

Pillar 2

Environmental stewardship

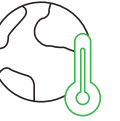
MMG strives to protect communities and natural habitats by minimising its mining footprint in the regions where we operate.



Water monitoring at Kinsevere mine.

Impacts of climate change

Climate Change
Action



We are aware of the impacts and risks that climate change poses for our operations, and the communities and regions. We collaborate closely with our local stakeholders and people to map these influences and develop comprehensive resilience plans for our operations.

The minerals and metals that MMG extracts are some of the building blocks fuelling sustainable technologies including solar and wind power, electric vehicles, power devices and energy storage together with infrastructure projects and consumer appliances. **Minimising our environmental footprint falls under MMG's goal of achieving net zero carbon emissions by 2050.** We have set an interim 2030 target of reducing Scope 1 and Scope 2 operational greenhouse gas emissions from our operated assets by 40 per cent from a 2020 baseline.

In 2023, MMG progressed against our 2021 climate change strategy, which reflected The Paris Agreement to limit human-induced temperature increases and protect communities and natural habitats from global warming. **We mobilised carbon reduction financing initiatives and technologies to drive action in partnership with business and civil society.** Las Bambas saw an 18.4 per cent increase in operational Scope 1 and Scope 2 emissions in 2023, up from the prior year. This is due to social conflict pausing our 2022 production for a period, with the net effect of reduced emissions that year. With production resuming in 2023, emissions trended back up. The Kinsevere Expansion Project's reliance on diesel use resulted in a 29.85 per cent emissions

increase. Rosebery had a 6.4 per cent increase. Dugald River had a 25.7 per cent reduction with the Solar Farm having the intended benefit of lowering the site's Scope 2 emissions.

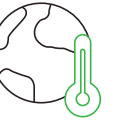
In 2023, we finalised our first Scope 3 emission inventory, which informed our ambition to work towards net zero scope 3 emissions by 2050. Supporting this ambition, by the end of 2025 we will have carried out improved upstream and downstream data collection from material scope 3 sources, and be engaging key customers/suppliers in their decarbonisation trajectories and also begun investigating reduction incentives. This ambition and approach has been approved by MMG's Executive Committee and Board.

As we look ahead to 2024, we will assist our sites to develop and deliver these decarbonisation initiatives. This includes working closely with Khoemacau to integrate the site and identify opportunities to achieve further environmental improvements.



Transition to a lower carbon economy

Climate Change Action



MMG plays a key role in the transition to a low carbon future by providing the minerals required to decarbonise economies and develop green technologies to replace fossil fuels.

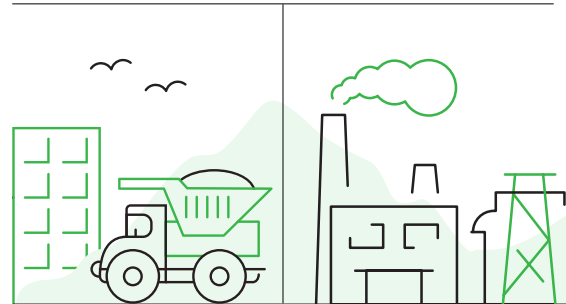
Our operations have detailed energy assessments and reduction targets to identify and reduce our emissions and energy intensity, looking for efficiencies and alternate energy sources to progressively replace fossil fuels where possible.

Total emissions 2023 (tCO₂e)

Scope 1 (Fuel)	Scope 2 (Electricity)	Scope 3
592,306 (16%)	348,929 (9%)	2,843,385 (75%)

MMG combined total emissions (Scope 1, Scope 2 and Scope 3)

3,784,620



Upstream	
Purchased goods and services and Capital goods	11%
Fuel and energy related activities	9%
Transportation and distribution	7%
Downstream	
Transportation and distribution	1%
Processing of sold product	72%

CASE STUDY

Solar Farm supports MMG's low carbon plans

MMG's Queensland-based Dugald River mine is hastening the transition to a more sustainable future. Following the official opening of the Mount Isa-based Solar Farm, the facility is delivering about one third of the site's electricity needs, consistent with reducing the mine's emissions. Dugald River General Manager Dr Tim Akroyd said the facility has reduced energy-related emissions by about 33 per cent since April 2023. "As a relatively new mine, we have strong aspirations to decarbonise our mining operations and be a global leader in sustainability," he said. "Renewable energy delivers environmental and economic benefits for a remote location mine. We are already seeing the Solar Farm's cost savings. This is a welcome reprieve as the cost of mining continues to rise, making for more challenging economic conditions." Energy provider APA Group is operating the 88MW solar farm at Mica Creek through a long-term

solar offtake agreement. Dr Akroyd said plans are underway to source energy from wind power. "We are investigating the feasibility of building a wind farm at Dugald River to complement the solar operation," he added. "Our medium-term goal is for three quarters of our power to come from renewable energy, delivering further site cost savings, reducing the local community's footprint and supporting future ore body extension and growth opportunities. Dugald River plays an essential role in supporting MMG's vision to be a leading international mining company for a low carbon future.

33%

Dugald River's Solar Farm has reduced energy-related emissions by about 33 per cent since it came into operation in April 2023.



Biodiversity and land management

Managing
Environmental
Impacts



We recognise our role as temporary stewards of the land we mine and surrounding tenements, and the responsibility we carry to care for it for future generations.

We strive to minimise our impacts as much as possible. Where we do have a footprint, we develop comprehensive plans to record and preserve the natural landscape, and local flora and fauna. We manage the land throughout the life of the operation in close coordination with local stakeholders where possible. A modern society cannot exist without mining. At the same time, a balanced approach must have regard for the environment. **Complying with laws, regulations, global standards and community expectations while extracting minerals is an obligation closely monitored by MMG.**

It is possible for mining to exist in step with biodiversity and rehabilitation plans designed to benefit future generations beyond a mine's lifespan. Kinsevere has set a target to produce 80,000 seedlings for land reforestation within the mine's vicinity. Current measures are providing sufficient space with expanded mining activities, topsoil removal challenges and redirecting scarce site water supply together with drilling a borehole if testing proves feasible.

CASE STUDY

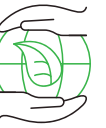
368-hectare reforestation project spans 34 communities

The Las Bambas Development Association, supported by 22 locally based nurseries, is funding a greener future for 34 communities in the provinces of Cotabambas and Grau by planting tree seedlings spanning a vast 368-hectare area, emulating a 'green lung' to improve air quality and build biodiversity. The 'Sacha Tarphuy' forestry campaign is creating new woodlands with Pine, Queuña and Colle species. Generating mass swathes of forest conserves ecosystems and, over time, has been proven to sequester and capture carbon, a measure that mitigates damaging climate change. At the launch ceremony, Zenón Panihura, the Pumamarca Community President, welcomed planting seedlings to benefit future generations: "Our children and grandchildren will enjoy the forests we are now creating, thanks to the work with Las Bambas and the communities. Now it is our duty to take care of them," he said. Since 2012, Las Bambas' financed forestry programs have increased regional biodiversity protection for people living within its operating footprint, aligning with critical sustainable development and socio-environmental responsibilities.



Biodiversity and land management (continued)

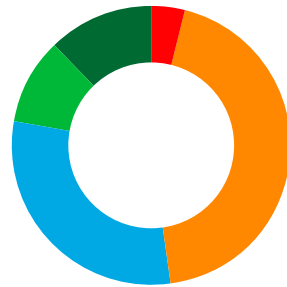
Managing Environmental Impacts



Total land managed by MMG (ha)

2023

● Australia	13,676.2
● DRC	149,265.9
● North America	101,539.0
● Peru	34,328.0
● Zambia	40,541.8
TOTAL	339,350.9



Proportion of land disturbances

Facility Desc.	Date – Year	Proportion of disturbance area that has been rehabilitated	Proportion of lease area disturbed by operating activities
Dugald River	2021	0.27%	11.66%
	2022	0.00%	9.89%
	2023	0.00%	10.39%
Kinsevere	2021	0.04%	25.19%
	2022	0.16%	37.04%
	2023	0.21%	42.33%
Las Bambas Operations	2021	4.08%	32.19%
	2022	4.12%	32.46%
	2023	4.51%	32.16%
Rosebery	2021	0.00%	6.49%
	2022	0.00%	6.49%
	2023	0.00%	6.55%



Responsible water consumption

MMG recognises that water is a strategically crucial resource with social, economic and environmental value. It requires rigorous management and monitoring for efficient and responsible withdrawal, consumption and discharge.

This achieves an efficient operation while minimising impacts for other catchment users, including upstream and downstream communities and, of course, the environment. By continuously improving our water management we can deliver best practice MMG-wide outcomes.

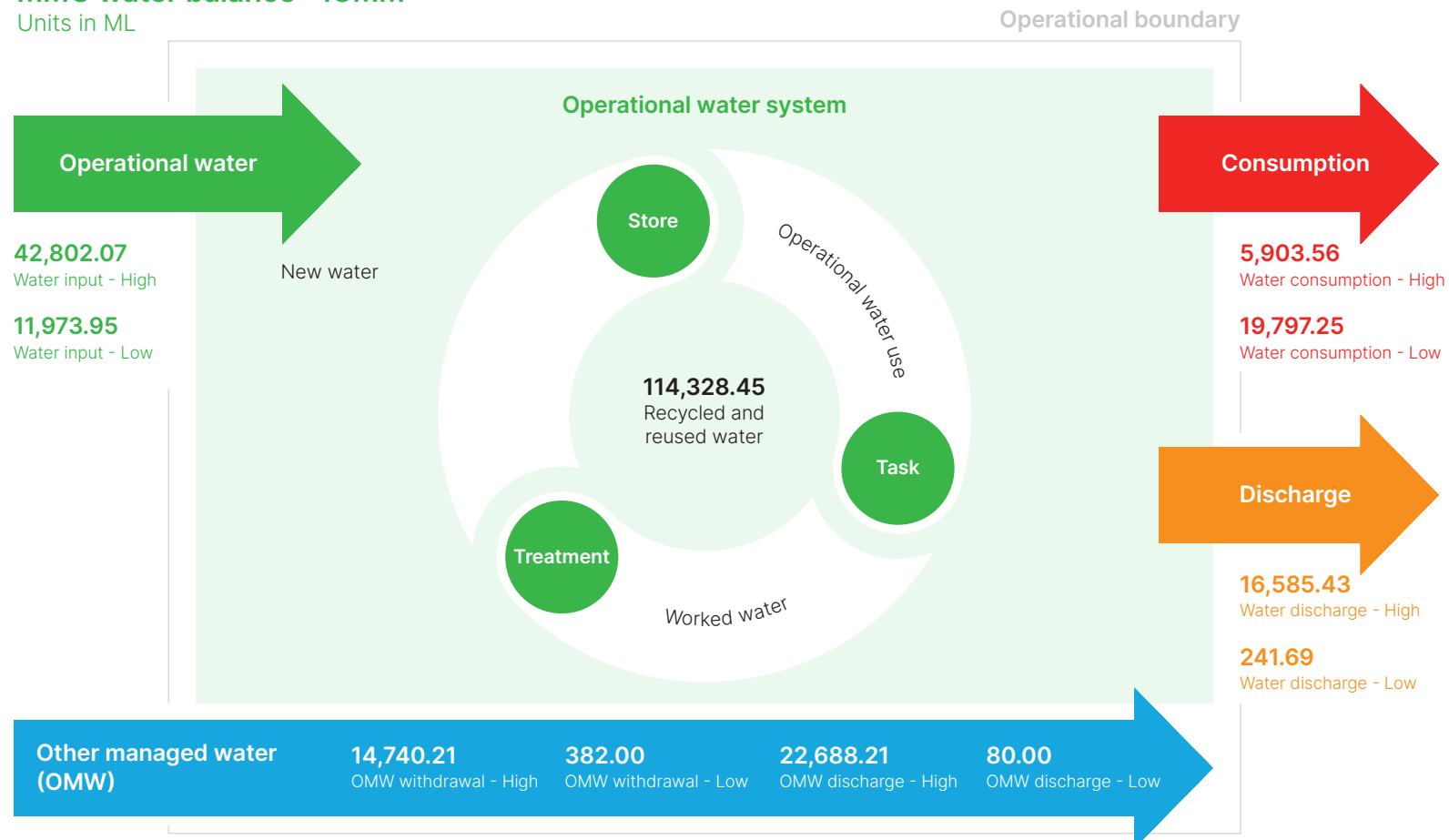
Our water stewardship maps to the ICMM's standards together with our own strategies for sustainable use, storage, discharge and improved community sanitation for those living near our mines. How we manage tailings, our mines' waste, is overseen and informed by our executives, the ICMM, the Australian National Committee on Large Dams, the Canadian Dams Association, the Mining Association of Canada and the Global Industry Standard on Tailings Management (GISTM).

Las Bambas water management

Our Las Bambas operation is managing critical natural resources by recovering approximately 70 per cent of water used during processing. The site optimises tailing storage facility water to achieve this high conservation outcome, equating to a six per cent fresh water consumption level. Las Bambas-wide, a disciplined water stewardship approach, strict governance and regard for environment controls is overall recovering more than 90 per cent of water used during the mining process. This is consistent with MMG's material goal to responsibly consume water.

MMG water balance - ICMM

Units in ML



Note: High quality water has high socio-environmental value with multiple potential beneficial uses, including water supply for drinking, agriculture, ecosystem function, etc. Low quality water typically has lower socio-environmental value as the poorer quality may restrict potential suitability for use.

Managing Environmental Impacts



Reporting metrics

Operational water withdrawal
Volume of water that enters the operational water system used to meet the operational water demand.

Total consumption
Total volume of water that is removed by evaporation, entrainment (in waste or product) or other losses, and not released back to surface water, groundwater, seawater or a third party.

Total discharge
Total volume of water that is released back to the environment (surface water, ground or seawater) or a third party.

Other managed water withdrawal
Volume of water that is actively managed without intent to supply the operational demand.

Reuse-recycle
Total volume of worked water used in operational tasks with or without treatment.

Impacts of mine closure

Managing
Environmental
Impacts



We are conscious of the impacts mine closure can have on long-term land use as well as local communities.

We manage these impacts through progressive rehabilitation where possible, adequate provisioning for closure and long-term land management and biodiversity plans. We collaborate closely with local communities to explore options for economic transitions post-closure, as well as helping to diversify the local economic base to manage potential impacts on community employment and economic development.



CASE STUDY

Stakeholders informed about Rosebery's future planning

Public engagement and involvement are hallmarks of doing business in Rosebery. The mine has been operating continuously since 1936. Today it supports more than 500 employees and contractors and their families, contributing to the local Tasmanian West Coast economy. Many stakeholders keenly follow Rosebery's long-term plans. **A 2023 community town hall meeting welcomed more than 40 Rosebery and surrounding area residents to learn about the mine's exploration program, tailings storage solutions and key regulatory requirements seeking local input and consultation.** The town's future options were also scoped at the community Closure Visioning Workshop, facilitated by the University of Queensland. A mine closure plan is stipulated by the regulator and adapted in view of environmental, social and community matters. This does not mean the mine is about to shut its gates. Local business owners, council representatives and the Tasmanian Police joined residents at another forum to discuss options for attracting ongoing investment and businesses. The Rosebery team's Life-of-mine 2028 Outlook showed tailings storage facility (TSF) capacity studies and highlighted the extensive exploration program underway to extend the mine's operation.

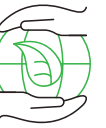


Impacts of mine closure (continued)

MMG 2023 land disturbance and rehabilitation

Site	Land type	Calendar – year	Sum of consumption value
 Dugald River	Biodiversity – 3 total land rehabilitated	2022	0.00
	Biodiversity – 3 total land rehabilitated	2023	0.00
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2022	316.00
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2023	332.00
 Kinsevere	Biodiversity – 3 total land rehabilitated	2022	1.23
	Biodiversity – 3 total land rehabilitated	2023	1.91
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2022	785.38
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2023	897.14
 Las Bambas	Biodiversity – 3 total land rehabilitated	2022	104.17
	Biodiversity – 3 total land rehabilitated	2023	114.53
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2022	2,421.95
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2023	2,423.97
 Rosebery	Biodiversity – 3 total land rehabilitated	2022	0.00
	Biodiversity – 3 total land rehabilitated	2023	0.00
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2022	318.56
	Biodiversity – 4 total land disturbed and not yet rehabilitated	2023	321.12

Managing
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Tailings and waste management

We proactively manage tailings infrastructure and the waste produced by our operations across the full asset lifecycle.

We acknowledge the challenges and complexities of tailings and waste management and, as a result, actively manage our tailings facilities, critical controls and risk assessments for catastrophic failure and, reporting and communicating outcomes. Our design, operational and risk reviews are comprehensive.

We closely monitor the safety, environmental and social risks of tailings management and engage with our host communities, governments, regulators and other stakeholders. Any concerns raised or brought to MMG's attention are incorporated into planning processes.

In 2023, MMG generated, in total, 1.30 million tonnes of potentially acid forming waste rock; 138.62 million tonnes of non-acid forming waste rock; and 55.83 million tonnes of tailings. This represents an increase of PAF, 17 per cent; NAF, 11 per cent and tailings 16 per cent; of mineral waste generated across MMG compared with previous years.

Las Bambas' tailings management approach is based on risk assessments to prevent harm to people and the environment. Fatal accidents are not tolerated. A zero-harm safety culture requires

that all employees be trained in compliance protocols monitored by independent auditors, and are competent in safe and sustainable tailings management. Following a review by the tailings and water manager, a self-assessment was conducted in 2023 on the application of 77 requirements and 219 criteria.



GISTM conformance summary and Church of England tailings disclosure: [2023 Sustainability Report Appendix](#)

Managing Environmental Impacts

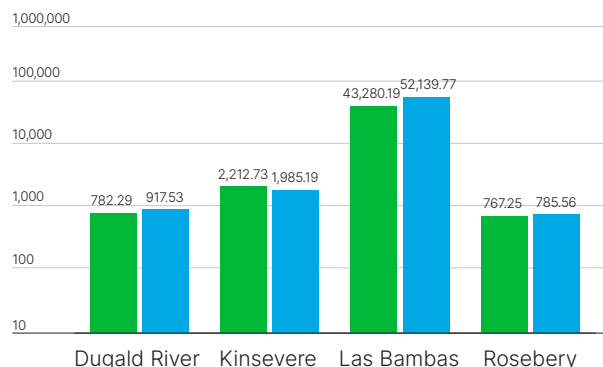


CASE STUDY

Gap Reduction Plan for Global Industry Standard on Tailings Management

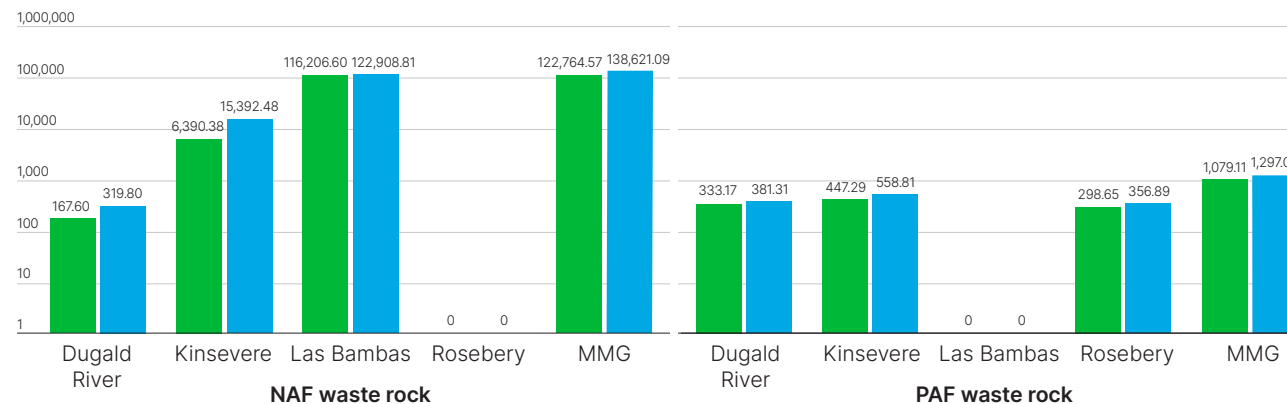
MMG is a signatory to the ICMM Global Industry Standard on Tailings Management (GISTM), adhering with the standard's goal of zero harm to people and the environment with our tailings management approach. For all those partially or not in conformance with the standard, MMG has action plans in place and is actively working to achieve 100% conformance. Our Tailings Governance Framework allows us to respond to changes in the future so that our dams always meet modern standards and societal expectations.

Tailings generated ('000 tonnes)



● 2022 ● 2023

Wasted rock generated ('000 tonnes)



● 2022 ● 2023

