

GEM DIAMONDS



OUR APPROACH TO
CLIMATE CHANGE
HALF-YEAR REPORT

2022

Q AND A WITH OUR CHIEF OPERATING OFFICER (COO)

AS THE CHIEF OPERATING OFFICER, CAN YOU EXPLAIN GEM DIAMONDS' APPROACH TO CLIMATE CHANGE FROM YOUR PERSPECTIVE?

As an organisation, in understanding our climate-related risks we take a pragmatic science-based approach, designed to support business continuity and promote broader societal resilience. Climate change is not a standalone sustainability issue. For us, climate change is an operational and strategic issue of increasing importance to business continuity and is included in our operational and financial planning agenda. It requires collaboration across the business to deliver a strategic and practical response that embraces science, our operational circumstances and our commitment to sustainability and to protecting our assets, environment and all our stakeholders.

CAN YOU UNPACK THE COMPANY'S OPERATIONAL CONTEXT?

Gem Diamonds is a leading producer of large and high-value diamonds and is focused on its operational mine, Letšeng, which is the highest dollar per carat mine in the world and produces, ~100 000 carats per annum. The mine is located in Lesotho – a mountainous and landlocked country classified by the World Bank as lower-middle-income country. The country is mostly highlands, with its lowest point being 1 400m above sea level, while the Letšeng Mine itself is situated in a remote environment more than 3 100m above sea level.

The mine is subject to severe weather events, including drought, flood, snow, high winds and cold. The mine has effectively managed the related impact for many years; however climate change threatens to increase the frequency and severity of these weather events.

Letšeng relies on Eskom, South Africa's state-owned electricity utility, for its grid electricity supply. Eskom is largely a coal-fired power generator and in recent years introduced loadshedding to manage the national grid instability. The unstable grid power supply requires businesses to secure alternative energy sources to ensure uninterrupted operations. Letšeng therefore also relies on diesel-powered generators during periods where grid supplied electricity is not available.

Letšeng's remote location and surrounding environment have made the adoption of renewable energy options challenging. Limited solar irradiation hours and a rich diversity of bird species have ruled out certain traditional solar and turbine wind energy options. We are actively investigating alternative renewable energy options, including hybrid solar/ grid storage solutions and bird-friendly wind power technology, to overcome these challenges and advance our decarbonisation objectives. All options are being assessed in a manner that is operationally and commercially sound and aligned to our broader socio-economic and environmental commitments.

We continue to develop and evolve our understanding of climate-related risks and opportunities and focus on ways to optimise how we operate, targeting reduced consumption cost efficiencies and decarbonisation opportunities. For example, operational improvements to enhance efficiencies, such as the recent shortening hauling distances, has resulted in reduced fossil-fuel related costs and carbon emissions.

We partner with our local communities in focused and needs-based social investment projects. We recognise that our climate change strategy and decarbonisation objectives must include and prioritise our local communities and host country in a just transition.

Q AND A WITH OUR CHIEF OPERATING OFFICER (COO) continued

YOU MENTIONED THE IMPORTANCE OF A JUST TRANSITION. CAN YOU DISCUSS THIS CONCEPT AND ITS IMPORTANCE?

Gem Diamonds is committed to responding to climate-related risks and associated complexities and related implications. We also recognise that social, environmental, financial and operational issues are deeply interconnected. It's because of this awareness that we strongly support and promote the concept of a just transition.

A just transition allows us to move towards a low-carbon economy in a way that is fair to and inclusive of all stakeholders, leaving no one behind. It also means recognising that socio-economic development and transition-related opportunities play an important part in the ability of countries, communities and individuals to adapt in a sustainable manner.

A just transition requires collaboration to maximise the social and economic opportunities of climate action, while carefully managing any challenges to minimise potential negative impacts on our social, economic and natural environment. We are committed to a low-carbon future in a way that recognises the socio-economic impacts and supports the needs of our project-affected communities and our host country.

OUR APPROACH TO CLIMATE CHANGE

OUR APPROACH TO REPORTING

Our reporting on climate change is evolving alongside our approach to how we understand and manage its effects and the risks and opportunities it presents.

Gem Diamonds recognises and supports the recommendations of the Task Force on Climate-Related Financial Disclosures.

OUR APPROACH TO CLIMATE CHANGE

In support of our commitment to sustainability and climate-related change, the Board officially adopted the TCFD framework in June 2021, with a three-year TCFD adoption roadmap set out below. Objectives set out in the first phase of the roadmap were successfully completed in 2021, and we continue to work towards the delivery of phase 2 in 2022, with the final objectives in phase 3 to be completed in 2023.

OUR TCFD ROADMAP

Phase 1 – 2021	Phase 2 – 2022	Phase 3 – 2023
Establish the necessary governance, strategy and risk foundations to support meaningful, science-based decision-making.	Understand the climate-related risks Gem Diamonds faces to reassess our organisational resilience. Identify climate-related opportunities available to the Group and establish clear metrics and targets for decarbonisation.	Monitor and manage our climate-related exposure and measure against our decarbonisation targets.

2022 HALF-YEAR HIGHLIGHTS



OUR APPROACH TO CLIMATE CHANGE continued

GOVERNANCE

How we govern climate-related risks and opportunities

BOARD

The Board is ultimately responsible for the governance of climate-related risks and opportunities, and is supported by the Sustainability and Audit Committees. The Board continues to deepen its understanding of climate-related physical and transition risks and opportunities.



To ensure effective oversight, the Board and relevant Committees receive regular updates on climate change-related matters and the progress made in adopting the recommendations of the TCFD.

The climate change-related data and performance information presented to the Board and Committees informed the 2022 reviews of the Group strategy, risk-management framework, annual budgets and business plans.

LETŠENG BOARD ADOPTION OF TCFD GOVERNANCE STRUCTURE

To ensure Group-wide alignment in terms of the adoption of the TCFD recommendations, in March 2022, the Letšeng Board and sub-committees adopted a similar governance structure to that of the Group.

The Letšeng Board has assumed responsibility at subsidiary level for the Governance, Strategy and Risk related to climate change and will be supported through the Letšeng Audit and Sustainability sub-committees.

OUR APPROACH TO CLIMATE CHANGE continued

CLIMATE EDUCATION AND TRAINING

Climate science is continuously developing, and knowledge, understanding and skills development in this regard is an ongoing process.

Directors and senior management received regular climate-related training in the first half of 2022. In March 2022 the Directors deliberated on a carbon-pricing model during a climate and decarbonisation workshop. This included a detailed review of carbon-pricing methodologies and the associated climate-related science. The Directors also attended an ESG-risk workshop examining globally identified ESG risks and their relevance to the Group.

The Group's Chief Financial Officer (CFO) holds overall executive accountability for integrating climate-related issues into annual budgets and business plans, financial disclosures and risk management. The Group's COO has overall executive accountability for sustainability, including climate-related issues.

Gem Diamonds has established a TCFD Adoption Steering Committee, a management committee responsible for ensuring climate change-related risks and opportunities are appropriately identified, evaluated and appropriately elevated through the established governance and risk mitigation structures.

This Committee meets monthly and members include the CFO, COO, Group Financial Controller and HSSE and Sustainability Manager. In the first half of 2022 membership was expanded to include Letšeng's Head of Operations and Head of Finance. Internal and external attendees are invited to provide input into the process as appropriate.

This Committee works with relevant internal functions (enterprise risk management, communication and reporting, insurance, financial planning and disclosure, project management, internal audit, engineering, mining and treatment) to bolster the integration of climate change considerations throughout the business. In the first half of 2022 the scope of this engagement was expanded to include consultation on decarbonisation initiatives, implications and opportunities.

The TCFD Adoption Steering Committee reports to the GDL and Letšeng Boards and their respective Audit and Sustainability Committees every quarter.

Our Letšeng operation accounts for the majority of our carbon emissions, and management is closely involved as we move to implement decarbonisation initiatives and mitigate potential exposure to climate-related risks.

In the first half of 2022 climate-change knowledge-building, involving all heads of department and senior management, took place through climate-specific working sessions at departmental level, focused on resource consumption, operational optimisation and potential decarbonisation initiatives.




The members of the TCFD Adoption Steering Committee are participating in the UN Global Compact Climate Ambition Accelerator programme, a six-month programme designed to equip companies with the knowledge and understanding needed to set science-based emissions reduction targets aligned with the 1.5°C pathway.

OUR APPROACH TO CLIMATE CHANGE continued

STRATEGY

The impacts of climate-related risks and opportunities on our businesses, strategy and financial planning

Our strategy is to sustainably maximise stakeholder value in alignment with our commitment to being responsible stewards of natural resources. Gem Diamonds has identified three priorities (listed below) that underpin how the Group creates value for all stakeholders and we believe that the effective management of climate-related matters contribute to the Group's performance within these priorities.

Strategic priority		
 EXTRACTING MAXIMUM VALUE FROM OUR OPERATIONS	 WORKING RESPONSIBLY AND MAINTAINING SOCIAL LICENCE	 PREPARING FOR OUR FUTURE
Climate considerations		
Operational initiatives to improve efficiencies thereby reducing operating costs, carbon emissions and ensuring future availability of resources for all stakeholders.	Bolstering our resilience to the physical impacts of climate change while working with our PACs to improve their readiness and resilience, ensures that Gem Diamonds can protect its social licence to operate and continue to work responsibly with our stakeholders.	The Group's existing business continuity and disaster management plans include considerations for natural weather events, which we have successfully managed since we started mining in 2006.
2022 integration		
<ul style="list-style-type: none"> A focused waste rock dumping strategy has resulted in shorter hauling distances, further reducing costs, fossil fuel consumption and associated carbon emissions. Pit wall steepening in the main pit in 2022 will reduce the volumes of waste rock to be moved, eliminating associated costs, fossil fuel consumption and carbon emissions. 	<ul style="list-style-type: none"> During the first half of 2022, a climate-related risk exposure assessment was completed. 	<ul style="list-style-type: none"> Climate-pricing model developed and to be included in life of mine planning and evaluation of future projects.

OUR APPROACH TO CLIMATE CHANGE continued

Physical and transitional risk exposure assessments

In the first half of 2022 we expanded on our comprehensive physical and transition risk exposure assessments conducted in 2021 (2022 additions indicated in blue), and determined the materiality of potential impacts on financial performance and position. We took a science-based approach to identify potential exposure events associated with our climate-related risks, and their materialisation, allowing us to better plan for their management, mitigation, and financial impact.

Our resilience to physical climate-related risks is robust and we continue to further our understanding of the further potential physical risks under various future scenarios.

Climate-related transition risks have been incorporated into our risk management framework. Letšeng receives its electricity supply from the South African grid, which has been experiencing loadshedding since 2007. The total hours of loadshedding implemented over the 2019-2021 period has more than doubled, with the annual figure for 2021 exceeded in just the first six months of 2022.

The Letšeng operation does have back-up generator capacity to ensure on-going operations during periods of loadshedding.

To appropriately determine the impact of these exposures on our financial position and performance, we have sought to define an appropriate internal carbon price.

The table below provides a high-level overview of some of the Group climate-related risks and opportunities.

OUR APPROACH TO CLIMATE CHANGE continued

Climate-related risks	Potential exposure events	Potential financial impact	Climate-related opportunities	Potential financial impact
Short term: 1–3 years				
Short-term processes include annual business and financial planning, performance reporting, short-term capital and contract negotiations.				
<p>Increase in occurrence of moderate/severe precipitation</p> <p>Enhanced emissions reporting obligations</p> <p>Enhanced ESG obligations related to reporting, insurance and facility agreements</p>	<p>Severe rain/hail (on-site)</p> <p>Flooding (off-site) resulting in accessibility constraints</p> <p>1-in-100-year snow storm</p>	<p>Increased operating costs</p> <p>Increased capital investment</p>	<p>Increased resource efficiencies and reducing our reliance on fossil fuels.</p> <p>Enhanced water use strategies.</p> <p>Waste reduction and recycling initiatives.</p> <p>Research/establish viability principles for parametric insurance products (refer page 11)</p> <p>Re-assess viability of solar and wind power</p> <p>Potential for subsidised funding for renewable energy source(s)</p>	<p>Reduced operating costs</p> <p>Increased capital investment</p> <p>Mitigation of significant financial impact as a result of selected weather events</p>
Medium term: 3-5 years, Long term: 5-10 years				
Medium-to-long-term processes include strategy development, social and environmental management plans, rehabilitation planning, capital management plans, financing and capital investments. Operational planning, including contract negotiations and future focussed projects.				
<p>Increase in occurrence and severity of precipitation</p> <p>Rising mean temperature</p> <p>Strong winds</p> <p>Increased frequency of and extended duration of droughts</p> <p>Failure of electricity providers to move to a low-carbon economy</p> <p>Substitution of technology with lower-emission alternatives</p> <p>Social risks due to resource constraints, particularly in developing countries</p> <p>Evolving regulatory context regarding carbon tax</p> <p>Increased costs of carbon-intensive products i.e. diesel</p> <p>Reputational risk</p>	<p>Power transmission interruptions</p> <p>Critical maintenance delays</p> <p>Higher consumption/cost of diesel and related carbon footprint/taxes</p> <p>Access/logistics interruptions from flood damage to road networks</p> <p>Access to water in the event of droughts</p>	<p>Increased capital investment</p> <p>Increased operating cost</p> <p>Reduced revenue from decreased production capacity</p> <p>Increased insurance premium or insurance unavailability</p> <p>Research, development and implementation costs of new technology</p> <p>Inappropriate investment decisions</p>	<p>Identify opportunities to transition to renewable-energy sources</p> <p>Strengthen Gem Diamonds' position as an ethical and responsible producer of low-carbon-footprint diamonds</p> <p>Use of new renewable energy technologies</p> <p>Potential for implementation of wind/solar/pumped storage renewable power</p> <p>Partnerships for shared renewable energy projects</p>	<p>Reduced exposure to carbon and fossil-fuel pricing</p> <p>Increased capital availability</p> <p>Enhanced reputational benefits</p> <p>Decreased operating costs</p> <p>Increased capital investment</p>

OUR APPROACH TO CLIMATE CHANGE continued

PUTTING A PRICE ON CARBON

Internal carbon pricing is a globally recognised tool to guide decision-making when assessing climate change impacts, risks and opportunities, by forecasting a future world under various climate-change scenarios. Companies who adopt an internal price on carbon are better able to integrate the impact of climate change into their business strategy and planning.

The United Nations Global Compact called for businesses to adopt an internal carbon price of at least US\$100/tCO₂e by 2020, which is needed to keep GHG emissions consistent with a 1.5–2°C pathway by 2100. Companies use internal carbon pricing as a risk-management and assessment tool, and to explore cost savings and revenue opportunities through innovation. Reported internal corporate carbon prices currently adopted by companies range from US\$0.01 to US\$909/tCO₂e.

Pricing models

Three types of carbon pricing are commonly used:

Shadow price: places a hypothetical cost of carbon to reveal hidden risks and opportunities and to support strategic decision-making related to future capital investments.

Internal fee: imposes an internal fee on GHG emissions, results in actual internal financial flows.

Implicit price: calculated based on how much it costs a company to implement emissions reduction projects, such as renewable energy purchases or energy-efficiency upgrades. An implicit price is calculated retroactively, after a company achieves its desired emissions cuts.

The CDP has published data on 1300 companies that use internal carbon pricing (or plan to do so in the next 2 years). While many companies employ multiple types of carbon pricing depending on their needs, shadow pricing is most often used, with more than half of companies implementing this carbon pricing model.

The importance of carbon pricing to Gem Diamonds

Gem Diamonds understands its exposure to the risks of climate change, as indicated in our climate change-related risk and opportunities register. Although we are not currently subject to any direct carbon taxes (there is indirect exposure through our Eskom tariffs and diesel levies), we understand the risk of potential direct carbon taxes being imposed in the jurisdictions in which we operate.

In order to ensure business continuity, effective capital-allocation decisions and to support a just transition to decarbonisation, it is responsible to plan as effectively as possible taking into account the potential risk of climate-related risks and costs.

Adopting an internal carbon price allows us to effectively estimate the impact on our financial position and performance of climate-related risks and opportunities, and the business-case and trade-off implications for future projects, such as a transition to renewable power to meet demand for future energy requirements.

Our carbon price

Our carbon-pricing model (shadow price) considers our climate-change scenario-planning work, and assigns prices based on current and potential future global responses (including carbon tax, technology development and deployment, coal powered energy divestiture, fossil fuel pricing increases and location specific regulation) associated with various changes in global temperature.

In May 2022, a carbon pricing workshop was held with senior Group management and members of the TCFD Adoption Steering Committee, to workshop the assumptions and outcomes of the carbon pricing model to be utilised by the Group. This informed the internal carbon model and price that was presented to the GDL Board in June 2022. The Directors were presented with the Group carbon pricing model assumptions and recommendations, which included an evolutionary approach to shadow pricing for pre-2030 and post-2030 business planning and future project considerations.

As the regulatory environment changes around carbon tax and associated energy pricing, the Group will revisit the assumptions within its carbon pricing model to ensure appropriate internal pricing.

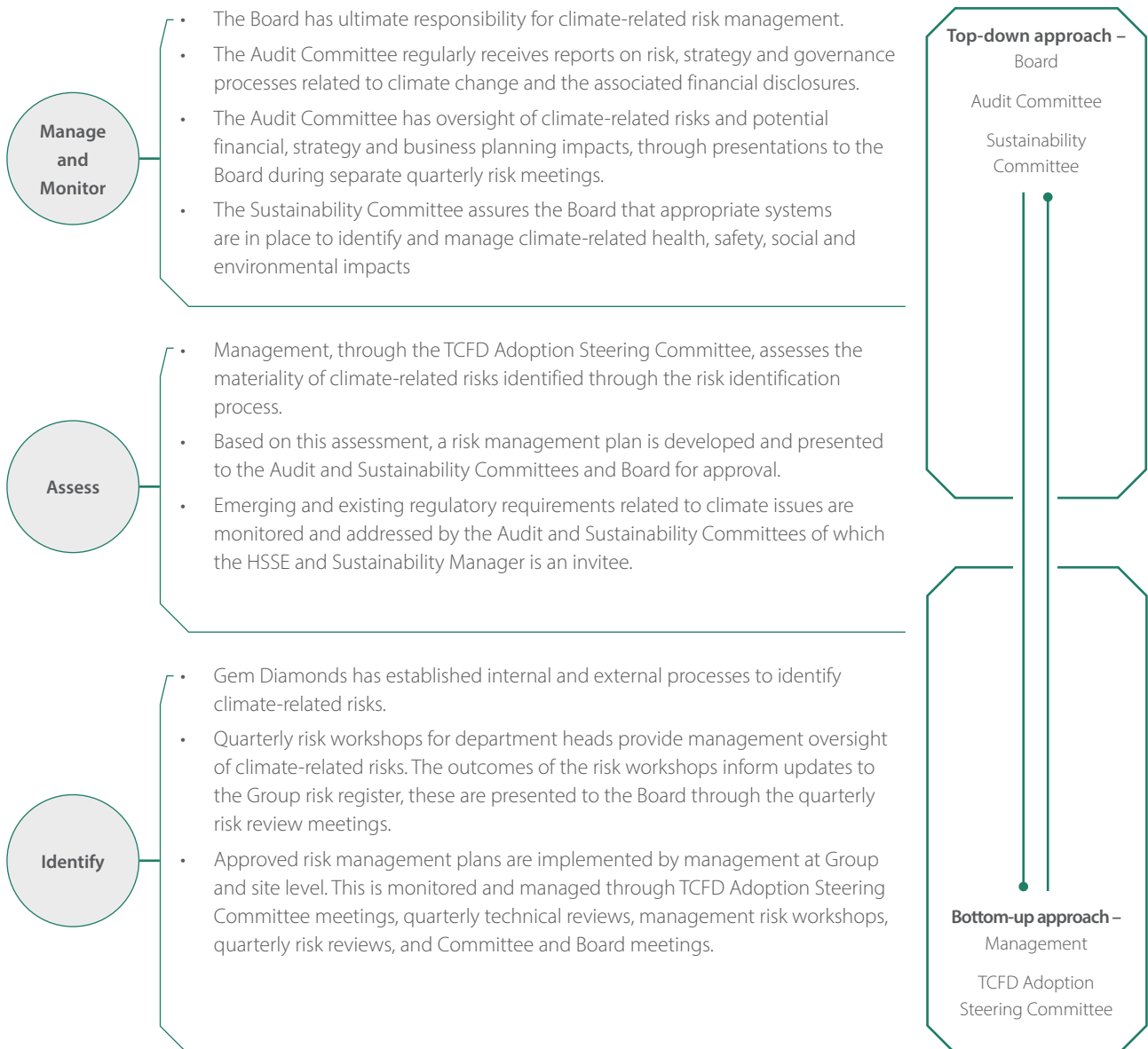
OUR APPROACH TO CLIMATE CHANGE continued

RISK MANAGEMENT

How we identify, assess and manage climate-related risks

Gem Diamonds has a robust risk management process and framework to identify, assess, manage and mitigate current and emerging risks and uncertainties. Our risk management framework combines a top-down and bottom-up approach to ensure appropriate governance and oversight.

The Board is responsible for risk management in the Group, including climate-related risks, ensuring that all risks are appropriately identified, assessed, mitigated and monitored. Risks are assessed and prioritised in terms of potential impact, probability of occurrence and effectiveness of controls across short, medium and long-term timeframes. In 2022 we worked closely with insurance experts to determine the appropriateness of our existing insurance structure in the context of our risk framework and climate-related exposures. In this process, we examined the applicability of parametric insurance – an insurance product that protects/insures against the occurrence of specific predetermined climate-related trigger events.



OUR APPROACH TO CLIMATE CHANGE continued

TARGETS AND METRICS

The targets and metrics used to assess and manage relevant climate-related risks and opportunities

The Group monitors a wide range of metrics to inform its assessment of climate-related risks and opportunities.

In 2022 we began assessing our carbon and water footprints every six months (from once a year), providing a more detailed impression of our progress against goals and associated risks and opportunities.

The following metrics and trends have been measured and monitored as part of our normal operations:

- Carbon footprint
- Water footprint
- Freshwater dam levels
- Precipitation patterns
- Energy consumption trends
- Environmental expenditure
- Land use and rehabilitation activities

For information on our historical GHG emissions, including scope 1, 2 and 3 emissions and other climate-related metrics, refer to our Annual Report and Accounts 2021 and Sustainability Report.

OUR APPROACH TO CLIMATE CHANGE continued

Our carbon, energy and water footprints

CARBON

The Gem Diamonds carbon footprint is calculated in accordance with the GHG Protocol Corporate Accounting and Reporting Standard, an accounting tool to manage GHG emissions. The standard includes IPCC GHG inventory guidelines for specific heating values, carbon content, densities and emission factors.

Our H1 2022 total carbon footprint for the Group was 71 530 tonnes of carbon dioxide equivalent (tCO₂e) (H1 2021: 79 916 tCO₂e). This includes direct GHG emissions (Scope 1), energy indirect GHG emissions (Scope 2) and material Scope 3 emissions. The Group has successfully reduced its relative comparative carbon footprint and associated intensity indicators over the period. The relative reduction is mainly due to the mining optimisation initiatives implemented during Q4 2021, such as the 30% reduction of the mine waste hauling distance.

The ever-increasing Eskom grid instability and loadshedding has resulted in an increase in the use of stationary generators at Letšeng, however overall diesel consumption over the comparative period (H1 2021 vs H2 2022) has decreased by 8% mainly due to decreased volumes of waste mining and optimised haulage distances.

Emissions	Unit	H1 – 2021	H1 – 2022	Change	H2 – 2021
Scope 1	tCO ₂ e	33 210	27 248	(17.9%)	29 462
Scope 2	tCO ₂ e	33 704	32 517	(3.5%)	33 769
Scope 3	tCO ₂ e	13 001	11 766	(9.5%)	11 553
Scope 1 and 2	tCO ₂ e	66 915	59 764	(10.7%)	63 231
Scope 1, 2 and 3	tCO ₂ e	79 916	71 530	(10.5%)	74 784

The Group monitors intensity indicators to assess and appropriately respond to carbon emissions changes, this allows us to assess whether a total reduction in carbon footprint is as a result of mining more efficiently. The table below shows that the intensity indicator for the H1 2022 period has improved (compared to the same period in 2021).

Indicator	Unit	H1 – 2021	H1 – 2022	Change	H2 – 2021
Scope 1 and 2/Tonne ore treated	tCO ₂ -e/t ore treated	0.021	0.019	(9.5%)	0.020

ENERGY

The Group-wide energy consumption (for Scope 1 and 2 activities) over the HY 2022 period was 136 562 222 kWh (2021 HY: 170 570 833 kWh). 99% of the Group-wide Scope 1 and 2 energy consumption is attributable to Letšeng, where our principal energy sources are grid electricity and diesel.

	H1 – 2021	H1 – 2022	Change	H2 – 2021
Scope 1 (kWh)	136 283 889	103 381 944	(24.1%)	115 466 389
Scope 2 (kWh)	34 286 944	33 180 555	(3.2%)	34 352 777
Total Scope 1 and 2 (kWh)	170 570 833	136 562 222	(19.9%)	149 819 167

Our Letšeng operation is located in a remote location, requiring long-distance transmission of grid power. Scope 2 energy consumption for the Group is primarily driven by grid electricity consumption at the Letšeng operation. As our operations move towards lower carbon emissions targets, power sources and technology at our operations will continue to be evaluated to secure stable and cost-effective supply and reduce our carbon emissions.

OUR APPROACH TO CLIMATE CHANGE continued

WATER

The Group water footprint (net water usage) for HY 2022 was 2.8 million cubic meters (m³) (2021 HY: 1.7 million m³). Below is a comparison of our water consumption performance. The increase in net water usage was driven by dewatering activities at our Letšeng operation, following significant rainfall the summer months. The total volume of water recycled within our production processes increased by 2.96% from H1 2021 to H1 2022.

Water consumption (million m ³)	H1-2021	H1-2022	Change	H2-2021
Net water usage	1.7	2.8	64%	5.2
Water withdrawal and capture	1.9	0.6	(68%)	1.8
Water recycled	3.1	3.2	3%	5.6
Water loss through evaporation, entrainment, and seepage	1.9	0.9	(52%)	1.6
Net water use (m ³)/Tonnes ore treated	0.541	0.927	71%	1.691
Recycled water (m ³)/Tonnes ore treated	0.987	1.060	7.4%	1.822

Gem Diamonds' decarbonisation strategy and managing a just transition

Decarbonisation, the process of reducing or ending anthropogenic carbon emissions through reduced resource consumption, the implementation of low-carbon technologies and renewable energy sources, is a key factor in alleviating climate change impact.

There is a growing expectation that corporates adopt a net-zero strategy, typically to decrease carbon emissions to net-zero by 2050.

Decarbonisation workshops have been held throughout the Group in 2022 to discuss and identify decarbonisation risks, opportunities and supporting initiatives with specific operational teams. These workshops will inform a proposed decarbonisation strategy, which will be evaluated internally and by an external decarbonisation expert.

Lesotho has a dependency ratio of 1:9, which is underpinned by an unemployment rate of 24.6%. Our decarbonisation strategy will take into consideration the socio-economic well-being of our workforce and our surrounding communities.

We acknowledge the growing importance of a transition from reliance on fossil fuel powered equipment and technologies, and will target decarbonisation projects that have economic, societal and climate-impact benefit as prioritised for each project.

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