring ongoing access of the communities to their land, and the assimilation of cultural heritage awareness among contractors. Moving forward, these topics will be incorporated into the management systems and programmes accordingly.</p>	
		<p>We are also committed to avoiding and minimising adverse impacts on community health and safety, underpinned by our Health & Safety Policy and Communities Policy. This commitment in ensuring the safety of our surrounding communities applies to all our business partners.</p>	
		<p>We implement policies and practices that apply to all our entities and projects, and closely monitor our procurement performance. We conduct inherent-risk assessments for our primary Tier One suppliers and effectively communicate and enforce our expectations regarding ethics, human rights, and social as well as environmental performance to our business partners and supply chain.</p>	

⁴⁰ More information can be found on our website, www.amman.co.id.

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
Number and duration of non-technical delays	EM-MM-210b.2	There were no non-technical delays in 2022.	Supporting Local Communities Page 57
Labour Relations			
Percentage of the active workforce covered under collective bargaining agreements	EM-MM-310a.1	We do not have yet to establish a collective bargaining agreement at AMMAN. However, to facilitate constructive engagement with our employees, in 2020, we established a Bipartite Cooperation Institution (Lembaga Kerja Sama/LKS Bipartit), to comply with the applicable laws and regulations in Indonesia.	Empowering Our Workforce Page 71
Number and duration of strikes and lockouts	EM-MM-310a.2	There were no strikes or lockouts in 2022.	Empowering Our Workforce Page 71
Workforce Health & Safety			
1. MSHA all-incidence rate	EM-MM-320a.1	1. Full-time (Permanent) employees: 0.47 Contractors: 0.15	Ensuring a Safe Working Environment Page 76-77
2. Fatality rate		2. Full-time (Permanent) employees: 0.00 Contractors: 0.00	
3. Near miss frequency rate (NMFR)		3. Full-time (Permanent) employees: 0.23 Contractors: 0.17	
4. Average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees		4. Full-time (Permanent) employees: 22 hours Contractors: 13 hours	
Business Ethics & Transparency			
Management system for prevention of corruption and bribery throughout the value chain	EM-MM-510a.1	<p>At AMMAN, we firmly believe in conducting business with the utmost integrity and take a strong stance against any unethical behaviour. Our Code of Business Ethics and Conduct ("Code") is a comprehensive document that outlines our ethical standards and expectations for our employees and business partners.</p> <p>We are dedicated to maintaining a robust management system that effectively prevents bribery, corruption, and anti-competitive behaviour, ensuring compliance with relevant Indonesian laws and regulations. Our Department of Internal Audit (IA) is responsible for overseeing the implementation of this compliance system. IA conducts regular ethics workshops for ongoing education and awareness on ethical practices within our business.</p> <p>To prevent bribery and corruption, we have implemented several measures, including annual reporting of gratification payments in accordance with the law. Additionally, we have established a gift register system run under an online platform called "Discovery," and run a gift awareness programme that encourages employees not to receive or send gifts, particularly before festive occasions.</p>	Promoting Corporate Governance, Compliance and Transparency Page 36-39

Accounting Metric	Code	Data	Reference in Sustainability Report 2022												
		<p>As part of our efforts to prevent corruption and bribery, we have established a Whistleblowing System (WBS) that forms a critical part of the our grievance mechanism. The AMMAN Ethics Line serves as a reporting platform for both internal and external stakeholders to report any violations and misconduct within the Company, including but not limited to accounting & auditing matters, conflict of interest, bribery related to government officials, environment, health & safety, improper supplier or contractor activity, inappropriate behaviour, and/or misuse of the company's assets or services.</p> <p>To maintain the independence and confidentiality of our WBS, we engage an external party to manage the AMMAN Ethics Line. This provides a secure platform for confidential reporting to our stakeholders, without fear of retaliation or punishment from the reporting party.</p> <p>Our Ethics Response Team, which includes members from our HSE, Security, HR, Legal, and Internal Audit teams, is responsible for investigating any reports received through the WBS. After conducting audits, the team formulates appropriate measures to address and prevent similar incidents from occurring in the future.</p> <p>Since acquiring the mine asset from Newmont in 2016, we have maintained a clean record of zero reports of corruption or bribery involving internal and external stakeholders.</p>													
Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	EM-MM-510a.2	Our operations and production of copper-gold concentrate are located in Indonesia, a country which does not rank among the 20 lowest in Transparency International's Corruption Perception Index.	Promoting Corporate Governance, Compliance and Transparency Page 37												
Tailings Storage Facilities Management															
Tailings storage facility inventory table:	EM-MM-540a.1	<table border="1"> <tbody> <tr> <td>Facility Name</td> <td>Deep Sea Tailings Disposal (DSTP)</td> </tr> <tr> <td>Location</td> <td>Batu Hijau Project, Senunu Canyon and Lombok Basin, situated southwest of Sumbawa Island</td> </tr> <tr> <td>Ownership status</td> <td>Owned and operated by AMNT, a subsidiary of AMMAN</td> </tr> <tr> <td>Operational status</td> <td>Active</td> </tr> <tr> <td>Construction method</td> <td>Other⁴¹ Deep Sea tailings placement includes tailings deaeration tank, onshore pipe (6km), offshore pipe (3.4km) with discharge depth at 125 Metres Below Sea Level (MBSL), with most tailings settling at 3000-4000 MBSL. DSTP does not require the use of a tailings dam which eliminates associated risks.</td> </tr> <tr> <td>Maximum permitted total tailings discharge</td> <td>51,100,000 tonnes (dry basis) per year, as per Tailings Dumping Technical Approval S.219/2022</td> </tr> </tbody> </table>	Facility Name	Deep Sea Tailings Disposal (DSTP)	Location	Batu Hijau Project, Senunu Canyon and Lombok Basin, situated southwest of Sumbawa Island	Ownership status	Owned and operated by AMNT, a subsidiary of AMMAN	Operational status	Active	Construction method	Other ⁴¹ Deep Sea tailings placement includes tailings deaeration tank, onshore pipe (6km), offshore pipe (3.4km) with discharge depth at 125 Metres Below Sea Level (MBSL), with most tailings settling at 3000-4000 MBSL. DSTP does not require the use of a tailings dam which eliminates associated risks.	Maximum permitted total tailings discharge	51,100,000 tonnes (dry basis) per year, as per Tailings Dumping Technical Approval S.219/2022	Responsible Tailings Management Page 84
Facility Name	Deep Sea Tailings Disposal (DSTP)														
Location	Batu Hijau Project, Senunu Canyon and Lombok Basin, situated southwest of Sumbawa Island														
Ownership status	Owned and operated by AMNT, a subsidiary of AMMAN														
Operational status	Active														
Construction method	Other ⁴¹ Deep Sea tailings placement includes tailings deaeration tank, onshore pipe (6km), offshore pipe (3.4km) with discharge depth at 125 Metres Below Sea Level (MBSL), with most tailings settling at 3000-4000 MBSL. DSTP does not require the use of a tailings dam which eliminates associated risks.														
Maximum permitted total tailings discharge	51,100,000 tonnes (dry basis) per year, as per Tailings Dumping Technical Approval S.219/2022														
1. facility name															
2. location															
3. ownership status															
4. operational status															
5. construction method															

⁴¹ DSTP does not fall into the categorisation of construction method defined by the International Council on Mining and Metals (ICMM) which are downstream, upstream, or centreline.

Accounting Metric	Code	Data	Reference in Sustainability Report 2022	
6. maximum permitted storage capacity		Current amount of tailings discharged	866,767,353 cumulative tonnes (dry basis) by the end of 2022 40,242,758 tonnes (dry basis) in 2022	
7. current amount of tailings stored		Consequence classification	Not applicable ⁴² . AMNT's DSTP does not require construction of a tailings dam which eliminates associated risks and consequences.	
8. consequence classification		Date of most recent independent technical review	The latest independent technical review of marine environmental impacts was conducted in 2022 by SAMS Enterprise, and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency.	
9. date of most recent independent technical review				
10. material findings			Between 2020 and 2022, a five-yearly audit was conducted by SUCOFINDO, an independent auditor on behalf of the MoEF.	
11. mitigation measures		Material findings	None. There were no major non-compliances or material negative technical findings in 2020-2022.	
12. site-specific EPRP		Mitigation measures	Not required. AMMAN operates in compliance with the Government of Indonesia's Tailings Dumping Technical Approval S.219/2022.	
		Site-specific Emergency Preparedness and Response Plan (EPRP)	Yes. AMMAN has two offshore tailings pipelines, one of which is operational while the other serves as a backup. If there is ever an offshore leak, we will halt operations and switch to using the spare pipeline before resuming normal activities.	
Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities		EM-MM-540a.2	<p>At AMMAN, we have developed and implemented a Tailings and Heap Leach Management Technical Standard which sets the minimum requirements for the design and management of Tailing Storage Facilities (TSFs), Submarine Tailings Placement (STP) and Heap Leach Facilities (HLF) to protect human health, wildlife and flora, protect groundwater and/or surface water, prevent uncontrolled releases to the environment, manage process fluids and set requirements for closure and reclamation.</p> <p>We are dedicated to ensuring the stability and suitability of our tailings system and regularly update the DSTP model and impact assessments to reflect the latest best practice and technological advancements. Over the years, we have updated our models and impact assessments six times through Addendums to the Environmental Impact Assessment (EIA), starting from 1996.</p>	Responsible Tailings Management Page 85-87

⁴² The Consequence Classification Matrix outlined in Requirement 4.1 of the GISTM is not applicable to DSTP as it provides consequences for dam failure, which is not a scenario relevant for AMMAN.

Accounting Metric	Code	Data	Reference in Sustainability Report 2022
		<p>The Environmental and Social Impact Assessment (ESIA) in 2021 for assessing various options associated with the DSTP expansion concluded that the risk factors associated with DSTP have been effectively minimised through design safeguards and operating procedures.</p> <p>The most senior role responsible for management of our tailings activities is held by our Batu Hijau Site Director, who simultaneously acts as our Mine Technical Head. The Site Director's primary responsibility is to execute mining and processing operations in accordance with GILP, which includes the management of tailings. The Board of Directors is accountable for ensuring that adequate resources are available for overseeing and supervising tailings management. Furthermore, the other departments offer support in line with their respective primary tasks and functions.</p> <p>We have internal controls and procedures to monitor the quality of the tailings prior to discharge and take subsequent action as appropriate. Among these, we conduct continuous monitoring and adjustment of pH and copper concentration to control the tailings quality. We undertake regular and comprehensive monitoring and scientific research studies for environmental, human health and social aspects. Scientific studies are conducted at varying frequencies, from daily, monthly, every six months to every five years. These monitoring programmes are supported by various independent specialists and include, but not limited to, Physical and Chemical Properties of Tailings, Internal and External Tailings Pipeline Inspections, and Seawater Quality and Sea Ecosystem.</p>	
Approach to the development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	EM-MM-540a.3	<p>We implement a comprehensive and risk-based Emergency Preparedness and Response Plan (EPRP) to ensure the safety of our operations. Our tailings emergency programme has been established through several rounds of internal stakeholder engagement and is reviewed periodically to ensure its effectiveness.</p> <p>We also follow Risk Management Procedures to identify potential tailing emergency risks and the process is documented in our Aspect-Impact register. The tailings spill risk is modelled to inform the emergency response planning.</p> <p>In 2022, we conducted a DSTP Emergency Response Plan training exercise involving our personnel, local emergency services and community representatives.</p>	Responsible Tailings Management Page 87
Activity Metrics			
Production of metal ores	EM-MM-000.A	Copper concentrate: 792,892 tonnes (dry basis)	Key Company Metrics Page 7
1. Total number of employees	EM-MM-000.B	1. 1,403 employees within AMNT, AMIG, and AMIN (as at the end of 2022), In addition, AMMAN employed 9,657 contractors, resulting in a total workforce of 11,060 people.	Key Company Metrics Page 7
2. Percentage of contractors		2. 87%.	Strengthening Our Workforce Page 62

Appendix VI:

OJK Index

OJK Index in accordance with OJK Circular Letter Number 16 Year 2021

No.	Topic	No.	Disclosure	Reference in Sustainability Report 2022		
A	Corporate sustainability strategy	A.1	Explanation of the sustainability strategy	Sustainability Strategy Framework Page 30-31		
B	Summary of sustainability performance	B.1	Economic aspect, covering:	Financial Performance Page 7		
			a. Quantity of production of services sold;	Financial Performance Page 8		
			b. Revenue or sales;	Financial Performance Page 8		
			c. Net profit or loss;	Financial Performance Page 8		
			d. Environmentally friendly products/ services;	Environmental Performance Page 9		
		e. Involvement of local suppliers/parties/ organisations related to sustainable operations.	Social Performance Page 10			
		B.2	Environmental aspect, covering:	Environmental Performance Page 9		
			a. Energy usage;	Environmental Performance Page 9		
			b. Emission reductions;	Environmental Performance Page 9		
			c. Waste and effluent reduction;	Environmental Performance Page 9, 112		
		d. Biodiversity conservation.	Environmental Performance Page 9-10			
		B.3	Social aspect	Social Performance Page 9-10		
		C	Summary of company profile	C.1	Vision, mission, and sustainability values	Our Vision and Mission Page 24-25
				C.2	Company's address	Company Profile Page 13
C.3	The scale of business, containing at least:			Company Profile Page 12		
	a. Total assets or capitalization of assets and total liabilities;			Not disclosed in the reporting year		
	b. Number of employees by gender, position, age, education, and employment status;			Empowering Out Workforce Page 62-64		
	c. Name of shareholder and percentage of ownership share;			Company Profile Page 12		
d. Areas of operations.	Company Profile Page 13					
C.4	Products, services, and business activities conducted			Company Profile Page 12		
C.5	Association memberships	Association Memberships Page 26				
C.6	Significant changes to the company	Company Profile Page 12				

No.	Topic	No.	Disclosure	Reference in Sustainability Report 2022	
D	Letter from Board/ Director(s)	D.1	Letter from the Board/Director(s), covering:	Letter From the Board Page 4-5	
			a. Company policies in responding to the challenges in fulfilling the sustainability strategy;	Letter From the Board Page 4-5	
			b. Implementation of sustainable operations;	Letter From the Board Page 4-5	
			c. Strategy to achieve sustainability targets.	Letter From the Board Page 4-5	
E	Sustainability governance	E.1	Responsibility for the implementation of sustainable operations/finance	Sustainability Governance Page 32-33	
		E.2	Competency development/capacity building pertaining to sustainable operations	Empowering Our Workforce Page 64-67	
		E.3	Risk assessment on the implementation of sustainable operations	Managing Enterprise Risks Page 45	
		E.4	Stakeholder relations	Engaging Our Stakeholders Page 49-51	
		E.5	Issues on implementation of sustainable operations	Supporting Local Communities Page 55 Preserving Environment Page 82	
F	Sustainability performance	F.1	Initiatives in building a culture of sustainability	Empowering Our Workforce Page 42, 48, 64-67, 72, 77	
		Economic performance			
		F.2	Economic comparison of production targets and performance portfolio, financing target, or investment, income and profit/loss	Not disclosed in the reporting year	
		F.3	Economic comparison of target and portfolio performance, financing target, or investments in financial instruments or projects relating to sustainable operations	Not disclosed in the reporting year	
		Environmental performance			
		F.4	Environmental cost	Environmental Performance Page 9	
		Material aspect			
		F.5	Use of environmentally friendly materials	Not applicable	
		Energy aspect			
		F.6	Amount and intensity of energy usage	Promoting Energy Efficiency Page 108	
F.7	Efforts and initiatives for energy efficiency and renewable energy	Promoting Energy Efficiency Page 109			
Water aspect					
F.8	Water usage	Preserving Water Resources Page 112			
Biodiversity aspect					
F.9	Impacts of operations near or within a conservation area/area rich in biodiversity	Safeguarding Biodiversity Page 90-92			
F.10	Initiatives for biodiversity conservation	Safeguarding Biodiversity Page 92-95			

No.	Topic	No.	Disclosure	Reference in Sustainability Report 2022
Emission aspect				
		F.11	Amount and intensity of emissions produced by type	Managing GHG Emissions Page 100
		F.12	Initiatives and achievements for emission reduction	Managing GHG Emissions Page 100-102
Waste and effluent aspect				
		F.13	Amount of waste and effluent produced by type	Managing Waste Page 117
		F.14	Waste and effluent management mechanism	Managing Waste Page 115-116
		F.15	Spills that occurred (if any)	Preserving Water Resources Page 113 Managing Waste Page 118
Complaints regarding the environmental aspect				
		F.16	Number and material of environmental complaints received and resolved	Promoting Corporate Governance, Compliance and Transparency Page 37-41
Social performance				
		F.17	Commitment in providing services on products and/or equivalent services to consumers	Our Commitments Page 25 Responsible Supply Chain Management Page 47
Employment aspect				
		F.18	Equal employment opportunity	Upholding Human Rights Page 71
		F.19	Child labor and forced labor	Upholding Human Rights Page 71
		F.20	Regional minimum wage	Empowering Our Workforce Page 62
		F.21	Decent and safe working environment	Ensuring a Safe Working Environment Page 74-79
		F.22	Employee capabilities training	Promoting Corporate Governance, Compliance and Transparency Page 42 Empowering Our Workforce, Page 64-67 Ensuring a Safe Working Environment Page 77 and 79

No.	Topic	No.	Disclosure	Reference in Sustainability Report 2022
Community aspect				
		F.23	Impact of operations on surrounding communities	Supporting Local Communities Page 57-61
		F.24	Public complaints	Promoting Corporate Governance, Compliance and Transparency Page 37-41
		F.25	Corporate environmental and social responsibility initiatives (related to UN SDGs)	Upholding Ethics Page 34, 42, and 48 Advancing People Page 52, 59, 61, 65, and 75 Preserving the Environment Page 80, 93, 97, and 101 Managing Resource Page 104, 108, 113, 114, 118
Responsibility for the development of sustainable products and services				
		F.26	Innovation and development of sustainable products and services	Managing GHG Emissions Page 100 - 102 Promoting Energy Efficiency Page 109 Preserving Water Resources Page 113 - 114 Managing Waste Page 118
		F.27	Products and services that have been evaluated for customer safety	Responsible Supply Chain Management Page 47
		F.28	Impacts of products and services	Responsible Supply Chain Management Page 47
		F.29	Number of products recalled	Not applicable
		F.30	Customer satisfaction survey on sustainable products and services	Not applicable
G	Written verification from an independent party	G.1	Written verification from an independent party (if any)	Not applicable
H	Feedback form	G.2	Feedback form	Appendix VII: Feedback Form Page 153
I	Responses to the previous year's report feedback	G.3	Responses to the previous year's report feedback	Not applicable

Appendix VII: Feedback Form

At AMMAN, we are continuously seeking ways to improve our environmental and social impact. We believe that sustainability is a journey, not a destination; we recognise that, as a business, we must address the evolving needs of our stakeholders. As such, our Feedback Form is a way to gather feedback on our sustainability efforts and identify areas where we can improve.

We appreciate your input and look forward to working together to build a better, more sustainable future for all.

To which Stakeholder Group do you belong to?

- | | |
|--|--|
| <input type="checkbox"/> Shareholders and Investors | <input type="checkbox"/> Industry Association |
| <input type="checkbox"/> Employees | <input type="checkbox"/> Academic |
| <input type="checkbox"/> Local Communities | <input type="checkbox"/> Customers |
| <input type="checkbox"/> Government Officials | <input type="checkbox"/> Business Partners |
| <input type="checkbox"/> Media | <input type="checkbox"/> Others, please specify: |
| <input type="checkbox"/> Civil Society Organisations | |

Overall, how would you rate AMMAN's sustainability commitments and performance?

- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Poor |
| <input type="checkbox"/> Good | <input type="checkbox"/> Very Poor |
| <input type="checkbox"/> Fair | |

How transparent do you feel AMMAN's sustainability report is?

- | | |
|---|---|
| <input type="checkbox"/> Very transparent | <input type="checkbox"/> Not very transparent |
| <input type="checkbox"/> Somewhat transparent | <input type="checkbox"/> Not transparent at all |

How would you rate the quality of information presented in AMMAN's sustainability report?

- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Poor |
| <input type="checkbox"/> Good | <input type="checkbox"/> Very Poor |
| <input type="checkbox"/> Fair | |

Do you have any additional comments or suggestions for how AMMAN could improve its sustainability commitments, performance, and disclosure?

Please send this form to:



PT Amman Mineral Internasional Tbk.
Menara Karya 6th Floor Unit A, B, C dan H
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2
Jakarta Selatan 12950

Telp: +6221 5799 4600
Fax: +6221 576 1464
E-mail: sustainability@amman.co.id

This page is intentionally left blank



PT Amman Mineral Internasional Tbk.

Menara Karya 6th Floor Unit A, B, C dan H
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2
Jakarta Selatan 12950

Telp: +6221 5799 4600

Fax: +6221 576 1464

E-mail: sustainability@amman.co.id

corporate.secretary@amman.co.id

amman.co.id