HARMONY™

Climate-related financial disclosures 2021

Reporting in accordance with the recommendation of the TCFD (Task Force on Climate-related financial disclosures)

MINING WITH PURPOSE

Mining with purpose

We are a global, sustainable gold producer, creating shared value for all stakeholders while leaving a lasting positive legacy by:

- **Creating a profitable, sustainable company**
- **Committing to safe, ethical, social and ecologically responsible mining**
- **Positioning our business to contribute to a low-carbon future.**

Creating shared value is the golden thread that links our purpose to our business model and to our strategy. It drives our pursuit of operational excellence and ensures an inclusive approach to stakeholders. This guides the way we manage our capitals – ensuring that at all times we create and preserve value, generating infinite opportunities from a finite resource.

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INTRODUCTION

Under our strategic pillar of Responsible Stewardship, Harmony recognises the global shift towards a low-carbon economy. During the last year, this shift has been accelerating with an increased focus by investors on climate change, with the pressure for a low-carbon transition ever mounting.

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Harmony continues to support the climate-change commitments of its host countries, South Africa and Papua New Guinea.

We recognise the push towards net-zero targets, as underpinned by the Paris Agreement and the newly released IPCC 6th Assessment Report. Harmony takes note of the demands of investors regarding net-zero targets and has initiated a process to evaluate the practicalities and net impacts of such a target on our business and is working on a strategy and plans to determine when our net zero will be achieved.

The South African government has recently announced a move towards a low-carbon economy by increasing the limit for exemption from licence requirements for self-generation projects up to 100MW. This removes a significant obstacle to investment in embedded generation projects. This provides an opportunity for Harmony as more than 80% of our emissions relate to the use of base load electricity from Eskom. This regulatory relief, if implemented, will allow us to continue our investment in renewable energy, and the resultant journey to reduce our carbon footprint.

During FY20, Harmony made a strategic decision to align its annual reporting with international best practice in terms of global climate reporting. We embarked on a process to structure our annual reporting in accordance with the Task Force for Climate-related Financial Disclosures (TCFD) requirements. While our TCFD reporting continues to evolve, we have focused on the four key areas as defined by the TCFD for this year's report as we progress in integrating the TCFD requirements with our existing reporting structures.

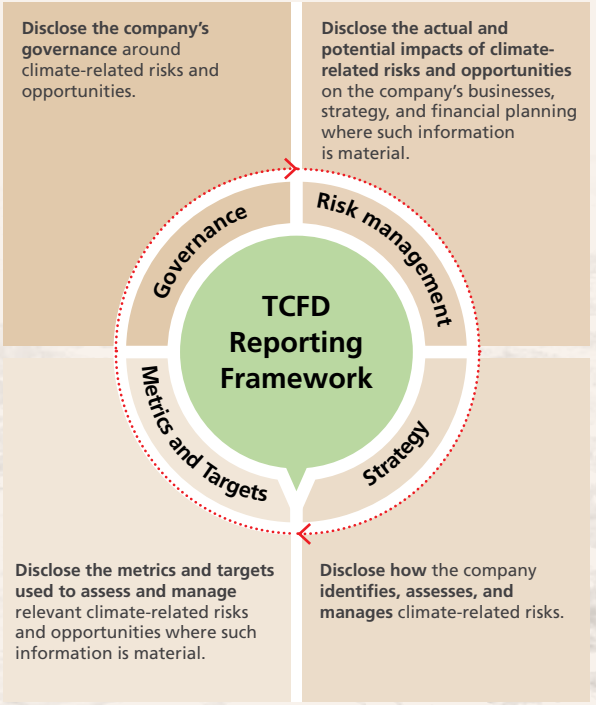


Figure 1: The TCFD Reporting Framework.

More than
80%
emissions relate to the use of electricity.

GOVERNANCE

Harmony has an embedded and risk-adjusted strategy. Our recognition of climate change and our commitment to climate change mitigation and adaptation, is embedded into our business strategy and decision making. As such, Harmony's board has oversight of all climate-related issues.

The Harmony board's social and ethics committee has the highest level of strategic oversight regarding climate change within the group. The committee is guided by the relevant environmental legislation, as well as the country's international commitments as embodied in the Paris Agreement and the Nationally Determined Contributions (NDC). One of the primary purposes of the social and ethics committee is to ensure responsible environmental management across all of the group's operations. The committee thus provides the strategic direction for Harmony's response to climate change.

The social and ethics committee is also responsible for setting and overseeing the achievement of group-level greenhouse gas (GHG) emission reduction targets. Through the social and ethics committee, climate-related matters are managed through a top-down approach. This results in more informed decisions and actions both in terms of climate mitigation and adaptation.

As such **strategies, policies and targets relating to environmental and climate change** are managed proactively from board level.

The social and ethics committee is supported by:

Harmony's **board of directors** (who approve Harmony's climate change policy and strategy)

The board of directors recognises the Group's commitment to be a responsible corporate citizen. The board is responsible for appointing the chief executive officer (CEO), on the recommendation of the nomination committee. Harmony's CEO is responsible for leading implementation and execution of the board-approved strategy, policy and operational planning, and serves as a link between the board and executive management. The CEO is held accountable for all decisions passed and reports to the board.

The **chief executive officer** (who "owns" Harmony's climate change policy and strategy)

The group's CEO leadership role ultimately entails being responsible for all day-to-day management decisions and for implementing the company's long and short-term plans. As such, climate change impact management, environmental and social stewardship, resource efficiency and emission reduction forms part of the CEO's operational responsibilities.

The **executive:** Sustainable development (who is responsible for the execution of Harmony's climate change policy and strategy)

The executive sustainable development is responsible for the operational assessment of climate management across the group and the subsequent implementation of Harmony's climate-change policy and strategy.

Harmony's executive management KPIs are set against the achievement of ESG-specific targets, some of which are climate change related.

SA and PNG **executives**

Engineering and operational delivery and project management.

climate change

RISK MANAGEMENT

Harmony monitors its risks and opportunities at both a company-level and an asset-level, as part of its multi-disciplinary process.

Climate-change risks and opportunities are included in this process. Energy and climate-change risk is assessed in relation to group enterprise risks at the audit and risk committee meetings. The committee's role in the risk management processes is multi-dimensional.

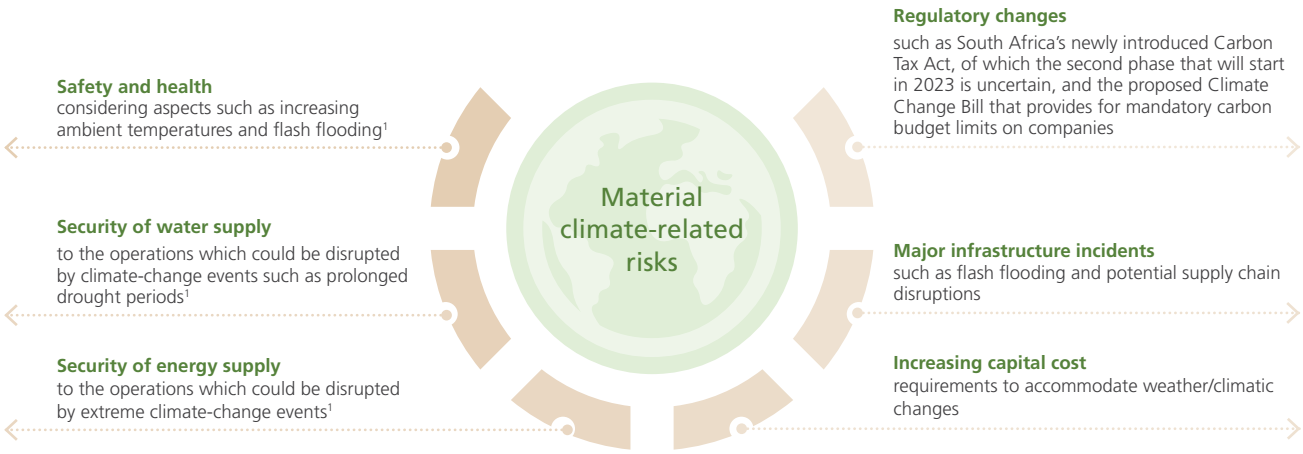
Material risks that have been identified at this level include Harmony's dependency on South Africa's fossil-fuel based electricity grid, carbon tax liabilities and security of electricity supply. These risks are managed most effectively through frequent engagements between management and the board, as well as between the company and stakeholders.

There are quarterly meetings held between the executive committee and the audit and risk committee, where they discuss possible risks and changes in the importance of each risk while also determining the best approach towards mitigating these risks. The 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 who have oversight of environmental and social or sustainable development policies, practices and performance. The investment committee also reviews investments in renewable energy, energy efficiency and a variety of capital programmes.

Climate change will affect future costs, infrastructure requirements (energy sources), operations and operating conditions, host communities, and supply chain at Harmony.

Climate change presents **numerous risks and opportunities** to Harmony, and thus plays a key role in the **risk-identification process.**

Material climate-related risks – which could result in substantive financial impacts – include:



Harmony is able to identify and assess the risks and opportunities they are faced with as a result of climate change through weekly review and monthly meetings. Additionally, Harmony adheres to the ISO 14001, ISO 31000 and ISO 50000 standards which enable the company to identify and manage risks appropriately. This includes issues of climate-related risks such as water availability; flash flooding; and impact of elevated ambient temperatures on cooling requirements. Shaft managers are encouraged to report on risks and opportunities relating to climate change during these meetings.

In addition, Harmony conducted a climate-change scenario analysis in July 2020, informed by the TCFD guidelines, which enables the company to navigate the most likely scenarios which might play out because of climate change. The approach applied in the scenario analysis considered five main steps to determine the financial impacts climate-change scenarios may have on Harmony's business. The five steps are summarised below.

Figure 2: The five main steps applied in the TCFD scenario analysis.

RISK MANAGEMENT continued

Harmony's physical and transitional risks identified during the scenario analysis are presented in the following infographic (Figure 3) which identifies the climate-change risk, the intermediate drivers, and the financial impact.

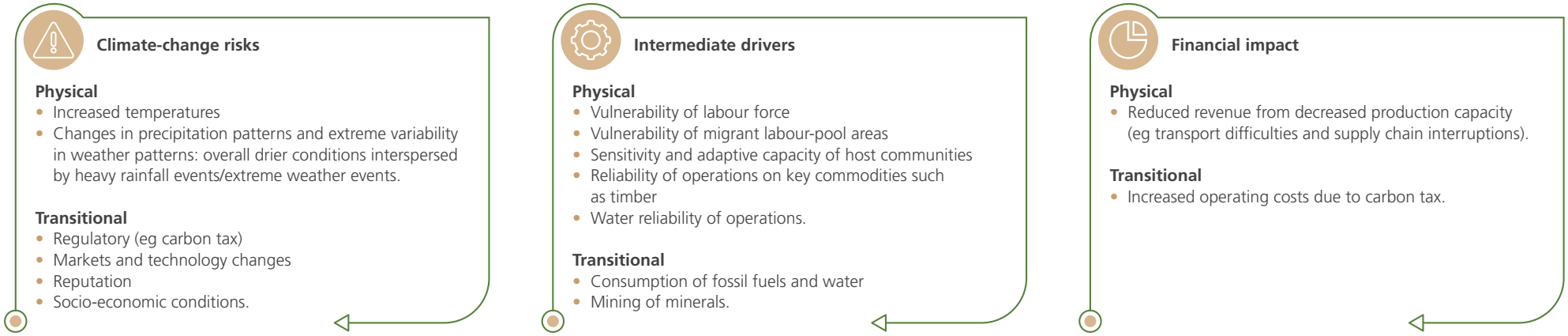


Figure 3: Climate-change risks and responses identified during Harmony's scenario analysis.

The scenario analysis showed that Harmony is well-placed to be able to transition to a low-carbon economy given its gold and copper reserves.

The most significant positive impact on the company's business is likely to arise from the use of gold as a hedge against geo-political uncertainty, followed by the use of copper and silver in the market for global renewable energy rollout and for the rollout of electric vehicles.

In the transition to a clean-energy future, the world will require as much copper in the next 25 years as was produced in the last five millennia. To meet this demand, and cap global warming at 1.5°C, global production of nearly every base metal (including copper, aluminium, magnesium, nickel, and lead) is expected to increase by 225%-250% in the next 30 years[2]. But as demand accelerates, the mining industry's role in climate change threatens to grow at an even greater pace, as the energy inputs needed to meet the increasing demand surges. In other words, mining companies must strive to increase their material output while decreasing their carbon-based energy inputs. However, Harmony's unique position as a supplier of metals to facilitate a transition to a low-carbon economy provides it with a unique opportunity to increase its revenues and implement actions to increase the company's resilience to climate change.

[1] *OneWorld. (2020) Situation Analysis Report on Climate Change and its Impact on Mining in South Africa. Department of Forestry, Fisheries and the Environment (DFFE); Department of Mineral Resources and Energy (DMRE); International Institute for Sustainable Development (IISD). https://oneworldgroup.co.za/oneworld-projects/climate-change-mining-sa/[accessed on 18/08/2021].*

[2] *Lezak et al, Low-Carbon Metals for a Low-Carbon World: A New Energy Paradigm for Mines, Rocky Mountain Institute, 2019, available at https://rmi.org/wp-content/uploads/2019/12/Low-Carbon_Metals_for_a_Low-Carbon_World.pdf.*

STRATEGY

Harmony's climate-change journey

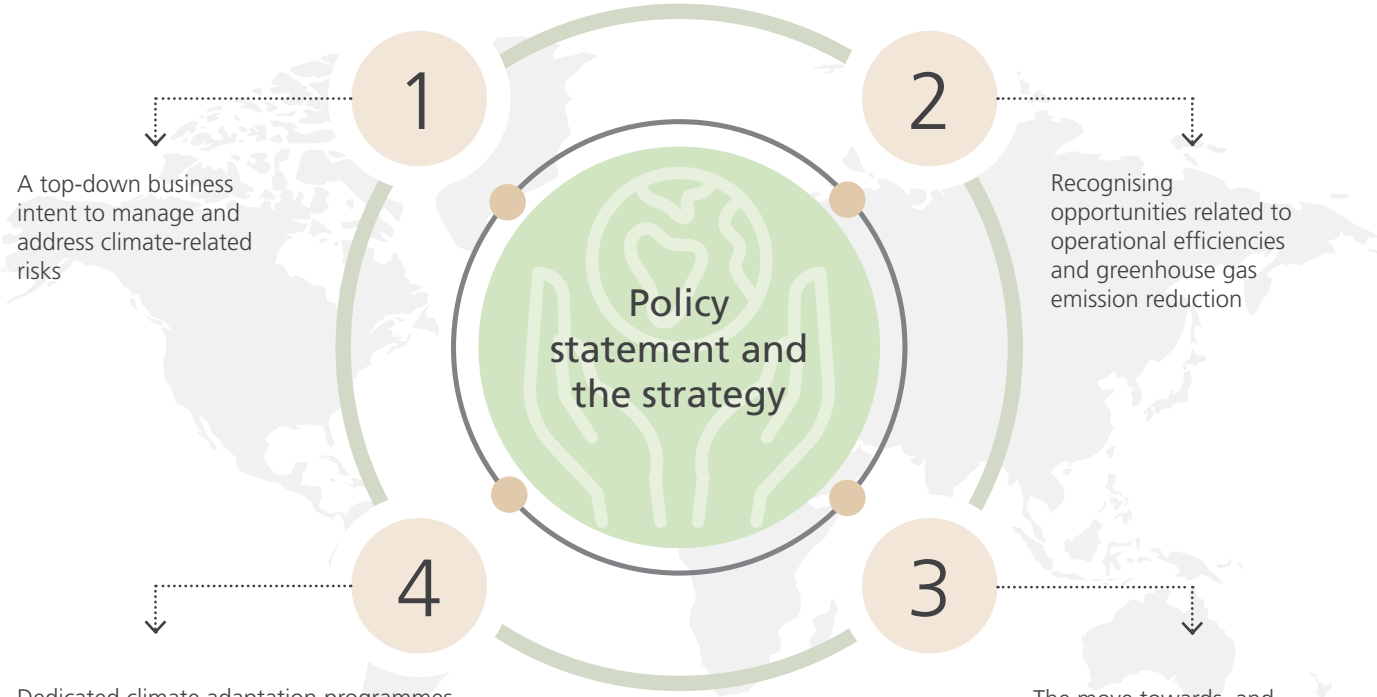
Harmony has been proactively positioning itself to address climate change since 2010.

During June 2021, Harmony updated both our climate-change and energy policy as well as our climate-change and energy strategy. Through this process, Harmony identified that climate change will impact the gold mining sector, both in terms of physical changes to our environment and the societal and economic mobilisation necessary to achieve the objectives of the Paris Agreement over the coming decades.

Harmony's climate-change and energy policy statement was developed in response to the transitional and physical risks and impacts of climate change. The strategy aimed to give effect to the policy statement. The strategy focuses on the following four key areas:

The 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 greenhouse gas emission reduction

Dedicated climate adaptation programmes in both South Africa and Papua New Guinea such as biogas energy production and agricultural projects in South Africa and agricultural coffee projects in Papua New Guinea

The move towards, and continuous drive to mine ore using methods with lower energy requirements

The company has taken significant strides in **lowering its emissions** and **managing energy and water use** across its various operations.

STRATEGY continued

Rebalancing asset portfolio

During FY08 to FY20, Harmony closed our energy intensive shafts. From FY19 to FY23, Harmony continued and will continue further closure of deep level and energy intensive shafts, with increased surface portfolio assets. Our recently acquired assets, Mponeng and Mine Waste Solutions, have higher energy and emission intensities than our historic portfolio, and the influence on our overall performance can be seen in the graphs overleaf. We are actively working on the reduction of these emission intensities.

Energy mix

Our energy mix portfolio post FY22, includes grid electricity in South Africa, as well as energy from independent power producers, which include solar energy, wind energy, and electricity generated from natural gas.

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.

As a result of these efforts, as well as considering lower-emission mining technologies and practices where possible, our emission intensity has decreased substantially over time. The performance of our historic portfolio of assets is continuing to decrease. Our new acquisitions have decreased the group-wide intensities, and we have plans in place to further reduce the emission intensities of these new operations.

During 2016 we took full ownership of our Hidden Valley Mine in Papua New Guinea. The mine was recapitalised and reached full commercial levels of production by 2018. This is an opencast mine and decreased our overall emission intensities due to the fact that the majority of Harmony's other mines are deep-level underground operations which have a considerably higher emissions intensity.

During the FY21 reporting year, Harmony acquired the Mponeng Mine operations and related assets. This included Mine Waste Solutions, a high volume surface source operation, from AngloGold Ashanti. This acquisition resulted in a substantial decrease in our GHG intensities, offsetting the additional emissions from Mponeng Mine for FY21. This is discussed further in the Metrics and Targets section.

Harmony has been decarbonising from as early as FY08, through the following initiatives:

Energy efficiency

Between 2016 and 2021, an energy saving of 1 032GW/hr was achieved, which translates to a cost saving of R1.017 billion at an investment made of R213 million. Moving forward, between 2021 and 2026, we plan to maintain a reduction of 1.5% per annum with the estimated savings of R85 million per annum based on an investment made of R44 million.

METRICS AND TARGETS

As part of our strategy of producing safe, profitable ounces, and improving our margins through operational excellence and value-accretive acquisitions.

Harmony is continuously investigating growth prospects and as a result our absolute emissions will increase as we grow. It is for this reason that we measure our success in reducing our GHG emissions by focusing on two GHG emission intensity metrics (Figure 4). The first being tonnes CO_2/tonnes ore milled and the second being tonnes CO_2/kg of gold produced.

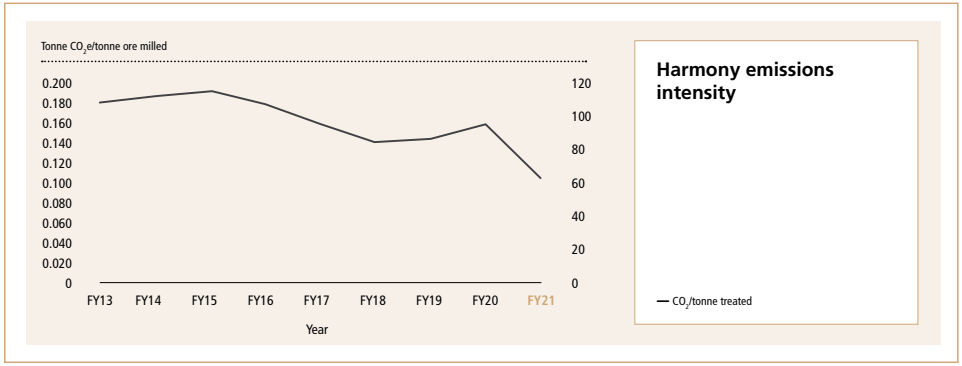


Figure 4: Harmony's GHG emissions intensity for FY21.

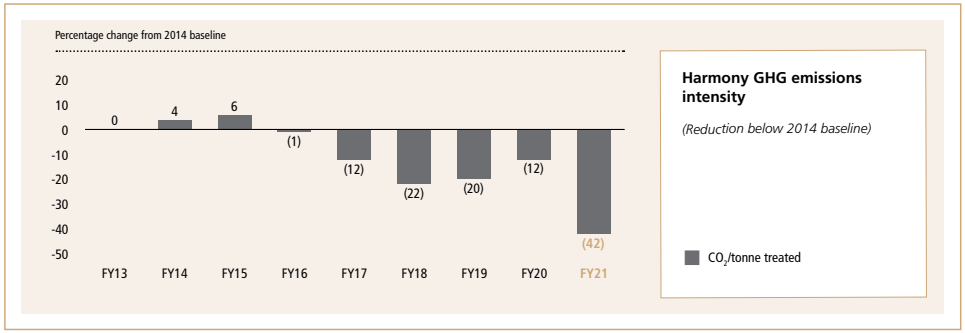


Figure 5: Harmony's GHG emissions intensity percentage change from the 2014 baseline.

See **ESG report** for further information on scope 1, 2 and 3 emissions.

Harmony has achieved a 42% decrease in emissions intensity per tonne of ore milled against a 2014 baseline. This decrease was in a large part due to two strategic programmes. The first is a result of the continual effort in driving further **energy efficiencies**, and the second is from the ongoing rebalancing of our portfolio to focus on less energy-intensive resources such as surface source mining. The sharp decrease from 12% below baseline in FY20 to 42% below baseline in FY21 was partly due to the acquisition of Mine Waste Solutions. This operation processes a high volume of surface materials at a very low energy consumption.

Our GHG emission intensity per tonne of gold produced increased by 16% against a FY14 baseline in FY21. We showed a reduction of 123% below the baseline in FY19 as a result of the initiatives mentioned above. The intensity has, however, increased to above the baseline in the last financial year due to the **high energy consumption** of the Mponeng Mine, as well as the low grade of the surface materials processed by Mine Waste Solutions.

Harmony remains committed to reducing our emissions. Multiple energy optimisation projects were newly implemented and maintained across 63 operational systems in FY21, which resulted in an estimated energy cost saving of R218 million. These systems include compressed air, refrigeration, water reticulation and ventilation. This is a testament to the company-wide integration and resilience of our energy and climate-change strategy to affect energy use and **greenhouse gas emission** reductions. Going forward, Harmony aims to increase the total energy savings on these systems through the implementation of various additional energy-efficiency capital projects.

Water and energy security were identified as key areas of risk associated with both physical and transitional climate-change risks. As a result, Harmony is taking proactive steps to manage these risks through various initiatives and the close monitoring of **water and energy** use across our operations.

METRICS AND TARGETS continued

Since FY18, Harmony has developed several targets running up to FY22 including:

Targets running up to FY22

- **5%** absolute reduction in **electricity consumption** (MW)
- **5%** reduction in **electricity intensity** (kWh/tonne milled)
- **5%** reduction in **total carbon emission intensity reduction** (tCO_2/tonne milled)
- **2%** reduction in **diesel intensity** (kl/tonne milled)
- **2%** reduction in **petrol intensity** (kl/tonne milled)
- **7%** reduction in **water** used for primary activities (kl)
- **7%** reduction in **water intensity** (kl/tonne milled)
- Recycle **6%** of Harmony's **water consumption**
- **10%** of total **electricity consumption** must be from renewable energy

METRICS AND TARGETS continued

The targets related to electricity, diesel and petrol consumption will directly reduce GHG emissions, thereby contributing towards Harmony's climate-change mitigation efforts.

Harmony's water targets will contribute towards reducing our reliance on potable water from water utilities in South Africa, while at the same time, boosting our resilience during periods of drought.

As part of our target setting, we monitor and reduce energy use and greenhouse gas emissions. Importantly, the increasing of the limit for exemption from licence requirements for self-generation projects up to 100MW provides Harmony with the opportunity to more aggressively pursue renewable energy within South Africa and reduce our GHG emissions.

Energy and greenhouse gas emission mitigation

Harmony consumes electricity from the national power utility, Eskom in South Africa. This grid is mainly dependent on coal-fired power stations.

Under investigation
23 projects

Estimated saving per annum
R148 million

Implemented
63 energy optimisation projects

Estimated saving per annum
R218 million

Most electricity used by Harmony in Papua New Guinea, is obtained from renewable energy, predominantly hydro-power, resulting in much lower emission intensities.

From the period FY16 to FY21 R180.6 million was spent on implementing energy-optimisation projects. Harmony has increased investment in renewable energy, particularly solar power which decreases our grid-reliance as well as our carbon emissions from electricity use. More than 263 initiatives have been implemented with cumulative cost savings, over the past seven years, at a capital cost of R35 million. Projects implemented in FY21 enabled savings of R50 million as well as significant reductions in indirect greenhouse gas emissions and water consumption.

METRICS AND TARGETS continued

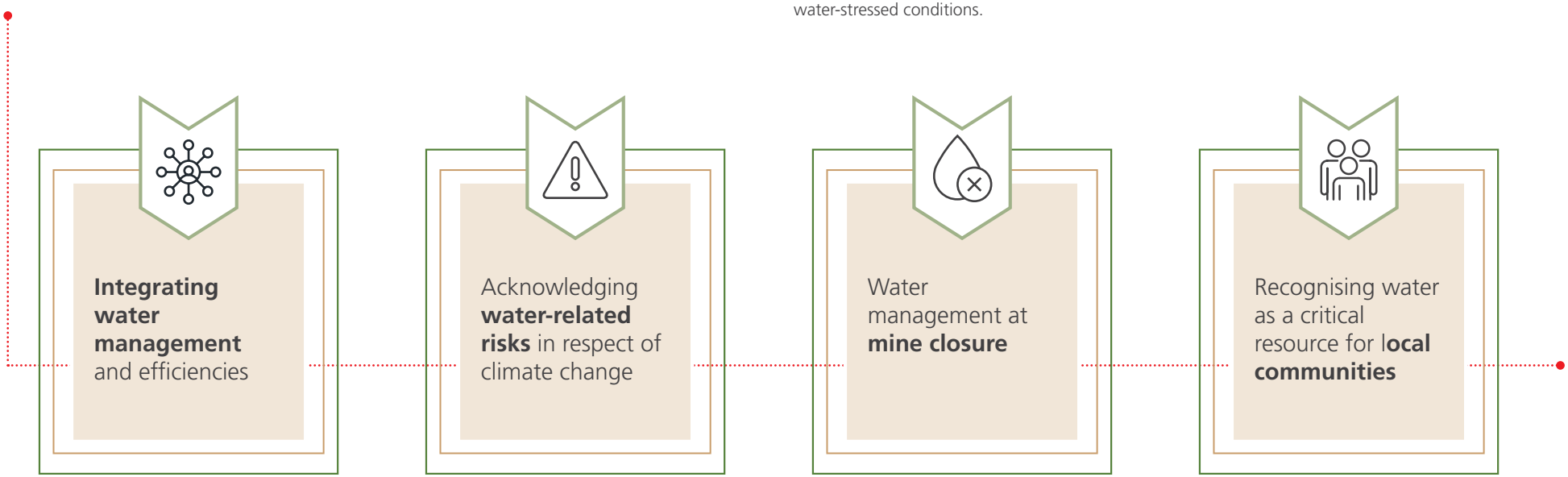
Water

Harmony has an embedded understanding of water management and water risks across its operational spectrum.

We have integrated the management of water security and water-related risks into our long-term strategic business objectives, as well as our financial planning. Harmony's commitment to responsibly managing water usage is therefore driven from an executive level and has evolved from a strategy into practical and relevant actions across the group. This process is achieved through Harmony's water strategy.

Harmony adopts a company-wide water management strategy which provides a consistent approach and an operations baseline for use across the group. This document clearly sets out Harmony's objectives related to water conservation, efficient water use and the necessities surrounding water supply in the context of its host communities.

This includes:



Harmony recognises an opportunity to reduce its operating costs through recycling its water. Harmony's water strategy supports the shift towards self-generation and zero discharge of water, to 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 in the near future.

As such, Harmony has adopted a group-wide campaign to re-use process water and reduce our dependency on potable water from water utilities. To do this, Harmony set long-term targets to reduce the water used for primary activities by 7% and increase water recycled by 6%, by FY22. In addition, we have a 10-year target to recycle 80% of our water with zero discharge by FY27. To achieve these targets, various water conservation initiatives have been implemented.

Harmony has constructed three water treatment plants that assist in continuing to secure water supply to our operations, while also reducing water consumption and assisting with water conservation initiatives. In total, the three water treatment plants save Harmony approximately R5.6 million in operating cost each year. Further to our water treatment plants, Harmony continues to pump water out of our Margaret and Covalent shafts, a portion of which is used within our processes with the remaining being discharged. This additional water could provide Harmony with water resources to adapt to future water-stressed conditions.

WAY FORWARD

Harmony's strategic decision to report against the TCFD remains a priority.

We ensure that our board has oversight of all climate-related issues. Further to this, we have included climate change, both mitigation and adaptation-related aspects, into our business strategy and decision making. We also published our climate-change and energy policy and our climate-change and energy strategy during June 2021.

Our climate-change and energy strategy recognises the opportunity to improve operational efficiencies and GHG emission reduction, as well as the move towards and continuous drive of lower energy requirements. We have already set a number of targets up to FY22 for electricity, diesel, petrol, GHG emissions, water and waste. As Harmony continues our journey towards carbon neutrality, we aim to release further carbon neutrality targets and plans by December 2021.