HARMONY™

CLIMATE ACTION AND IMPACT REPORT

30 JUNE 2024

MINING WITH PURPOSE

CONTENT

Report navigation

Hyperlinks to different sections within this report and to other reports are used throughout the report. Further information is available online at **www.harmony.co.za** or alternatively our full suite of annual reports are available at **www.harmony.co.za/invest/annual-reports**.

Feedback
We welcome your feedback on these reports. If you have any comments or suggestions, contact our reporting team at **IARreports@harmony.co.za**.

OUR 2024 REPORTING SUITE

This report is supplemented by and should be read with our full reporting suite, comprising Harmony's:

- **Integrated report**, which provides our stakeholders with a balanced, holistic and transparent overview of our business model, strategy, performance and value creation.
- **Mineral Resources and Mineral Reserves** report, produced in accordance with SAMREC and section 12.13 of the JSE Listings Requirements (as updated from time to time).
- **Environment, social and governance (ESG) report**, which provides insight into our ESG performance for 2024 and over the past five years, along with our aspirations. It is intended as a useful guide to support analysis and provides information about our shared value.
- **Financial report**, which includes the consolidated and separate parent company annual financial statements.
- **Remuneration report** provides clear and comprehensive information on our remuneration policies and practices with the goal of aligning director pay and remuneration in general, with company performance and good governance.
- **Notice to shareholders** provides valuable information to shareholders who wish to participate in Harmony's upcoming annual general meeting (AGM), inclusive of the proxy form.
- Annual **Form 20-F** report filed with the United States Securities and Exchange Commission, in compliance with the listing requirements of the New York Stock Exchange.
- **Operational report**, a supplementary report, which includes technical and operational information about our operations.

Scan the **QR code** to download the 2024 reporting suite.

These reports and supporting documents are available at **www.harmony.co.za**.

INTRODUCTION

Mining with purpose

Mining with purpose is our approach to create shared value for our stakeholders – our communities, our employees, our contractors and sub-contractors, our suppliers and shareholders, and the government in the countries where we operate. It is the golden thread that connects our purpose with our strategy and business model. Shared value drives our pursuit of operational excellence, includes stakeholders, and determines the way we manage our six capitals: natural capital, social and relationship capital, human capital, intellectual capital, manufactured capital and financial capital. Guided by sustainable development principles in delivering our strategic objectives, we preserve and increase shared value by ensuring the sustainability and profitability of our business.

We understand our role in contributing to broader sustainable development issues in our areas of influence. We have identified areas where we can improve our negative impacts and increase our positive impacts through targeted actions. These include reducing dependency on fossil-fuelled energy consumption, contributing towards reducing poverty, efficiently managing our use of scarce natural resources such as water and land, while protecting biodiversity, safeguarding human rights and integrating strategies to identify and manage our nature-related dependencies and impacts, and mitigating nature-related risks while leveraging opportunities that arise from the intersection of our business with nature.

Harmony has a meaningful impact on all 17 SDGs. Nine SDGs directly align with our business strategy and its four pillars (direct SDGs), while our business strategy aligns indirectly with a further eight SDGs, allowing us to meaningfully contribute through our sustainable development framework and by meeting our socio-economic development commitments.

Many of the SDGs are interconnected, and collaboration is a key SDG to all the others. SDG 17 calls for partnerships, and pooled efforts and resources to bring sustained beneficial change to our people.

SDGs where we have meaningful impact

Harmony focuses on four main Sustainable Development Goals, being responsible consumption and production, climate action, life below water and life on land. As part of our comprehensive strategy, we are dedicated to decarbonising our direct footprint (scope 1 and 2 emissions) and actively supporting the global low-carbon transition. Our approach involves providing essential minerals and metals to facilitate the growth of renewable energy technologies while mitigating the physical and transitional risks associated with climate change. In South Africa, we also extend our commitment to sustainability beyond our operations by gaining an understanding of where our suppliers are in their decarbonisation efforts. Moreover, we aim to build resilient communities and contribute to the economic development of the countries in which we operate. With our ambitious climate agenda, we strive to achieve our SBTi 1.5°C target by FY36, and reach net zero by 2045, contributing to a greener and more sustainable world.

Direct

Reporting period

The Climate Action and Impact 2024 Report covers the reporting period ending 30 June 2024 (FY24).

Scope

Harmony has historically reported on climate change through the TCFD report. In January 2024, the Financial Stability Board and IFRS confirmed that the TCFD has been disbanded with climate-related financial reporting responsibilities transferred to the International Sustainability Standards Board (ISSB). As such, Harmony is in the process of transitioning its climate-related disclosures to align with the new standards introduced by the ISSB. The alignment process will move us closer to eventual compliance.

Climate change in context at Harmony

This year has seen much evidence of climate change in the form of flooding, drought conditions increased bushfires and extreme weather events in our areas of operation – as populations across the globe struggle with record-breaking heatwaves and intense rainfall, we too at Harmony have felt its impact in recent years and it promises further disruptions in future through major supply chain interruptions and rising operational costs on the horizon. The climate crisis has urged Harmony to pause, rethink, assess our resilience and innovate for our business, our host countries' economy, our people and our communities. While we are addressing the very real threats from climate change, our business has seen great opportunities, and we are focused on integrating decarbonisation opportunities in the core of our business.

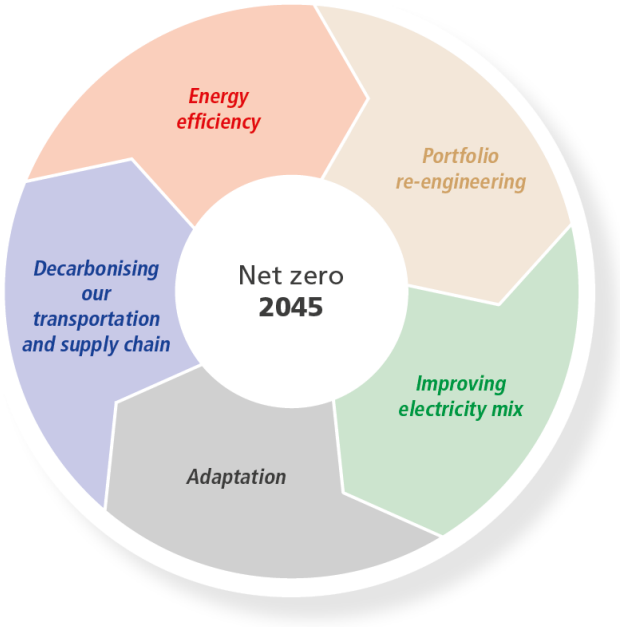
We support the United Nations Framework Convention on Climate Change and the Paris Agreement, and we embrace the role we must play in collective action to meet our global goals to limit global temperature increases. We are focused on mitigating our impacts and have taken purposeful and decisive steps to decarbonise our operations. We recognise that the role we play as a responsible mining company in producing minerals and metals is critical for a global transition and we have re-engineered our portfolio of assets to be relevant to this shift, by expanding our asset portfolio to copper, through our investments in renewable energy and through the implementation of our energy efficiency and climate change strategy.

We further acknowledge that we have a duty of care to our communities and host country economies and will own our part in their just transition toward a low-carbon future.

Introduction continued

Harmony is a global leader in gold production and sustainable development is embedded in our strategy and corporate commitments. This drives our integrated risk-based decision making and creates shared value for all our stakeholders. Harmony recognises and supports our important contribution towards the transition to a low-carbon economy, including the mining and minerals industry. With responsible stewardship as the first of our strategic pillars, the principles of decarbonisation are fundamental to Harmony's business strategy, business processes and decision making. We have proactively been decarbonising our operations since 2008.

Harmony's transition pathway is founded on five guiding themes, reflecting our comprehensive approach to navigating the challenges and opportunities presented by the global shift towards a low-carbon economy.



The guiding themes representing Harmony's transition pathway

The guiding themes representing Harmony's transition pathway

Our decarbonisation journey started more than a decade ago, with Harmony implementing early emission reduction initiatives during the 2010s. Our decarbonisation journey was developed in the context of our commitments to the Paris Agreement and the developing global landscape and was formalised in 2021 with the setting of a science-based target. In January 2022 we submitted a science-based target (SBT) to the Science Based Targets Initiative (SBTi) and in 2023, received validation for our target of aligning with 1.5°C by FY36. We will achieve our target by reducing our absolute scope 1 and 2 GHG emissions by 63% by FY36, from a FY21 base year. We are also a member of the Business Ambition for 1.5°C campaign.

The initial phase of our energy efficiency and climate change strategy in the 2010s rested on energy efficiency initiatives, as well as rebalancing of our portfolio. We have been changing the commodities in the asset portfolio to respond to the market and to the renewable energy sector and decided to redirect capital towards projects that will progress our objectives of decarbonising and addressing climate change. We have decommissioned several depleted deep underground operations, which, by the nature of their business were characterised by high-energy intensity. Our long-term strategy is to focus on the development of economically feasible opencast assets rather, with low-energy intensity. The first step in our decarbonisation strategy remains the reduction of GHG emissions through a combination of operational efficiency initiatives and a more recent switch to renewable energy sources. The next step in our strategy is to identify how emissions, which we are unable to feasibly abate, can be neutralised by using land under our control for carbon dioxide removals or using carbon offsets.

Harmony supports the climate change commitments of our host countries, South Africa, Papua New Guinea and Australia. We align with the Minerals Council of South Africa's Climate Change Position Statement, which commits full support to the need for a bespoke, pragmatic and people-centred just energy transition to meet South Africa's economic, development and energy security ambitions as described in the country's most recent Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC). In both Papua New Guinea and Australia, we support the Papua New Guinea – Australia Climate Change Action Plan with the aim to be carbon neutral/net zero by 2045. We further support the position of the International Council on Mining and Metals (ICMM) and World Gold Council regarding its commitment to decarbonising the mining industry in line with the climate goals of the Paris Agreement. Under this commitment, mining operations are accelerating climate actions to reduce GHG emissions.

Part of the Harmony strategy is to re-engineer our portfolio of operations through value-accretive acquisitions. Despite the various acquisitions in the recent past, the overall trend of the GHG intensity of our operations, based on the milling of ore, has been reducing. The acquisition of the Moab Khotsong and Mponeng operations in 2018 and 2019 respectively and the high-volume low-energy reclamation business, Mine Waste Solutions, led to an increase in the GHG intensity of the production of gold by approximately 14% in those years. However, the implementation of our energy efficiency and climate change strategy will facilitate Harmony's net zero journey even while Harmony pursues business growth objectives. The overall GHG intensity of our operations are decreasing on a tonne CO_2 per tonne of milling-of-ore basis due to energy efficiency and other improvements.

We initiated phase 1 of our renewable energy programme in 2022. Phase 1 was commissioned in 2023.

Introduction continued

Harmony's renewable energy and efficiency rollout plan

We are prioritising operational efficiency and transitioning to renewable energy sources to achieve our decarbonisation targets as set out in our short-term SBTi 1.5°C target.

In phase 1 of our energy efficiency and climate change strategy, we invested in renewable energy projects, including rooftop solar installations at our Randfontein office park and Nufcor facilities, which delivers a combined 999MWh of energy generated annually. We further installed three 10MW solar PV facilities at our Eland, Nyala and Tshepong operations in 2023, delivering renewable energy for use at the mines. Further small-scale rooftop solar projects are planned at our Doornkop, Phakisa and Kalgold operations in future, which will deliver an estimated 5 068MWh of energy generated annually.

Phase 2, with a planned capacity of 137MW, began implementation in October 2023 and is expected to reach commercial operation by FY27. This approach reinforces our commitment to GHG emissions reduction, positioning Harmony as a leader in decarbonisation and increases the resilience of our business model.

OUR RENEWABLE ENERGY AND EFFICIENCY ROLLOUT PLAN

2016 – 2045

Decarbonising Harmony while reducing electricity costs:
- Implementing energy mix and portfolio re-engineering initiatives to reduce GHG emissions to be net zero by 2045 (including carbon removal, agriculture, and water beneficiation)
- A phased strategy that includes solar PV, wheeling, wind energy, hydropower and energy efficiency projects.

	Phase 1	Phase 2a	Short-term PPA	Phase 2b	Phase 3	Phase 4	Wheeled wind
Commission year	**Commissioned**	**FY26**	**FY26**	**FY27**	**FY27**	**FY28**	**FY28**
Grid connection	Behind the meter	Behind the meter	Wheeled	Behind the meter	Behind the meter	Behind the meter	Wheeled
Installed capacity (MW)	30	100	200	37	56	100	260
Energy generated (GWh pa)	64	230	460	90	130	230	800
Carbon reduction pa (kilotonne)	49	210	1 407	273	364	1 085	924
Cost saving (R millions) pa	22	270	60	36	45	198	162

Progress to date

Phase 1: Harmony has effectively added 30MW of installed capacity solutions. As one of the first IPP projects to close under recently amended legislation, this facilitates the growth of the private power industry in South Africa. It also paves the way for companies to become more power independent, reduce emissions and procure predictably priced power. Procurement of private power helps to diversify our energy sources and addresses the energy shortage in South Africa.

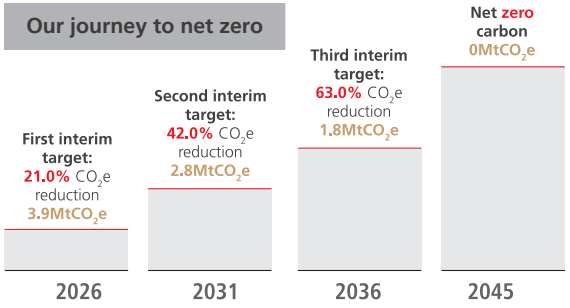
Phase 2: All environmental approvals for construction of the plants have been granted.

Short-term PPA: The bidding process for 200MW of energy has been completed and PPA negotiations are underway. Once concluded, we expect to generate 460GWh of energy per annum for a period of five years.

Phase 3: A request for proposal to purchase 56MW of solar power for Harmony is in progress.

Wheeled wind: Negotiations are underway with preferred service providers around wheeling (over the Eskom network) another 260MW of wind-generated energy to augment the phase 1 and 2 initiatives.

Our journey to net zero



Our energy efficiency plan

2008 – 2024
- **Ventilation** optimisation
- **Compressed air network** optimisation
- **Time of use** optimisation
- **Excess capacity** utilisation
- **Closed** deep-level and energy-intensive shafts
- **Increased portfolio** of surface assets

2024
- Reduction: 1.9TWh
- Investment: R295 million (US$16.2 million)
- Cumulative savings: R2.2 billion (US$143 million) and 2.1Mt$CO_2$

2023 – 2026
- Planned energy reduction: 43GWh per annum
- Estimated investment: R100 million (US$6.1 million) per annum
- Estimated savings: R83 million (US$5.1 million) per annum

Introduction continued

Incentives driving the renewable energy project include cost savings (purchasing less grid electricity), GHG emissions reduction (to meet the FY36 SBTi 1.5°C target) and positioning Harmony as a leader in decarbonisation. Capital allocation decisions prioritise projects contributing to decarbonisation and addressing climate challenges. The increasing demand for copper and silver in renewable energy and electric vehicles aligns with our commitment to a sustainable future.

In 2024, we began to incorporate the disclosure requirements set out by the International Sustainability Standards Board's (ISSB) International Financial Reporting Standards (IFRS) S2 ***Climate-related Disclosures Standard***. The standard requires entities to "disclose information about climate-related risk and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium and long term." IFRS S2 fully incorporates the disclosure requirements of the Task Force on Climate-Related Financial Disclosures (TCFD) framework. In some respects, IFRS S2 requires more detailed and specific information.

To facilitate this transition, we conducted a gap analysis between the two standards and our current disclosures, aiming to systematically transition fully to IFRS S2. For instance, the two standards emphasise governance and the oversight of climate-related risks. However, IFRS S2 requires additional disclosures such as the specific responsibilities of governance bodies or individuals reflected in their roles or mandates, which go beyond the TCFD recommendations.

In terms of strategy, while the TCFD Recommendations focused on the impacts of climate-related risks and opportunities on business and financial planning, IFRS S2 extends this by requiring disclosures on how these risks and opportunities are considered within the industry context, detailing the specific effects on the business model and value chain.

For risk management, both standards require disclosures on processes for identifying, assessing, and managing climate-related risks. IFRS S2 expands on this by necessitating a deeper exploration of the processes used, including any changes from the previous reporting period and how these are integrated into the overall risk management framework.

Regarding metrics and targets, TCFD recommends disclosing metrics used to assess climate-related risks and opportunities aligned with strategy and risk management processes. IFRS S2 aligns with these recommendations but also requires disclosures on industry-based metrics and specific methodologies used in GHG emissions calculations, providing a more comprehensive view.

TCFD and IFRS S2 information in this report

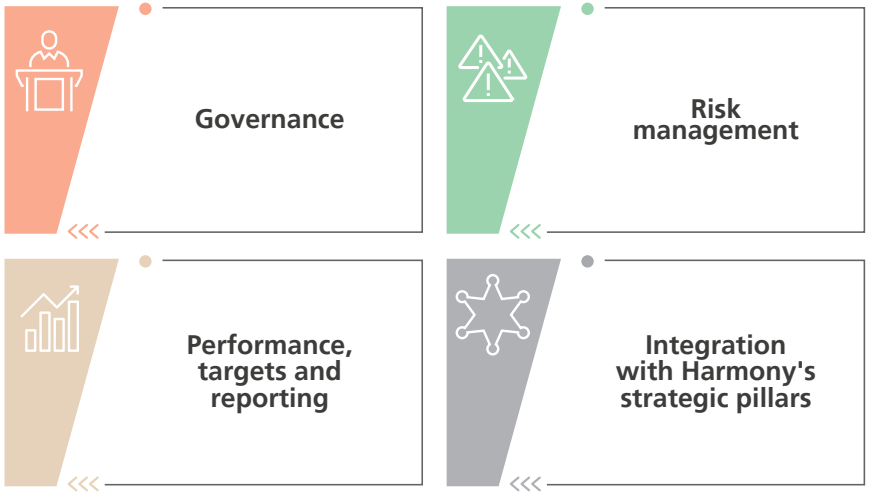
We refer the reader to relevant sections in this report that correspond with the TCFD and IFRS S2 disclosures, outlined in the table below:

TCFD recommended disclosures	IFRS S2 climate-related disclosures	Page and section
Governance		
» Disclose the organisation's governance around climate-related risks and opportunities.	» Understand the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities.	Section starts on **page 15**
Strategy		
» Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	» Understand a company's strategy for managing climate-related risks and opportunities.	Section starts on **page 6**
Risk management		
» Disclose how the organisation identifies, assesses and manages climate-related risks.	» Understand the processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including, whether and how those processes are integrated into and inform the company's overall risk management process.	Section starts on **page 17**
Metrics and targets		
» Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	» Understand a company's performance in relation to its climate-related risks and opportunities, including progress towards any climate-related targets it has set, and any targets it is required to meet by law or regulation.	Section starts on **page 22**

STRATEGY

Policy statement and strategy

Harmony's Climate Change and Energy Policy (the Policy Statement) evolved in response to the physical and transition risks and impacts of climate change we identified for our business. The risk management section in this report describes physical and transition risks for our business. Our energy efficiency and climate change strategy to implement the Policy Statement focuses on the following key areas:



This Policy Statement confirms our continued commitment to be a sustainable metals producer by heeding the global call to drive down greenhouse gas emissions and adapt to the impacts of climate change. Our strategy considers climate change-related risks and opportunities, rebalancing our asset portfolio, driving energy efficiency, improving the reliability and sustainability of our energy mix, as well as adaptation to climate change. These points outline the background to the key performance indicators, which in turn set out the targets and their implementation at an operational level, as per our strategy to implement policy on the right hand side of this page. We seek continual improvement at the meeting point of climate change and technological innovation by regularly reviewing the outcomes of business decisions, and continuously consider the interaction of climate-change risks and opportunities with our business. Our continuous improvement focus areas from 2026 to 2045 are shown in our **renewable energy and efficiency rollout plan**. Harmony's climate change and energy policy is built around three pillars: strategic initiatives to remove or reduce GHG emissions within our business model, operational efficiencies to improve energy efficiency and thereby reducing GHG emissions from our operations and increasing the proportion of renewable energy in our energy supply. The table overleaf (Summary of Harmony's climate change and energy strategy), provides a summary of Harmony's strategy.

Strategy to implement policy

A top-down business intent to manage and address climate-related risks.

▼

Recognition of opportunities related to operational efficiencies and GHG emission reduction.

▼

Dedicated climate adaptation programmes including:
» Biogas energy production and agricultural projects in South Africa
» Solar lighting and water, sanitation and hygiene projects in Papua New Guinea.

▼

The move towards, and continuous drive of, mining ore using methods with lower energy requirements.

Strategy continued

Summary of Harmony's climate change and energy strategy

Pillar	Area	Initiatives	Alignment of climate and business strategy
Strategic initiatives	Close high energy intensive operations	Merriespruit Operations	These strategic initiatives effectively address climate vulnerabilities in our business model and allows us to plan effective and responsible mine closure as well as future business growth.
		Bambanani Mine	
		Kopanang Mine	
	Develop surface and opencast operations	Mine Waste Solutions	
		Hidden Valley	
	Diversify commodities: Copper	Acquired Eva Copper in 2022	
		Progress in the development of Wafi-Golpu	
	Diversify commodities: Uranium	Acquisition of Nufcor in 2020	
	Finance	Secured R4 billion in facilities, including a R1.5 billion green loan for the second phase of renewable energy programme, enabling further investment in energy-efficient technologies and practices	We are strategically leveraging finance to support and achieve our climate and business strategies.
Operational efficiencies	Early energy efficiency implemented 2010 – 2020	Bulk air cooler peak-load clipping	» Reduce energy demand » Reduction in scope 1 and 2 GHG emissions.
		Energy-saving ventilation fans	
		Enhancement of compressed air use	
		Installation of energy-saving motor drives	
	Current energy efficiency interventions	» Optimise mine cooling systems » Improve and/or eliminate the use compressed air as an energy carrier in underground operations » Enhance and optimise water pumping and management systems » Optimise ventilation systems	
Energy supply	Onsite renewable energy	**Phase 1:** 30MW solar photovoltaic plant for the Tshepong, Nyala, and Eland operations.	Increased proportion of renewable energy in our energy supply mix. This lowers our scope 2 emissions and contributes to decoupling of economic activity from harmful impacts on society and the climate.
		Phase 2: 137MW solar project for Moab Khotsong, Great Noligwa mine, Noligwa gold plant, Harmony 1 plant and Central plant authorised for construction	
		Phase 3: 56MW of renewable energy planned for completion in FY26	
		Phase 4: 100MW of renewable energy planned for Mponeng Mine in FY28	
		Short-term Power Purchase Agreement (PPA) for 200MW for a period of five years	
	Wheeled energy	260MW wind power project	
		Assessing alternative power supply options and energy mix for Eva Copper	

Strategy continued

Achieving the objectives of the Paris Agreement necessitates physical changes to our societal and economic mobilisation. Harmony committed to setting a science-based target with the submission of a commitment letter to the SBTi in 2021. This target was validated by the SBTi in 2023.

The group is working towards delivering on our approved SBTi target, which is to reduce absolute scope 1 and 2 GHG emissions by 63% by FY36, from a 2021 base year. While we expect a marginal exceedance of the target level in FY26 due to delays in the commissioning of solar and wind facilities, we expect to overshoot our target by 15 – 20% by 2036 due to significant additional investments in renewable energy.

Our Policy Statement is unpacked in the 2024 ESG report and outlined below:

South Africa

In **South Africa** we are focusing on delivering our phase 2 and 3 solar projects and we are continuing to enhance our energy efficiency initiatives. While we have experienced some delays in implementation, largely due to regulatory barriers and constraints related to escalations in technology prices, we have introduced a phase 4 100MW project at Mponeng, secured an additional 200MW in short-term Power Purchase Agreements (PPAs) and increased our wheeled wind in the mix. We are also working with our suppliers to co-create a plan for their decarbonisation journeys and we are completing studies on decarbonising our transportation pathways.

Papua New Guinea

In **Papua New Guinea**, we are constantly working with power suppliers to address the stability of grid power (which is predominately hydropower), which enables us to reduce our dependency on diesel.

Australia

In **Australia**, initial power production at Eva Copper will be a combination of solar, a battery energy storage system and diesel. This will provide the mine with the flexibility to convert the diesel component to a grid connection via the CopperString 2032 project – a strategic, Queensland government-backed project to connect the North West Minerals province to lower carbon-intensive power, and benefit from the Queensland's renewable energy generation targets of 50% by 2030, 70% by 2032 and 80% by 2035.

Our energy efficiency and climate change strategy will be reviewed periodically, to ensure alignment with our goals and priorities, and to ensure that we take into account any changes in the macro- and micro-economic environments. These may include innovative decarbonisation technologies and options.

We are committed to making responsible decisions and announcements to achieve our ambition of reaching net zero by 2045 and are working towards reaching our long-term decarbonisation commitments.

After implementing all financially feasible abatement options, the remaining emissions may be offset through the purchase of carbon credits. In considering the use of carbon credits, Harmony will carefully consider the following, in line with the requirements of IFRS S2:

1 which third-party scheme(s) will verify or certify the carbon credits
2 the type of carbon credit, including whether the underlying offset will be nature-based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal
3 any other factors necessary for users of general-purpose financial reports to understand the credibility and integrity of the carbon credits.

Any carbon credits utilised in our net-zero journey will be sourced from reputable, verified issuers. At this stage, Harmony has not determined a preference for a specific type of carbon credit, such as nature-based or carbon removals. We will endeavour to develop a comprehensive carbon credit purchasing policy in the future to guide our efforts. This policy will form part of our overall governance framework.

Strategy continued

Harmony's climate change journey

Harmony has been proactively positioning itself to address climate change since 2008. The company has taken significant strides in lowering its GHG emissions and managing energy and water use across its various operations. Importantly we have taken a decision to redirect capital towards those projects that will further progress our objectives of decarbonising and addressing climate change. We took significant strides in the last few years in the evolution of Harmony's policy and corporate commitments, for example by focusing our growth strategy on bolstering our copper and uranium portfolios through various acquisitions. In FY24 we took further action, by successfully generating 65.3GWh, thus reducing our reliance on Eskom by 18.2GWh through phase 1 of our renewable energy programme and small-scale solar PVs that were successfully commissioned. We bolstered the decarbonisation programme to cater for longer life-of-mines and increased procurement of energy from 363MW to over 500MW total renewable energy. We continued work on our energy efficiency programme, which has resulted in a cumulative energy saving of R2.24 billion up to end FY24, equating to 2MtCO_2e. Harmony is finalising the procurement processes for phase 2a, 2b and 3 PV projects, and we are starting work on our climate-resilience assessment.

We have also made progress on our power studies for Eva Copper. Initial power production at Eva Copper will be a combination of solar, a battery energy storage system and diesel. This will provide the mine with the flexibility to convert the diesel component to a grid connection via the CopperString 2032 project, once this third-party project is completed. CopperString 2032 is a strategic project to connect the North West Minerals province to Australia's national electricity market. Connection to the grid via CopperString 2032 will provide further opportunities for Harmony to source lower carbon-intensive power, due to the Queensland government's plan to transform the state's electricity system and achieve renewables generation targets of 50% by 2030, 70% by 2032 and 80% by 2035. To understand future power supply options, we are working with various stakeholders, including the government-owned Powerlink Queensland, which will construct and manage CopperString 2032. We expect our detailed review and optimisation study to present a life-of-mine strategy that provides reliable power supply to Eva Copper and advances our decarbonisation goals.

In October 2021, Harmony updated both our Policy Statement as well as our Climate Change and Energy Strategy (the Strategy). Physical changes to our environment and the societal and economic mobilisation are necessary to achieve the objectives of the Paris Agreement over the coming decades. Our ESG report details the climate change and energy policy statement and its commitments, which responds to our current context and future ambitions (2024 ESG report).

Harmony's Policy Statement has evolved in response to the transition and physical risks and impacts of climate change. Our Strategy aims to give effect to the Policy Statement. The Strategy focuses on the following four key areas:

- Governance
- Risk management
- Integration with Harmony's strategy
- Metrics, targets, and reporting.

Our strategy outlines the background to the key performance indicators, which in turn outline the targets and the implementation thereof at an operational level. The Policy Statement and the Strategy have been historically achieved through the following:

- A top-down business intent to manage and address climate-related risks
- Recognising opportunities related to operational efficiencies and GHG emission reduction
- Move towards, and continuous drive of, mining ore with lower energy requirements
- Dedicated climate adaptation programmes, in both South Africa and Papua New Guinea such as biogas energy production and agricultural projects in South Africa, and solar lighting and water, sanitation and hygiene projects in Papua New Guinea.

Upon review and in seeking to make continuous improvements against the backdrop of improving technology innovation, Harmony has considered the following aspects:

Accomplished to date

- Energy efficiency: Since 2016, Harmony has concentrated on using less energy and being more efficient in how it uses that energy. Through its energy efficiency programme, Harmony effected cumulative savings of 1.3 terawatt hours, translating to a 1.2-million tonne CO_2 reduction and R1 billion in electricity cost savings
- Rebalancing our asset portfolio: During FY08 to FY22, we closed our energy-intensive shafts considering both the intensity of energy required to continue operating, and given the ore reserve depletion, focusing instead more on surface portfolio assets. Our recently acquired assets, Mponeng and Mine Waste Solutions, have higher energy and emission intensities than our historic portfolio. Opportunities are being explored to reduce the associated emissions intensities. The rebalancing of our portfolio is strengthened by our increased focus on copper and uranium, which can both contribute to the global transition to a low-carbon economy.

Forward outlook

- Energy mix: Our energy mix portfolio post FY22 includes grid electricity in South Africa, as well as energy from independent power producers, which includes solar energy and wind energy. These projects are either under feasibility or in the build stage
- Adaptation: Harmony is investigating climate change adaptation through carbon sinks, agriculture and water beneficiation. More specifically, Harmony focuses on water resource management as well as biodiversity management action plans and land rehabilitation.

Strategy continued

CORPORATE STRATEGY

Climate change has presented a significant business opportunity for Harmony because we have the metal portfolio to supply the growing demand for critical minerals shown in our **renewable energy and efficiency rollout plan**. Our growth strategy has been focused on bolstering our copper portfolio through the acquisition of the Eva Copper Project. This adds to the resources of our existing Wafi Golpu Tier 1 copper asset. Our metal portfolio includes the following:

Gold operations		
» Moab Khotsong » Mponeng » Kalgold » Tshepong Operations	» Doornkop » Joel » Target 1 » Kusasalethu	» Masimong » Phoenix » Central Plant Reclamation » Waste Rock Dumps
Copper operations	**Silver operations**	**Uranium operations**
» Wafi Golpu » Eva Copper Project	» Hidden Valley	» Nufcor

Critical materials in the transition to cleaner energy

3 Li Lithium | 28 Ni Nickel | 29 Cu Copper | 27 Co Cobalt | 64 Dy Dysprosium | 60 Nd Neodymium

- Permanent magnets for wind turbines require rare earth metals such as neodymium and dysprosium.
- Permanent magnets for electric vehicles require rare earth metals such as neodymium and dysprosium.
- Batteries for electric vehicles and stationary battery systems typically use lithium.
- Solar energy technologies use large amounts of copper and silver.
- The transmission and distribution cables that make up the electricity grid are composed largely of copper.

Strategy continued

Climate risk time horizons, risks and opportunities for our geographies and assets

We undertook a review of our climate scenarios in 2023. A detailed overview of the approach to scenario analysis is provided in the risk management section. The review demonstrated how climate-related risks manifest over time and how our assets may be impacted on a regional level. The scenario analysis identified risks to infrastructure within Harmony's broader operational context, to the cost of mining operations, for increased energy and cooling demands, increased need for health and safety measures, and potential increased cost of insurance as a result of physical and transition climate impacts.

The timelines considered in our scenario analysis are:

Short term (2021 – 2030)

» This period focuses on immediate risks and opportunities, particularly those that might arise from current policies and near-future regulatory changes. The scenario analysis during this period considers the impact of existing and emerging policies on greenhouse gas emissions and energy use.

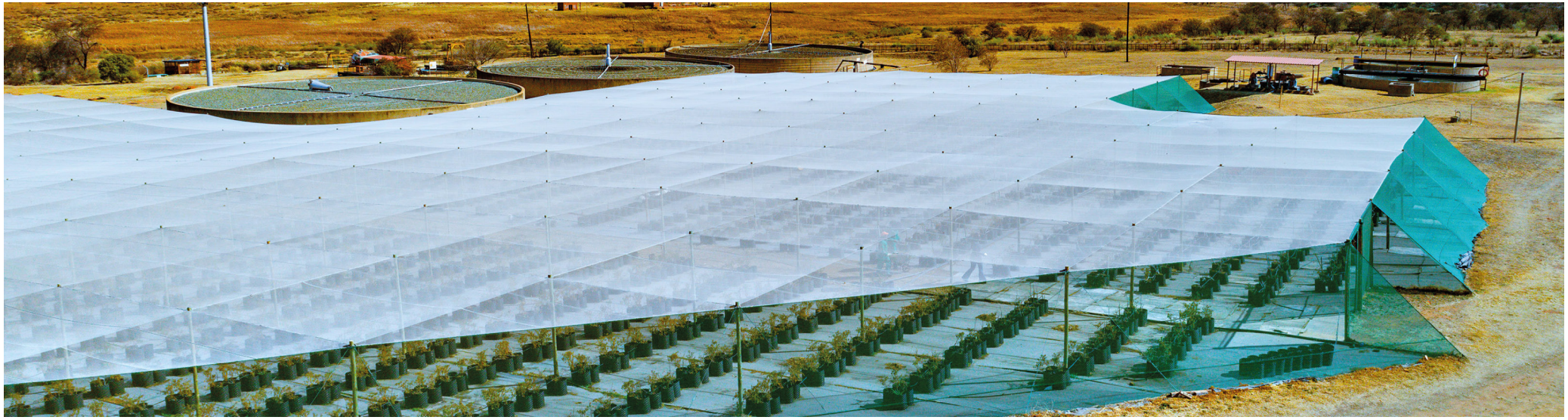
Medium term (2031 – 2050)

» In the medium term, Harmony examined the potential impacts of more significant regulatory shifts, technological advancements and market changes. This period includes transition risk scenarios aligned with the International Energy Agency's pathways, such as the 2°C scenario, which outlines a pathway and emissions trajectory aligned with limiting the average global temperature increase to approximately 2°C.

Long term (2051 – 2100)

» The long-term horizon evaluates the broader, more extensive impacts of climate change, focusing on sustained regulatory changes and long-term climate goals. This period incorporates Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs) to assess various socio-economic developments and their influence on greenhouse gas emissions. Specifically, scenarios such as SSP1 (Sustainability) align with RCP2.6, aiming for substantial mitigation efforts to limit global warming to well below 2°C.

By examining a range of possible future scenarios, Harmony can develop informed strategies, set realistic targets, and adapt its operations to mitigate risks and capitalise on emerging opportunities in alignment with global climate goals.



Strategy continued

Materiality of physical climate risks

Harmony operations are exposed to the physical risks from climatic changes present. Physical risks of climate change can be characterised as follows[1]:

Natural hazards

Chronic and acute physical climate risks are projected to escalate by 2030 and further by 2050 across all the examined cases. Socio-economic impacts are expected to rise significantly, ranging from approximately two to 20 times the current levels by 2050. While some countries may experience certain benefits, such as increased agricultural yields in Canada, Russia and parts of northern Europe, overall physical climate risks are on the rise globally.

Spatial

Climate hazards manifest locally, and it is essential to understand the direct impacts within a specific geographic area. Variations exist both between countries and within countries, emphasising the need for localised assessments.

Non-stationary

Physical climate risk is non-stationary, meaning it is continuously changing. The earth's warming trend is expected to continue due to inertia in the geophysical system and socio-technological inertia in reducing emissions. To stop further warming and risk escalation, achieving zero net greenhouse gas emissions is necessary. Managing this risk requires preparing for a world of constant change rather than a "new normal".

Non-linear

Socio-economic impacts are likely to escalate non-linearly as climate hazards surpass thresholds, leading to sub-optimal functioning or complete breakdown of physiological, human-made, or ecological systems. Adaptation measures may not keep pace with the rapid rate of warming, resulting in significant impacts even with slight breaches of system thresholds.

Systemic

While climate change's direct impacts are local, they can have ripple effects across regions and sectors through inter-connected socio-economic and financial systems. For example, flooding can damage housing, raise insurance costs, affect property values, and impact tax revenues. Economic and financial systems optimised for efficiency may lack resilience, making them vulnerable to a changing climate.

Regressive

The poorest communities and populations within the studied cases are typically the most vulnerable to climate change. Across all analysed countries, at least one of six indicators of socio-economic impact is expected to increase by 2030. These indicators of socio-economic impact include: the share of population living in areas experiencing a non-zero annual probability of lethal heat waves, the share of outdoor working hours affected by extreme heat and humidity, the annual demand of water as a share of annual supply of water, the share of time spent in drought over a decade, the annual share of capital stock at risk of riverine flood damage in climate-exposed regions, and the share of land surface changing climate classification. Emerging economies face a significant increase in potential impacts, and poorer countries have limited resources to adapt quickly, relying more on outdoor work and natural capital.

Under-prepared

The pace and scale of adaptation efforts need to be significantly increased to manage the rising levels of physical climate risk. Adaptation will involve rising costs and difficult choices, including decisions on whether to invest in infrastructure resilience or relocate people and assets. Coordinated action among multiple stakeholders is crucial.

Overall, recognising and understanding these characteristics of physical climate risk can guide assessment and management of the challenges posed by climate change.

[1] *Woetzel, J; Pinner, D; Smandari, H. et al. McKinsey Global Institute: Climate Risk and response: Physical Hazards and socio-economic impacts. 2020. McKinsey Global Institute.*

Strategy continued

Short- to long-term operational impacts on Harmony due to increasing temperatures and changes in rainfall patterns is as follows:

Physical risk	Expenditure	Assets and liabilities	Revenues	Impact description
Drought and water scarcity	✓	✓	✓	Water scarcity can impose water rationing and periodic water cuts. In more severe cases, the need to truck water to mine sites may arise and incur extra costs. Interrupted water supply threatens operational continuity and subsequent profitability of the business. Where affected by drought, Harmony's supply chain is vulnerable to similar disruptions and price hikes. These burdens on the supply chain have the potential to impact Harmony's operations. Drought conditions can negatively contribute to increased dust/particulate matter exceedances. Harmony uses water to suppress dust. Water use and thus operating expenditures could increase. An increase in dusty conditions can also increase the cost of maintenance on diesel trucks, as the air filters will need to be replaced more frequently. Longer droughts, especially in combination with higher temperatures, could affect the supply of water to the local community and support for the local community. Social unrest may arise. Also, Harmony's reputation and its social licence to operate may be affected and fines may need to be paid if dust or particulate matter exceedances were to result. The need for spend on once-off investments (assets) such as technology for water infrastructure to reduce water loss, increase water storage and recycling capacities or technology that enables mining to be less dependent on water for its processes will increase in the long term. Investments into more climate-resilient infrastructure may also be needed. Harmony's value chain is also likely to be severely impacted by water scarcity as a result of rising temperatures and changing rainfall patterns. Interruptions in the supply of goods and services will directly affect Harmony's ability to operate and generate revenues. Similarly, competition for water resources could increase considerably. With less water available, social, and economic needs will need to be evaluated by government. The need for access to clean water to people for domestic use would be of a higher priority than industry. This potentially exposes Harmony to limited amounts of water (primarily for processing) and threatening the sustainability of the operations. Although Harmony has increased its water recycling and water reduction initiatives, our water use is expected not to change in the future. Business interruptions and loss of revenue because of increasing water supply risk is therefore possible.
Increased temperatures	✓	✓	✓	Increased temperatures and rainfall fluctuations will likely inflict drought on our operations. This can affect Harmony financially in terms of water pricing, loss of revenue due to operational and supply chain disruptions. Rising average temperatures increase the intensity and frequency of heat waves and wind speed. This will increase cooling demands to prevent overheating. In turn, rising costs and unstable supply of national electricity in South Africa and Papua New Guinea can render mitigation attempts moot. Higher temperatures also result in a greater number of people at risk of heat-related medical conditions. Heat stress, in an operational context, has been shown to directly impact on labour productivity. Thus, with the anticipated changes in temperature, labour productivity is projected to decline, under a high emissions scenario.
Changing rainfall patterns and extreme weather events	✓	✓	✓	Municipal electricity supply could be extremely impacted by climatic changes. Spending on assets related to electricity infrastructure (renewable energy) to prevent power and thus business interruptions would need to be considered. As temperatures and rainfall events become more extreme, investments into equipment that can withstand such extremes may also become necessary. Extreme rainfall increases the water level in tailings dams, which reduces their stability. The wall height of tailings storage facilities may need to be increased to prevent the failure of dam walls. There is a risk of interruptions to operations arising from extreme rainfall, which could arise on site or offsite affecting access and receiving critical supplies.

Strategy continued

Sustainability-linked and green loan facilities

Facilities amount to R4 billion and include:

R1.5 billion green loan for **phase 2** of our renewable energy programme.

Sustainability-linked **R2.5 billion** and **US$300 million** revolving credit facilities and **US$100 million** term loan.

The green loan is expected to largely fund phase 2 of our solar photovoltaic (PV) initiatives after planned restructuring and alignment. The sustainability-linked facilities are aligned with our ESG and sustainable development targets and include energy-related KPIs.

Our targets are independently assured by a service provider who applies the sustainability-linked loan principles issued by, among others, the Loan Market Association. When we achieve our KPIs, we will receive interest savings. If we miss our targets, we will pay penalties.

GOVERNANCE

Governance structure

We continued to develop our approach to the governance of our business and operations this year. Whereas the historic strategic focus was on the production of gold at a low cost, our journey for more than a decade has been to include the energy intensity of the production into our decision matrices.

This shift in focus has allowed us to achieve a 28% reduction in GHG intensity (against ore treated) over the past seven years. Our strategic focus is now developing towards low-emission gold and growing our re-engineered portfolio to include copper and uranium. This shift in focus informs our SBTi 1.5°C target.

The responsibility for the alignment of our business strategy with our climate change objectives lies with our unitary board of directors. Our duty to be a responsible corporate citizen is fully supported by our directors and their commitment to ethical leadership. The board recognises that the achievement of SBTi 1.5°C target is mission-critical in our business and is committed to achieving this objective by FY36. Harmony has integrated the recommendations of the TCFD into the corporate reporting approach and is working towards undertaking the same with respect to the IFRS S2 reporting requirements. Transparent reporting on our climate change strategies and actions informed our approach to repositioning our business as a climate-resilient operation.

Governance structure and processes

The board of directors is responsible for aligning our business strategy with our climate change objectives. The board recognises that achieving SBTi 1.5°C target by FY36 from the FY21 base year is mission-critical.

The board's social and ethics committee has strategic oversight regarding climate change within the group. The committee is primarily guided by our overarching responsibility to mine responsibly. In developing our strategy, the committee is guided by relevant and developing environmental legislation and our host countries' international climate change commitments. Our strategy also considers internationally peer-reviewed science.

The chief executive officer (CEO) is responsible for strategy implementation. He takes ownership of Harmony's climate change policy and strategy. The CEO leadership role includes being responsible for all day-to-day management decisions, and for implementing the group's long- and short-term plans.

The CEO is supported by the **chief sustainability officer**, who is responsible for the climate change policy and Environmental Strategy's execution. South Africa and Papua New Guinea executives are responsible for this strategy's engineering, operational delivery and project management.

The audit and risk committee assists in the assessment of emerging climate-change risks, their financial impacts and their mitigation.

The investment committee reviews investments in energy efficiency and capital programmes contributing to climate change mitigation.

The CFO oversees and is responsible for considering climate-related risks and opportunities in the corporate budget and for assessment of major capex investments considering climate-related factors. The CFO is also responsible to establish the financial implications of climate-change risks and opportunities, and advise Harmony on strategic financial approaches.

Governance continued

Governance process

The board and board committees meet quarterly to consider climate-related risks and opportunities. Board is responsible to approve climate-related corporate targets that address material climate risks and opportunities, and monitor progress in line with the company's strategy, budgeting and planning cycles. Our group executive balanced scorecard includes a sustainability component. The chief sustainability officers' remuneration is linked to performance against climate-related KPIs.

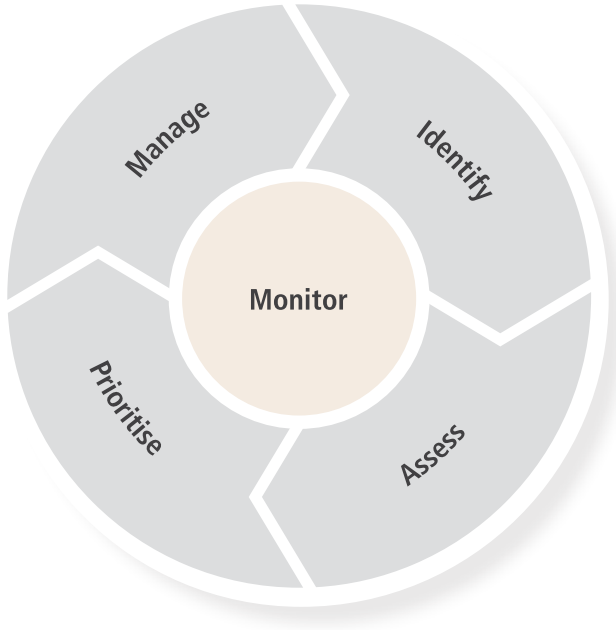
Corporate climate-related targets are delegated and adopted into operational mines by management, who also sets operational performance targets in support of the corporate targets. Climate-related information on performance progress is prepared by Harmony's environmental department and presented for consideration to the social and ethics committee on a quarterly basis. Remuneration at the executive and manager levels is linked to performance against climate-related KPIs.

Board is responsible to identify, assess and manage climate-related trade-offs, such as between adaptation measures and mitigation efforts; between short-term costs and long-term sustainability benefits; between operational continuity and environmental impact, and between labour productivity and health and safety. Our approach to managing these trade-offs is outlined below:

- **Short-term cost vs long-term sustainability:** construction of water treatment plants to secure potable water instead of relying on municipal water supply is a cost in the short term but ensures long-term security of supply
- **Timing of decarbonisation projects and initiatives:** we considered the trade-off between delayed investment and the benefits of earlier decarbonisation in the design of our energy efficiency and climate change strategy
- **Land-based carbon sequestration vs carbon offsets:** The business imperative to ensure the availability of TSFs for remining was key in our decision to pursue carbon offsets in place of land-based carbon sequestration projects in the short and medium term.

RISK MANAGEMENT

The risk management requirements for TCFD and IFRS S2 align substantially, as illustrated below. Both reporting standards require the clear identification of risks and opportunities, disclosing how these risks and opportunities are assessed within the company, and how these risks and opportunities are managed. IFRS S2 imposes an additional requirement, where the entity shall disclose how these identified risks and opportunities are monitored.



The alignment of TCFD and IFRS S2 requirements: Risk management

Harmony Gold identifies risks through a comprehensive Enterprise Risk Management (ERM) process that aligns with ISO 31000:2018 risk management guidelines and our ERM framework. We use scenario analysis to inform the identification of climate-related risks and opportunities, as well as the nature, likelihood and magnitude of the effects of those risks and opportunities. In 2023, we updated our Climate Change Scenario Analysis, incorporating several key elements to ensure a comprehensive understanding of potential future climate conditions. These factors include:

- **TCFD recommendations:** These provided a framework that enabled Harmony Gold to navigate the most likely scenarios that could arise due to climate change
- **Data sources:** Our analysis was informed by data from the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report, including the Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs). Additionally, we considered insights from the Shell Scenarios[1] and the World Gold Council report on the energy transition[2]
- **Scope of operations:** The scenario analysis encompassed both our direct operations and our value chain, ensuring a holistic approach to assessing climate-related risks and opportunities.

The approach applied in the Scenario Analysis considered four main steps to determine the materiality of the risks, as well as the possible climate-related opportunities that Harmony can capitalise on. The four steps for developing the Harmony scenario analysis are:

Select relevant scenarios ▶ **Identify risks** ▶ **Determine materiality of risks** ▶ **Responses to risks and opportunities**

[1] *https://www.shell.com/news-and-insights/scenarios/what-are-the-previous-shell-scenarios/_jcr_content/root/main/section_1789847828/promo_copy_142460259/links/item0.stream/1652119830834/fba2959d9759c5ae806a03acfb187f1c33409a91/energy-transformation-scenarios.pdf*
[2] *https://www.gold.org/goldhub/research/gold-and-climate-change-the-energy-transition*

Risk management continued

Scenarios used to assess climate risks and opportunities

Harmony's 2023 scenario analysis considered both acute and chronic risks under the physical risk assessment, as well as transition risks. Harmony used three reference scenarios to capture different possible pathways based on the associated SSPs, RCPs, radiative forcing by 2100, average global temperature increase, shell scenarios, and others where applicable:

Scenario	Scenario 1	Scenario 2	Scenario 3
IPCC RCP	RCP8.5	RCP6.0	RCP2.6
Radiative forcing by 2100	8.5W/m^2	6.0W/m^2	2.6W/m^2
Average global temperature increase	Over 4°C	2.7 to 3.7°C	below 2°C (B2DS)
SSP	SSP5 (Fossil-Led Development)	SSP3 (Regional Rivalry)	SSP1 (Sustainability)
Shell scenario	Island	Waves	Sky
Other	Unmitigated scenario	Nationally Determined Contributions (NDCs)	High mitigation scenario

Scenario 1: The unmitigated scenario, based on IPCC's RCP8.5, represents a future with continuous greenhouse gas emissions increases, leading to a radiative forcing of 8.5 W/m^2 by the end of the century and a global temperature rise of over 4°C. This scenario aligns with SSP5 (Fossil-Led Development), where socio-economic development relies heavily on fossil fuels with limited climate-change mitigation. It features high population growth, slow technological advancements and fragmented global climate cooperation. Additionally, this scenario corresponds to Shell's Island scenario.

Scenario 2: The Nationally Determined Contributions (NDCs) represent emission reduction targets under the UN Paris Agreement. Achieving all NDC targets would stabilise radiative forcing at 4.5 W/m^2 by 2100, with emissions peaking mid-century and then rapidly declining. However, the Current Policy Scenario (CPS), reflecting mid-2017 policy frameworks, falls short of the 1.5°C global warming target, leading to a projected warming of 2.7 to 3.7°C due to continued carbon dioxide increases. These scenarios are connected to SSP3 (Regional Rivalry), characterised by fragmented international cooperation and limited climate action, and align with Shell's Waves scenario.

Scenario 3: The high mitigation scenario aims to limit global warming to below 2°C, aligning with the below 2°C scenario (B2DS) through ambitious NDCs and technological advancements. Both scenarios are associated with RCP2.6, a low emissions trajectory, and SSP1 (Sustainability), characterised by sustainable development, strong global cooperation, socio-economic equality, and environmentally friendly practices. This alignment implies a future where sustainable practices and global cooperation are crucial for achieving climate goals and transitioning to a low-carbon economy. This scenario also aligns with Shell's Sky 1.5 scenario. The Paris Agreement's "ratchet mechanism" will increase emission reduction ambitions in 2020 and 2025, enhancing climate commitments in Harmony's operating countries.

Risk management continued

Implications of climate change scenarios for Harmony

Climate change poses significant physical and transition risks for Harmony, impacting various aspects of our operations. Physical risks determined by our scenario analysis include drought and water scarcity, increased temperatures, changing rainfall patterns and extreme weather events across our operations and our operating regions. These physical risks have the potential to disrupt our mining operations and affect the health and safety of our workers.

The vulnerability of Harmony's labour force to climate change is crucial to evaluate and address. Health issues and decreased productivity can stem from chronic risks such as heatwaves, rising temperatures, water scarcity and elevated dust levels. Immediate threats to workers and their safety are posed by acute risks such as wildfires and flooding, underlining the importance of resilient infrastructure, effective contingency plans, and robust water management practices. Labour vulnerability is further aggravated by insufficient global cooperation. The impacts of physical climate risks also extend to the communities where Harmony operates. Physical climate risks can have social and reputational implications, for example extreme weather events can cause damage to local infrastructure, displacement of communities, and adverse health impacts.

The impact of physical risks on Harmony's value chain aligns with Scenario 3 (high-mitigation scenario). Although some protection is offered by this high-mitigation scenario, addressing climate-related risks remains crucial.

The scenario analysis also considered transition risks, which included risks in the labour domain. Harmony understands the importance of upskilling and reskilling its workforce to adjust to new technologies, the integration of renewable energy, and shifting market dynamics. By investing in comprehensive employee development programmes, Harmony aims to alleviate potential labour-related risks and present itself as a desirable employer in the evolving low-carbon economy.

Other transition risks identified include regulatory change, where increasingly stringent environmental regulations and carbon pricing mechanisms could elevate operational costs and necessitate significant capital investments in emissions reduction technologies. A new transition risk considered in our scenario analysis is the impact of the European Union (EU) Carbon Border Adjustment Mechanism or "CBAM". The CBAM aims to address carbon leakage and promotes the adoption of carbon pricing outside of Europe. In this context, carbon leakage refers to situations where EU producers move their production to regions without carbon pricing or less strict climate policies, or when customers choose cheaper imports with higher carbon emissions, leading to imbalances in competitiveness and environmental impact.

Phase 1 of the CBAM implementation, which is the transition phase, was implemented from 1 October 2023. The targeted sectors in phase 1 include: cement, aluminium, iron and steel, hydrogen, fertiliser and electricity. Upon implementing phase 2, the permanent system in 2026, these sectors are to be expanded upon and reviewed. The risk lies upon the uncertainties of whether these sectors will expand to include metals that Harmony produces.

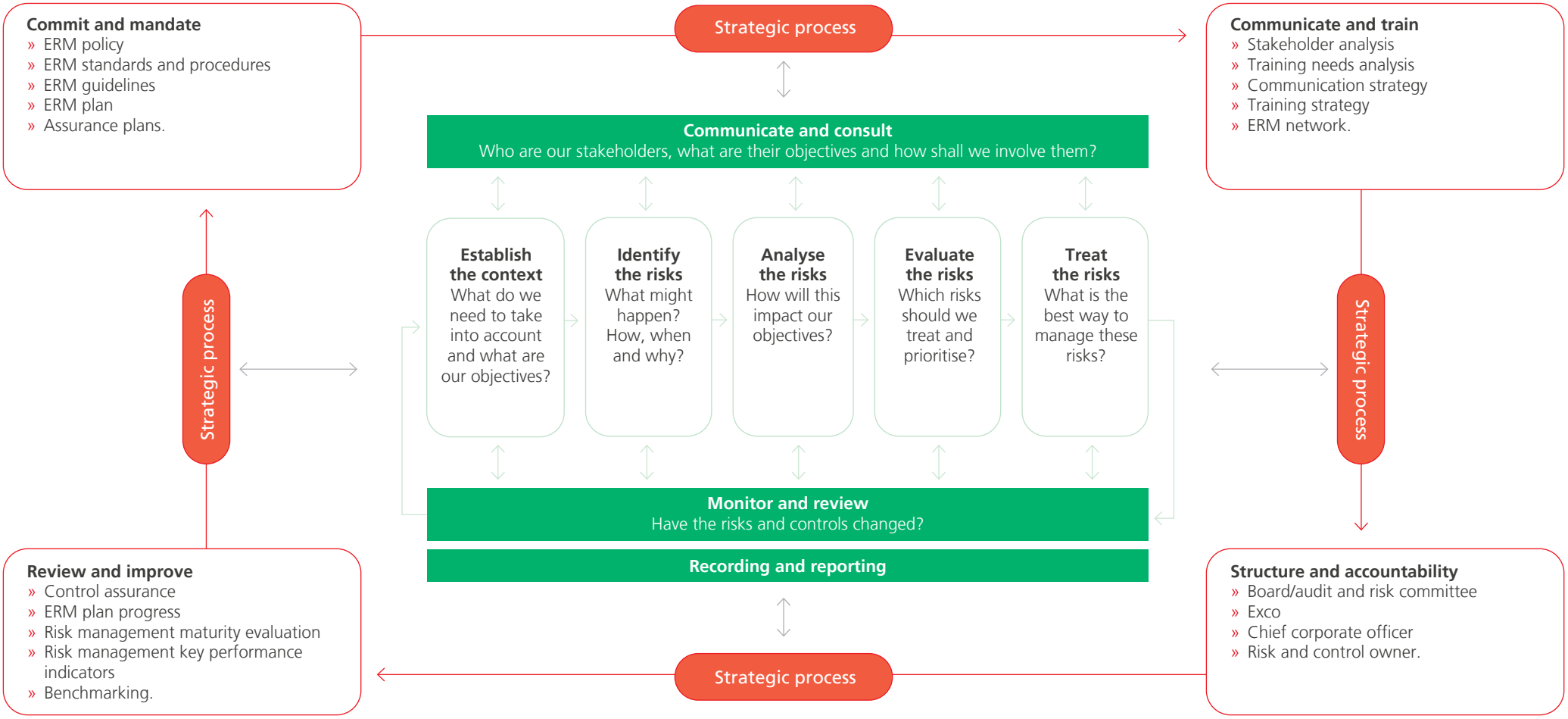
In South Africa, the government indicated that its plans to potentially amend the carbon tax legislation to make emissions from electricity generation liable for the carbon tax. This impacts South Africa's state-owned utility, which could well be liable to pay carbon tax from 2026 onwards. Harmony's scenario analysis considered the possible risk to our operational costs should this tax liability result in a pass-through cost on electricity from January 2026. We are also engaging with government on this issue through the Minerals Council of South Africa.

Despite the challenges, climate change also presents opportunities for Harmony. These include proactively managing the impacts of physical risks, for example investing in energy-efficient technologies, optimal water management practices, and renewable energy integration. Harmony is seeking to enhance our resilience and contribute to climate change mitigation through these initiatives.

Accordingly, transitioning to a low-carbon economy opens avenues for diversification, such as exploring new metals and assets beyond gold. The increasing demand for climate-friendly products and services presents revenue-generating opportunities and a competitive advantage for companies that can meet these demands. By adapting to market changes driven by this transition, Harmony aims to position itself as a leader in responsible mining and capitalise on the growing demand for sustainable minerals.

Harmony uses an integrated approach to identify and manage our climate-related risks and opportunities described above. Once the climate-related risks and opportunities have been identified, they are incorporated into our ERM, as outlined overleaf. The energy and climate-change risks are reviewed considering our enterprise risks at the audit and risk committee meetings. The committee's role in the risk management processes is multi-dimensional.

Risk management continued



Harmony's Enterprise Risk Management (ERM) strategic process for risk-based decision making

The board level executive committee and the audit and risk committee meet on a quarterly basis to discuss possible risks and changes in the importance and mitigation of the risks. This risk management process reflects Harmony's integrated approach to business and strategic developments. Climate-change risk is also addressed through the social and ethics committee, which has oversight of environmental, social, and sustainable development policies, practices, and performance. In addition, the investment committee reviews investments in energy efficiency and a variety of capital programmes.

Risk management continued

The materiality of our climate-related risks is quantified during scenario analysis and assessed through our risk management framework. Using this approach, risks are analysed by evaluating their impact on our business and then prioritised accordingly. Throughout this process, stakeholders are consulted at each step:

MATERIAL CLIMATE-RELATED RISKS

Major infrastructure incidents	Increasing capital cost	Security of energy supply	Security of water supply	Safety
such as flash flooding and potential supply chain disruptions	requirements to lessen the impact of weather/climatic changes	to the operations, which could be disrupted by extreme climate change events, such as tornados	to the operations, which could be disrupted by climate-change events such as prolonged drought periods	considering increasing ambient temperatures, excessive rainfall and flash flooding

Material climate-related risks

Our risk management in terms of climate change and energy aligns with ISO 14 001, ISO 31 000 and ISO 50 000 standards which enable the company to identify and manage risks appropriately.

Harmony recognises the importance of proactively managing risks, for example physical risks identified in our scenario analysis related to the availability and use of energy and water. We aim to bolster operational resilience, lessen environmental impacts, contribute to climate change mitigation by investing in energy-efficient technologies, optimising water management practices and embracing the integration of renewable energy. We continually endeavour to modify our business practices and engage in meaningful dialogue with stakeholders to navigate transition risks to manage energy and water effectively and capitalise on associated opportunities. By aligning our operations with evolving regulations, investing in responsible resource management and collaborating with local communities, we aim to reinforce our reputation as a socially responsible mining entity.

Through an integrated approach to risk-based decision making, we continuously monitor our risks and opportunities. These risks include those attributed to climate change, at both a company-level and an asset-level, as part of a multi-disciplinary process.

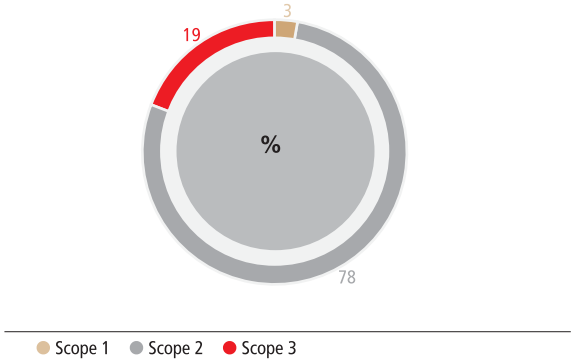
PERFORMANCE AND TARGETS

Harmony has calculated its GHG inventory since FY14 using the GHG Protocol: Corporate Standard. The information in this section presents the results of our GHG inventory for FY24 as well as Harmony's performance against its GHG emissions targets and water performance targets.

FY24 emissions

Harmony's total GHG emissions for FY24 were 5.25mtCO_2e, showing a 3.68% reduction against FY23. The largest portion of emissions is attributed to scope 2 emissions at 78% as shown in the pie chart below (Harmony's GHG emissions inventory by scope). Scope 3 makes up the second largest portion at 19% with scope 1 emissions contributing the least at 3%. Scope 1 GHG emissions include diesel consumption in backup generators and mining fleet diesel. Diesel consumption in FY24 decreased by 12% as a result of a more stable supply of hydropower in PNG and the changeover to electrical compressors at Doornkop.

Harmony's GHG emissions inventory by scope



Our South African operations contribute the most to our scope 2 emissions (98%) due to the fossil fuel-heavy grid and the Eskom Grid Emissions Factor. In line with our transition to IFRS S2, Table 1: Historical emissions for Harmony, presents Harmony's gross historical GHG inventory, reported in million tonnes of CO_2e. It is important to note that new asset acquisitions were not under Harmony's control for the full year in FY21.

Table 1: Historical emissions for Harmony

	Emissions (mtCO_2e)			
Scope	**FY24**	FY23	FY22	FY21
Scope 1	**0.179**	0.200	0.180	0.136
Scope 2 – Location based	**4.09**	4.25	4.57	4.25
Scope 2 – Market based	**0**	0	0	0
Scope 3	**0.99**	1.00	1.06	0.87

Location-based accounting of scope 2 emissions reflects the average emissions intensity of the electrical grids from which energy is consumed. Market-based accounting reflects the emissions from electricity that a company has chosen to purchase, considering specific energy contracts and certificates, such as renewable energy credits (RECs).

These energy-specific contracts, such as PPAs, and certificates, such as RECs, are classified as contractual instruments under the GHG Protocol. These contractual instruments substantiate claims about the use of low-carbon or renewable energy sources by providing evidence that a company has purchased energy with specific environmental characteristics. For renewable energy sources such as solar and onshore wind, the environmental characteristic or "benefit" is that they produce zero-emissions electricity.

In FY24, Harmony consumed 64.3GWh of green electricity from solar PVs located on our premises, which was accounted for in our calculation for scope 2 emissions. As part of our renewable energy programme, we have secured 137MW of renewable energy, set to be supplied to Harmony from June 2026, at which stage contractual instruments will be included. Additionally, we have increased the quantity of wind energy to be delivered through wheeling, commencing in 2028. Harmony will ensure that the PPAs align with the requirements of the GHG Protocol and its scope 2 Quality Criteria, and we will report its market-based emissions accordingly

The GHG Protocol requires dual reporting of market-based and location-based emissions to enhance transparency, providing a clear picture of a company's GHG inventory and its efforts to reduce emissions.

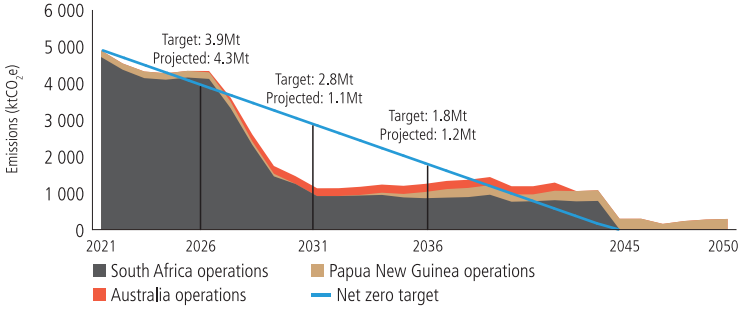
The target set for absolute emissions is a 21% reduction by FY26 against FY21 as the base year. The electricity intensity for FY24 was 0.08tCO_2e per tonne treated.

Performance and targets continued

Science-based target

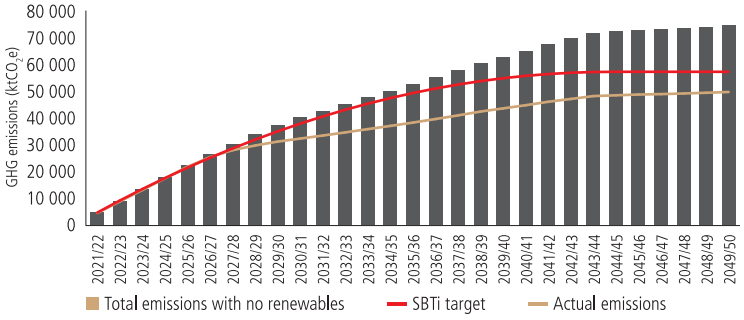
Harmony submitted its Commitment Letter the SBTi in 2021. In 2023, the SBTi approved Harmony's near-term target for 2021 – 2036. This target aims to decrease Harmony's cumulative emissions from its 2021 base year by 63% by 2036, or by 206ktCO_2e annually, based on an annual reduction of 4.2%. This conforms to SBTi requirements for a target aligned with Business Ambition for 1.5°C. Our commitment to achieving our FY36 target is demonstrated in Figure 1: Harmony emissions profile, showing a rapid decline in emissions starting in 2026, when phases 2A, 2B, and 3 of the renewable energy programme become operational. The projected effect of our climate and energy efficiency strategy on cumulative emissions can be seen in Figure 2: Cumulative emissions reductions from 2021 – 2050.

Figure 1: Harmony emissions profile



Emissions forecast against our target by 2050. South Africa, Papua New Guinea and Australian operations emissions are shown as stacked areas. The total emissions for all Harmony operations and our 2045 target trajectory are plotted as lines.

Figure 2: Cumulative emissions reductions from 2021 – 2050



To guide our progress toward this SBTi target, we have established interim targets, as outlined in Table 2: SBTi emission target and Harmony's interim targets. We are on track to surpass our FY36 target, largely due to the enhancement of our South African renewable energy programme. We expect a marginal exceedance of the target level in FY26 due to delays in the commissioning of solar and wind facilities. However, we expect to overshoot our SBTi target by 15 – 20% by FY36, due to significant additional investments in renewable energy.

The acceleration of our decarbonisation is a result of regulatory changes in South Africa. Prior to 2021, the licensing threshold for embedded generation was set at 1MW. In August 2021, this limit was increased to 100MW, and in 2023, the licence requirement was removed altogether, encouraging the development of renewable energy. However, the wheeling of energy through the Eskom grid presented another challenge for implementing renewable energy projects. In 2023, the National Energy Regulator of South Africa granted a transmission licence to the National Transmission Company South Africa. This marked a significant milestone in the legal separation process of Eskom's Transmission Division and facilitated the wheeling of renewable energy, as reflected in Harmony's increased procurement of power through wheeling.

Table 2: SBTi emission target and Harmony's interim targets

FY	Target type	Emission target $MtCO_2e$	Projected emissions $MtCO_2e$
26	Interim target	3.9	4.3
31	Interim target	2.8	1.1
36	SBTi target	1.8	1.2

We will review our energy efficiency and climate change strategy periodically to assess available technologies and the economics of decarbonisation opportunities.

Energy efficiency

Harmony has been optimising energy use since 2016 to help reduce emissions. Through our renewable energy and efficiency rollout plan, Harmony effected cumulative energy savings of R2.2 billion up to the end of FY24. This equates to savings of 2.1MtCO_2e.

We implemented and maintained multiple energy optimisation projects throughout our operational systems in FY24. Harmony also invested R295 million in the current year on new projects and initiatives, resulting in an estimated saving of 324GWh and a cost saving of R532 million.

Our energy efficiency initiatives focus on mine cooling, refrigeration, compressed air, water management and ventilation. To date, we have implemented over 240 energy efficiency initiatives at our operations. The energy efficiency programme approach considers the following:

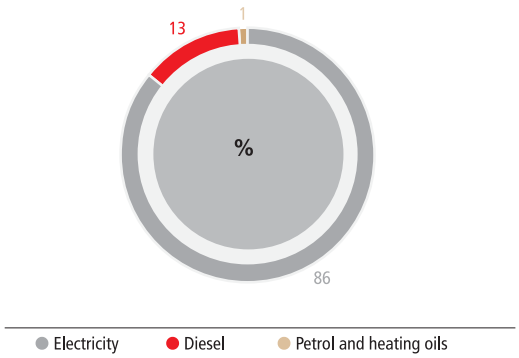
- Energy management teams at South Africa operations
- Infrastructure to enable energy metering and management
- Baseline electricity consumption at all operations
- Exploration, identification, and investigation of optimisation opportunities
- Implementation of optimisation strategies and capital projects
- Maintenance of implemented initiatives
- Reporting and management controls
- Awareness programmes to encourage energy conservation.

Performance and targets continued

Energy mix

Our energy mix, indicated in the pie chart below, is heavily dependent on emissions related to electricity supplied by Eskom in South Africa. The outlook is to drastically reduce reliance and even start pushing electricity into the Eskom grid from FY42 to FY50. A large concern is our current and projected use of diesel. If grid electricity becomes less reliable, we need to be wary of growing dependence on diesel generators to supplement electricity needs. The same can be considered for IFO and LNG. We should be well equipped to replace these sources with solar and hydroelectricity soon, as indicated in our updated renewable energy programme indicated overleaf in Figure 3: Our low-carbon energy distribution profile for South African operations.

Energy mix



Energy diversification

Since our SBTi target approval, Harmony's energy mix has been updated to include three main changes in energy sourcing. These include:

- Additional energy requirements for the Eva Copper Project acquisition in Australia
- The delayed PPA procurement for future operations at Wafi Golpu, projecting increased IFO and LNG emissions from 2033 to 2052
- Limited hydroelectricity production, which is the major contributor to the PNG Ramu grid, resulting in significant reliance on diesel power generation to supplement HV operations.

Reliance on 30% renewable energy for the Eva Copper Project and Wafi Golpu is factored in after three years of operation.

Papua New Guinea

Most of Papua New Guinea's electricity is sourced from the Ramu grid (60% hydropower). Climate change and El Niño induced drought has put significant strain on the generation of hydroelectricity, causing the Hidden Valley operation to rely on backup diesel generators to supplement electricity requirements.

Papua New Guinea has also been influenced by the La Nina cycle which tends to move too far south resulting in Papua New Guinea not receiving sufficient rainfall. This could influence the hydropower supply, as in cases of extreme water scarcity and could lead to increased use of fossil fuels.

The Hidden Valley operation is proximal to the 9.4MW Upper Bauine hydropower station, owned by PNG Forest Products Hydro, an independent power producer that supplies the Ramu grid.

In FY22, grid-operator PNG Power, PNG Forest Products Hydro and Harmony's Hidden Valley operation made good progress with commissioning and testing the "Bauine Switch", which will allow the Hidden Valley operation to be isolated from the Ramu grid and receive power from the Upper Bauine hydropower station. Although limited to 9MW (similar to the percentage received from the grid), supply is expected to be more stable and reliable. Implementation of this agreement has been delayed.

South Africa

In South Africa, our energy mix portfolio includes Eskom grid electricity which mainly relies on coal-fired power stations, and energy from independent power producers of solar and wind energy. These projects are either under feasibility or in the build stage.

Harmony is working toward diversifying the energy-mix portfolio through small-scale and large-scale projects. We decided to invest in small-scale solar projects to expedite our renewable energy drive. Projects include rooftop solar projects at our offices and administrative buildings across Harmony's footprint. In July 2022 the threshold for exemption from licence requirements for self-generation projects was removed. This provides an opportunity for Harmony to reduce our GHG emissions and pursue renewable energy more aggressively in South Africa.

As indicated in our **renewable energy and efficiency rollout plan**, our solar PV energy initiative is planned in four phases. Phase 1 is already delivering 30MW to the operations, and 137MW in phase 2 is currently being finalised. Off the back of phase 1 of the renewable energy programme, Harmony secured a R1.5 billion green loan for phase 2 rollout. Phase 2 is planned to reach commercial operation from FY27 onwards. Phase 3 PV projects will be constructed as a 56MW project, which will deliver 130GWh of energy per annum. We've expanded our PV initiative to include an additional 100MW of solar PV at Mponeng as part of phase 4, that is estimated to generate 230GWh per annum. The commercial operation date for phase 4 is expected to be FY28. Lastly, we are also exploring the opportunity of bringing in 200MW of short-term PPA energy into the mix, over a five year period.

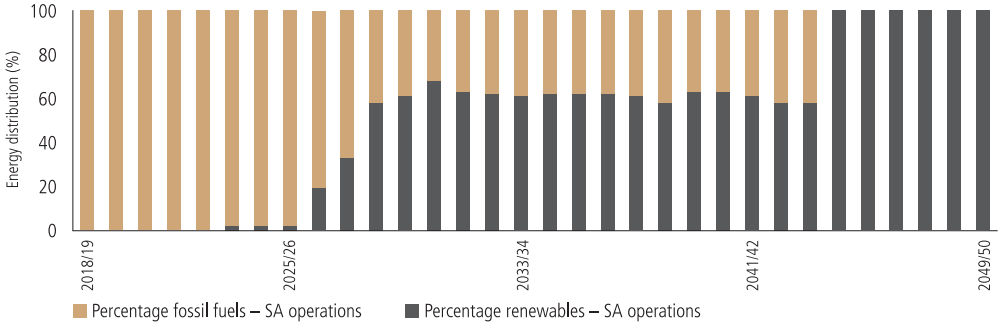
As outlined in our section on Science Based Targets, we've increased our procurement of wind energy delivered through wheeling from 140MW to 260MW. This is expected to come online in FY28.

Performance and targets continued

Harmony's energy diversification pipeline for South African operations looks as follows:

Parameter	Phase 1 PV	Phase 2 PV	Phase 3 PV	Phase 4 PV	Wind wheeling	Short-term PPA
Size of plant (MW)	30	137	56	100	260	200
Energy generated per year (GWh)	64	320	130	230	800	460
Commission year	FY23	FY26 – FY27	FY27	FY28	FY28	FY26

Figure 3: Our low-carbon energy distribution profile for South African operations



Water

Reliable water supply is critical for developing our assets, the mining process and realising our growth prospects. We have a thorough understanding of water management and water risks across the operational spectrum. We have integrated water security management and other water-related risks into our long-term business objectives, business strategy and financial plan. Harmony's commitment to responsible water management is driven from an executive level and has evolved from a strategy into practical and relevant actions across the group.

Harmony's water strategy sets out objectives related to water conservation, efficient water use and the necessities surrounding water supply in the context of its host communities, including:

- Acknowledging water-related risks regarding climate change
- Recognising water as a critical resource for local communities
- Integrating efficient water management
- Planning for water management at mine closure.

Harmony can reduce its operating costs and alleviate water shortage pressures in our host communities through recycling process water. Harmony's water strategy supports the shift towards self-generation and zero discharge of water where practical to do so. This will encourage the group's water conservation and demand-management objectives. Harmony prioritises the conservation of potable water, especially considering the potential worsening drought conditions in the regions in which we operate. Self-generating water will ensure consumption offsets and offer water supplements to host communities.

Harmony adopted a group-wide campaign to reuse process water and reduce our dependency on potable water from water utilities. In support of this, we set long-term targets to reduce potable water consumption by 10% and increase water recycled by 50% by FY27. To achieve these targets, Harmony implemented various water conservation initiatives.

Progress against water usage targets is reported below:

FY24 total potable water usage was **19.3Gℓ**, down **3.6%** from FY23, which totalled **20Gℓ**. This is great progress against a reduction target of 10% by FY27.

FY24 average water usage intensity of potable water used per tonne milled was **0.376kℓ/t**, down **2%** from FY23, which averaged **0.384kℓ/t**. This is great progress against the target to reduce this metric by 10% by FY27.

The absolute volume of water recycled in FY24 has **decreased by 2%** since FY23.

Harmony's three water treatment plants in South Africa assist in securing water supply to our operations while reducing water consumption and assisting with water conservation initiatives. The water treatment plants save Harmony R5.6 million in operating costs per year.

Harmony continues to pump water out of our Margaret and Covalent shafts, some of which is used in treatment processes, with the remaining being discharged. This surplus water could provide Harmony with water resources to adapt to future water-stressed conditions. With the physical impacts of climate change posing potential threats to water security in South Africa, water from Covalent and Margaret became strategic assets for community upliftment and operational growth and development.

In 2018, the Wafi-Golpu joint venture initiated a water, sanitation and hygiene (WaSH) programme to target 19 projects in the proposed special mining lease (SML) and Demakwa access road area, which is home to over 5 000 people. Projects aim to improve sanitation and support communities' water security. Five projects were completed before the Covid-19 pandemic. In FY22 the WaSH programme resumed, and we completed two projects in Zimake and Levilivan (Fly Camp) village, benefiting around 350 village residents.

STRATEGIC DIRECTION

Harmony is committed to achieving net zero by 2045. Our short-term target, which has been verified by the SBTi, commits to an absolute reduction in scope 1 and 2 GHG emissions (63%) by FY36 from an FY21 baseline. We have aligned our long-term target with a 1.5˚C trajectory in order to reach our 2045 net-zero target.

In 2024 we started the Biodiversity Footprint Project in collaboration with the Endangered Wildlife Fund (EWT). This project will allow us to enhance our biodiversity management approach through capacity building, pilot the Biological Diversity Protocol to effectively benchmark, manage and report on biodiversity, and help us understand which biodiversity targets would be appropriate at varied scales, and opportunities to meet these targets. We aim to produce and embed Biodiversity Action Plans (BAPs) to manage biodiversity in line with the BD Protocol for positive biodiversity outcomes, across our operations in South Africa, Australia and Papua New Guinea.

This project will inform our ambition to disclose against the Taskforce for Nature-related Disclosures (TNFD), model the net impacts of various biodiversity scenarios to deliver positive biodiversity outcomes, screen priority sites for significant biodiversity features and explore opportunities for voluntary conservation measures as well as offsets.

OUTLOOK

Harmony is working towards ensuring that future reports are aligned with the IFRS S2 disclosure requirements. We remain committed our climate and environmental targets, to enable meaningful change, and we are confident in our ability to meet our targets. Our commitment to net zero drives our ambitions and enables the transition to a low-carbon economy. In addition, we are investigating climate change adaptation through carbon sinks, agriculture, and water beneficiation, in an effort to increase not only our resilience to climate change impacts but the resilience of host communities as well. Our progress to date and commitment to strategic decision making ensure that we are well-placed to continue our journey. We will continue our strategic path, and we look forward to the challenges ahead.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the safe harbour provided by section 21E of the Exchange Act and section 27A of the Securities Act of 1933, as amended (the Securities Act), with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues, and the potential benefit of acquisitions (including statements regarding growth and cost savings) wherever they may occur in this booklet, are necessarily estimates reflecting the best judgement of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in our integrated report.

Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

- Overall economic and business conditions in South Africa, Papua New Guinea, Australia and elsewhere
- The impact from, and measures taken to address, Covid-19 and other contagious diseases, such as HIV and tuberculosis
- High and rising inflation, supply chain issues, volatile commodity costs and other inflationary pressures exacerbated by the geopolitical risks
- Estimates of future earnings, and the sensitivity of earnings to gold and other metals prices
- Estimates of future gold and other metals production and sales
- Estimates of future cash costs
- Estimates of future cash flows, and the sensitivity of cash flows to gold and other metals prices
- Estimates of provision for silicosis settlement
- Increasing regulation of environmental and sustainability matters such as greenhouse gas emission and climate change, and the impact of climate change on our operations
- Estimates of future tax liabilities under the Carbon Tax Act (South Africa)
- Statements regarding future debt repayments
- Estimates of future capital expenditures
- The success of our business strategy, exploration and development activities and other initiatives
- Future financial position, plans, strategies, objectives, capital expenditures, projected costs and anticipated cost savings and financing plans
- Estimates of reserves statements regarding future exploration results and the replacement of reserves
- The ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, as well as at existing operations
- Fluctuations in the market price of gold and other metals
- The occurrence of hazards associated with underground and surface gold mining
- The occurrence of labour disruptions related to industrial action or health and safety incidents
- Power cost increases as well as power stoppages, fluctuations and usage constraints
- Ageing infrastructure, unplanned breakdowns and stoppages that may delay production
- Increase costs and industrial accidents
- Supply chain shortages and increases in the prices of production imports and the availability, terms and deployment of capital
- Our ability to hire and retain senior management, sufficiently technically-skilled employees, as well as our ability to achieve sufficient representation of historically disadvantaged persons in management positions or sufficient gender diversity in management positions or at board level
- Our ability to comply with requirements that we operate in a sustainable manner and provide benefits to affected communities
- Potential liabilities related to occupational health diseases
- Changes in government regulation and the political environment, particularly tax and royalties, mining rights, health, safety, environmental regulation and business ownership including any interpretation thereof
- Court decisions affecting the mining industry, including, without limitation, regarding the interpretation of mining rights
- Our ability to protect our information technology and communication systems and the personal data we retain
- Risks related to the failure of internal controls
- Our ability to meet our environmental, social and corporate governance targets
- The outcome of pending or future litigation or regulatory proceedings
- Fluctuations in exchange rates and currency devaluations and other macro-economic monetary policies, as well as the impact of South African exchange control regulations
- The adequacy of the group's insurance coverage
- Any further downgrade of South Africa's credit rating
- Socio-economic or political instability in South Africa, Papua New Guinea, Australia and other countries in which we operate
- Changes in technical and economic assumptions underlying our mineral reserves estimates
- Geotechnical challenges due to the ageing of certain mines and a trend toward mining deeper pits and more complex, often deeper underground deposits
- Actual or alleged breach or breaches in governance processes, fraud, bribery or corruption at our operations that leads to censure, penalties or negative reputational impacts.

The foregoing factors and others described in the **Integrated report** under the **Risks and opportunities** section and our Form 20-F (accessed via our FY24 reporting landing page **here**) should not be construed as exhaustive. We undertake no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events, except as required by law. All subsequent written or oral forward-looking statements attributable to Harmony or any person acting on its behalf, are qualified by the cautionary statements herein.

Any forward-looking statements contained in our reports have not been reviewed or reported on by Harmony's external auditors.

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