

#### Contents

## Sustainability is at the heart of Petra.

Our purpose is to unearth the world's most beautiful product as responsibly and efficiently as possible, thereby generating long-term value for each of our stakeholders.

#### Overview

- 02 About Petra
- 03 At a Glance
- 04 FY 2017 Highlights
- 05 Our Operations
- 06 Introduction from the CEO
- 07 Defining Materiality
- 09 Our Material Topics



**Corporate Governance** 



**Generating Economic Benefits** 



**Consumer Demand** 



**Health and Safety** 



**Employee Retention and Development** 



**Diversity** 



**Labour Relations** 



**Environmental Management** 



Climate Change and Energy Usage



**Water Management** 



Community Development and Engagement



**Legal Compliance** 

#### **Supplementary Information**

- 63 KPIs
- 66 Back-up Data
- 77 Glossary
- 79 GRI Content Index



## **About Petra**

Petra Diamonds is a leading independent diamond mining group and growing supplier of rough diamonds to the international market. It is listed on the Main Market of the London Stock Exchange under the ticker PDL, with US\$650 million loan notes due in 2022 listed on the Global Exchange Market of the Irish Stock Exchange. It is a constituent of the FTSE4Good Index.

Petra offers an exciting growth profile, as the Company has been steadily increasing its production of rough diamonds over the years. Annual output has grown from 0.1 Mcts in FY 2005 to a record high of 4.0 Mcts in FY 2017, and is expected to reach 5.0–5.3 Mcts by FY 2019. The Group has a major resource base of over 300 Mcts, which provides a solid foundation for sustainable operations over the long term.

Petra has developed a dynamic company, underpinned by a 'can-do' attitude and a sense of collaboration and teamwork. Inspired by a shared vision for success, employees are encouraged to fulfil their true potential and work together for the long-term prosperity of the business.

High ethical standards are integral to our business and key to ensuring the provenance of our product. Petra therefore conducts all its operations according to its values and will only operate in countries which are members of the Kimberley Process.

## About this report

We are pleased to present the Petra Diamonds Limited Sustainability Report 2017 (the "Report")

The Report covers Petra's 2017 financial year ("FY 2017 or the "Year"), being the 12 months to 30 June 2017, and the operations of the Group, as set out on page 5. It should be read in conjunction with Petra's 2017 Annual Report, which is available to download at www.petradiamonds.com.

This Report has been prepared in accordance with the GRI Standards: Core Option. The GRI Standards are considered to be the benchmark for sustainability reporting globally. Petra has chosen to report as per the 'core' option, which means that we focus on disclosing those sustainability 'topics' that are considered material to both the business and our stakeholders. The Report sets out the Company's strategy, policies and practices with regards to the management of these material topics, a balanced review of performance in FY 2017 and expectations with regards to future outlook.

Our sustainability policies and reporting processes are aligned with international standards, including: the UN Global Compact, the UN Universal Declaration of Human Rights, the Kimberley Process, the Extractive Industries Transparency Initiative, ISO 14001, OHSAS 18001 and the ILO Declaration on Fundamental Principles and Rights at Work. Petra also provides

disclosure to the Carbon Disclosure Project ("CDP"), FTSE4Good, MSCI and Sustainalytics.

This Report has been partially assured. The key performance indicators relating to safety and the environment have been subject to assurance by Shangoni Management Services, an environmental, health and safety consulting company.

The staff turnover (page 28), women in the workforce (page 32) and staff training (page 28) key performance indicators for FY 2017 have been subject to specific agreed-upon testing procedures performed by BDO LLP, the Company's external auditor, under the International Standard on Related Services 4400, as issued by the International Auditing and Assurance Standards Board. Such procedures by BDO LLP did not constitute an audit or review opinion under International Standards on Auditing ("ISAS") (UK) or International Standard on Review Engagements ("ISRES").

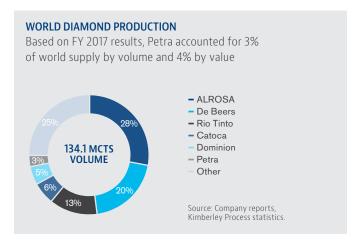
This Report has been reviewed and approved by the Company's HSSE Committee, chaired by CEO Johan Dippenaar, on behalf of the Board of Petra.

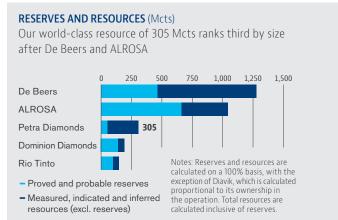
The following exchange rates have been used for this announcement: average for the Year US\$1:ZAR13.59 (FY 2016: US\$1:ZAR14.51); closing rate as at 30 June 2017 US\$1:ZAR13.05 (30 June 2016: US\$1:ZAR14.68).

- Petra's historical sustainability reports can be accessed on the Company's website here: petradiamonds.com/investors/results-reports
- If you have any questions or suggestions around the content of this Report, please contact Petra's reporting team in London via InvestorRelations@petradiamonds.com or +44 20 7494 8203
- Discover more about Petra online www.petradiamonds.com

## At a Glance

## Petra's position in the market





#### FY 2017 in figures

EMPLOYEES WORLDWIDE

5,607 +12%

**ORE PROCESSED IN FY 2017** Million tonnes

18.8 -1%

**REVENUE** US\$m

477.0 +11%

**NET PROFIT AFTER TAX** 

20.7 -69%

CONTRACTORS WORLDWIDE

5,562 -3%

ROUGH DIAMOND PRODUCTION Mcts

4.0 + 8%

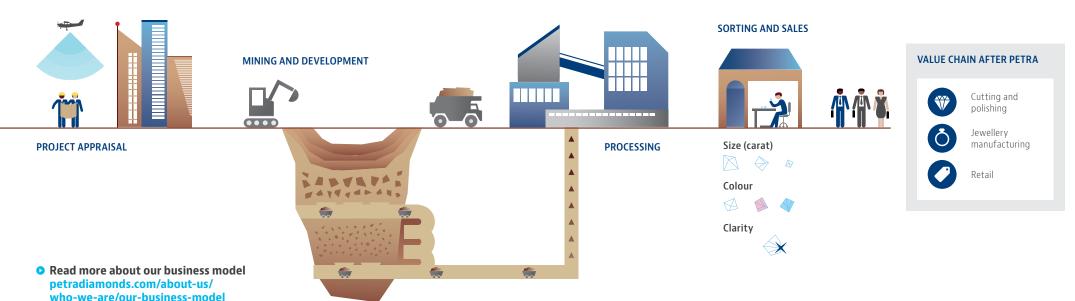
**OPERATING CASHFLOW** US\$m

160.2 -10%

**EARNINGS PER SHARE** US\$ cents

3.47 -67%

#### Our business model



## FY 2017 Highlights













## Our Operations

## Driving sustainable development in our local communities

Producing mine

Exploration O Care and maintenance

## finsch

**Employees** Mine plan1 Contractors 2.056 1,158 13 years

- ► Local operating environment: the mine is a primary economic contributor to the region
- Opportunities: improve maths and science education standards and support local economic development
- Challenges: fairly isolated location, high youth unemployment and poverty

## 2 Kimberley Ekapa Mining JV

**Employees** 1.709

Contractors 451

Mine plan<sup>1</sup> 18 years

- ► Local operating environment: KEM JV is a significant economic contributor to the City of Kimberley municipality and district municipality
- Opportunities: diamond heritage tourism, support local economic development and promotion of environmental awareness
- ► Challenges: high unemployment, labour relations and illegal mining

## 6 Williamson

**Employees** Contractors 590 853

Mine plan1 13 years

- ► Local operating environment: the mine is the primary economic contributor to the district
- Opportunities: well educated and skilled local workforce and protected forest reserve totalling circa 906 ha of the mining licence area
- Challenges: women in the workforce security of power and water supplies, illegal mining and malaria



**Employees** 1.220

Contractors Mine plan<sup>1</sup> 1.944 13 years

- ► Local operating environment: Cullinan is well connected in terms of urban amenities and infrastructure
- Opportunities: diamond heritage tourism and improve maths and science education standards
- ► Challenges: high youth unemployment and limited procurement opportunities for small businesses

## 8 Koffiefontein

5

**TANZANIA** 

**Employees** 613

**BOTSWANA** 

Contractors 248

Mine plan<sup>1</sup> 8 years

- ▶ Local operating environment: the mine is a primary economic contributor to the region
- ▶ Opportunities: improve maths and science education standards and support local economic development
- ► Challenges: remote location, water scarcity, illegal mining and community unrest

## O Helam

The Helam mine remains on care and maintenance

1. Residual resources at each mine suggest that the life of mine will be extended beyond Petra's current mine plan.

Marketing and corporate

Petra also has diamond

marketing operations in

Kimberley and Antwerp, as

well as corporate offices in

London and Johannesburg.



## Introduction from the CEO



I am proud to introduce Petra's ninth Sustainability Report, which sets out our approach to managing the most material environmental, social and governance ("ESG") topics related to our business, as well as our ESG performance for FY 2017.

As CEO of the Company, I am responsible for developing and implementing Petra's strategy, as well as for the operational management of the Group. I also chair Petra's HSSE (health, safety, social and environment) Committee, which gives me regular insight into the most material HSSE developments within the Group and enables me to directly assist with their monitoring and management.

#### Preparing for the future

Sustainability is at the heart of Petra as mining is inherently a long-term business and it is essential to put in place the right actions today which will benefit the future of a project, rather than focusing on short-term outcomes.

This is an approach that Petra follows across all aspects of the business, from our operational planning to how we structure our environmental and social management, in alignment with the mine plans (which range from eight to 18 years at our assets) as well as the longer potential mine life of each asset (which range up to 50+ years in the case of the Cullinan and Williamson mines).

We include our stakeholders in our planning processes so that their needs are taken into account. We therefore work with relevant government structures, representative unions, NGOs and worker committees in order to identify and address the most pressing needs of our local communities, via sustainable job creation, skills transfer (education and training), enterprise development and infrastructure development.

### Safety is our top priority

Although Petra has a well embedded safety management system in place and the nature of our mining method is inherently safe, there are unfortunately risks related to our business as a heavy industry which may result in accidents.

This was tragically the case in FY 2017, when we experienced six fatalities. We are deeply saddened by these incidents, which are unacceptable, as ensuring the safety of our people is our overriding priority. The Board of Petra and I send our heartfelt condolences to the families and friends of the deceased.

These accidents are very concerning to us. Safety has always been ingrained in everything we do at Petra and we have been encouraged by the steady improvement we have driven in our lost time injury frequency rate over the years. The fact this reached an all-time low of 0.27 in FY 2017, despite the large amount of activity taking place across the Group, shows that the Company is highly focused on managing safety. However, we have nevertheless taken a back-to-basics approach to safety as the core of our operations in an attempt to drive out complacency. We report further on the remedial action taken in our 2017 Annual Report on page 11 and on pages 22 and 27 of this Report.

#### Education, education

Having the long-term future in mind is gratifying as it means that in some cases we can take a generational approach to creating socio-economic change in our communities. This is why Petra has decided that education will be at the core of our responsibility programmes, as it is our belief that this is the key deciding factor which can offer the opportunity to escape poverty.

Our interest starts at grass-roots level with the aim of improving maths and science skills in our local schools, following which we have bursary, scholarship and experiential training programmes. We offer basic education training in literacy and numeracy, as well as portable skills training, to both employees and local community members, plus we have a whole host of development programmes to enable our

people to progress and fulfil their potential – read more on pages 28 to 31 and on pages 53 to 54.

#### Managing our environmental impacts

We report in detail on management of our environmental impacts, and the principles of pollution prevention and continual improvement are integrated into our strategic planning, management systems and daily activities. At Petra, environmental management is the responsibility of every employee, and we strive to raise environmental awareness amongst both our workforce and our wider communities.

Recognising the growing importance of climate change, both to our Company and our stakeholders, we are supportive of the onus on industry to be actively involved in projects and programmes to reduce the effects of global warming and climate change. Petra has therefore both improved its carbon reporting methodology during the Year, as well as adopting a 'Climate change adaptation strategy' for the first time, with the aim being to prepare the Company for various scenarios that could occur in relation to climate change. This is something that will evolve over the years — read more on pages 43 to 46.

#### Working with our partners

Finally I would like to thank our employees, contractors and partners for their much appreciated contribution to the Company. Together we are stronger and can create a successful future that will generate long-term value for all our stakeholders.

**Johan Dippenaar** Chief Executive Officer 27 October 2017



## **Defining Materiality**

#### **Defining our material topics**

Petra defines a material topic as an ESG issue that is of critical importance both to its stakeholders and to its long-term success as a business.

This definition has been updated since last year's report in the recognition that materiality has a different emphasis in the sustainability sphere, where it encompasses a company's impacts on the outside world. Our new definition therefore takes into account any issues which are deemed to have a significant economic, environmental or social impact on our stakeholders, as well as those which may significantly impact the Company.

Petra carried out a formal stakeholder engagement evaluation process in FY 2016 to identify our material topics. Moving from reporting to GRI G4 to the GRI Standards this year has assisted in clarifying our thinking around the topic of materiality to ensure that we are reporting on the impacts that matter most. The development process involved an informal internal materiality review in FY 2017, which included input from an internal communication survey, as well as external stakeholder feedback. Petra plans to conduct a full stakeholder engagement process every two years, which will co-ordinate with the Company's biennial governance roadshow (providing an opportunity to formally canvas our top shareholders on ESG matters).

Material topics identified are aligned with internal governance processes and operational imperatives, and are therefore managed as part of internal processes that answer to both regulatory requirements and internal KPIs.



In an effort to support the UN Sustainable Development Goals ("SDGs"), we have linked each of our material topics with the relevant goals to demonstrate the part we are playing in the agenda to transform our world.

#### • Read more at:

undp.org/content/undp/en/home/ sustainable-development-goals.html

### Stakeholder engagement

By responsibly developing its assets, Petra intends to unlock long-term value for each of its stakeholders.

Effective, regular and transparent communication with all our stakeholders is considered a core priority and essential to the current and future success of the Group. Stakeholder engagement therefore takes place on a continuous basis at both Group and operating company level.

Stakeholder engagement is important in helping us to identify, monitor and manage our key impacts and material topics.

### Employees/contractors/unions

#### WHY THEY ARE IMPORTANT

- Our people are our most important asset as they are integral to the success of our business
- Without a skilled, productive and healthy workforce, Petra would be unable to implement its strategy

#### **KEY ISSUES**

- Health and safety
- Performance updates, targets and objectives
- Remuneration and benefits
- Training and personal development
- Substantive rights
- Housing
- Environmental awareness

#### **HOW WE ENGAGE**

- Workplace meetings and employee briefs
- Internal publications, notice boards and electronic channels
- Annual CEO tour of operations
- Various mine forums and union representation on other committees

#### **HOW WE DELIVER VALUE**

- Salaries, wages and other benefits: US\$145.8 million
- Employee training and development expenditure: US\$7.6 million

#### **Customers**

#### WHY THEY ARE IMPORTANT

- Our customers buy the diamonds mined at our operations and are therefore the primary source of revenue for the Group
- Long-standing relationships with customers ensure an ethical supply chain for our product

#### **KEY ISSUES**

- Ethical provenance
- Consumer demand
- Reliability of supply
- Transparent and fair marketing system
- Quality of goods
- Heritage of our assets

#### **HOW WE ENGAGE**

- Continuous communication with our client base
- Open door policy and high level of business transparency
- ► Full certification of product
- Site visits to operations
- Industry advocacy via the DPA

#### **HOW WE DELIVER VALUE**

- ► Conflict-free production: 100%
- Million carats sold: 4.0.
- Marketing spend committed by DPA: US\$57 million

## Defining Materiality continued

#### Shareholders/bondholders

#### WHY THEY ARE IMPORTANT

- Shareholders are the owners of the Petra business and each one is important to us
- Without support from the equity and fixed income markets, Petra would not have been able to access financing over the years in order to develop the Company

#### **KEY ISSUES**

- Governance
- ► Financial and operational performance
- ► Delivery on production and expansion plans
- Health of the market and rough diamond prices
- ► Balance sheet and access to capital
- ► Returns to shareholders
- Risk management related to Petra's local operating environments

#### **HOW WE ENGAGE**

- Regular briefings via public announcements, webcasts, meetings, site visits and social media
- Annual and sustainability reporting
- ► Dedicated investor relations department

#### **HOW WE DELIVER VALUE**

- ► Production growth since FY 2009: +300%
- ► Production growth planned to FY 2019: +29%
- ► Total shareholder return since FY 2009: +165%

#### Local communities

#### WHY THEY ARE IMPORTANT

- ► The support of our local communities is an important component of our licence to operate
- A positive role in the community will ensure a sustainable future for Petra and contribute to a favourable Company culture

#### **KEY ISSUES**

- ► Employment
- ► Local economic development
- Social development
- Ongoing information and consultation
- ► Environmental management
- ► Life of mine and mine rehabilitation

#### **HOW WE ENGAGE**

- Public participation processes and meetings
- ► Community newsletters and local media
- ▶ Partnerships on socio-economic projects

#### **HOW WE DELIVER VALUE**

- ► Social spend: US\$3.4 million
- ► Community training spend: US\$0.9 million

#### **Host Governments/regulators**

#### WHY THEY ARE IMPORTANT

- Support from Governments and regulators is required for our licence to operate
- Petra ensures it complies with all relevant legislation in each of the countries in which it operates

#### **KEY ISSUES**

- Mandatory compliance with legislation
- Mining and prospective rights
- ► Socio-economic impacts
- Public-private partnerships
- Sustainability

#### **HOW WE ENGAGE**

- Continuous consultation
- Scheduled meetings
- Membership of South African Chamber of Mines
- Regulatory site visits and audits

#### **HOW WE DELIVER VALUE**

- ► Taxes and royalties: US\$47.2 million
- Average life of mine plans ranging from eight to 18 years
- Estimated number of dependants on our direct employees: 56,000+ (using the accepted x10 multiplier effect for South Africa and Tanzania)

## **Suppliers**

#### WHY THEY ARE IMPORTANT

- Suppliers provide the goods and services necessary to keep our operations and expansion programmes running
- Dealing with suppliers who share our values is important to Petra in order to ensure the ethical provenance of our diamonds

#### **KEY ISSUES**

- Compliance with Petra Code of Fthical Conduct
- ► Local supplier development
- Commercial transactions

#### **HOW WE ENGAGE**

- Supplier induction process
- Supplier days and events
- ► Local Enterprise Development Centres
- Continuous liaison
- Open door policy

#### **HOW WE DELIVER VALUE**

- ► South Africa supplier expenditure: US\$371.0 million
- ► BBBEE and HDSA suppliers: 62%
- Tanzania supplier expenditure: US\$66.7 million



## **Our Material Topics**

#### Our material topics

The following were identified as Petra's material topics, in accordance with the GRI Standards process and guidelines:

#### Corporate governance

Effective corporate governance is the backbone of Petra and enables each part of the business to operate efficiently, successfully and sustainably. It is essential from a mandatory perspective to comply with the various governance regulations in each of the jurisdictions in which Petra operates. However, it is also integral to the ethical conduct and culture of the business.

**Stakeholders:** employees/contractors/unions, customers, shareholders/bondholders, local communities, host Governments/ regulators and suppliers.

**Topic boundary:** applies to Petra's business as a whole.

• Read more on pages 11 to 14

#### Consumer demand

If consumers no longer aspire to buy and own diamonds, then there is no future for our business. While diamonds occupy a unique cultural position in that they are used to celebrate our most special moments, their continued acceptance is reliant on the assurance that they are sourced by ethical means and with due consideration for the environment. Petra seeks to influence sustainable consumer demand via its role as a founding member of the Diamond Producers Association.

**Stakeholders:** employees/contractors/unions, customers, shareholders/bondholders, local communities, host Governments/regulators and suppliers.

**Topic boundary:** applies to the Company and to consumers globally.

• Read more on pages 19 to 21

## Employee retention and development

To deliver on our ambitious growth plans, we require a skilled and engaged workforce, pulling together as a team to achieve our shared vision. Petra therefore has a wide range of personal development programmes in place in order to develop our people. Our 'can-do' Company culture, whereby employees are empowered and held accountable for their actions, also plays a key part in staff retention.

**Stakeholders:** employees/contractors/unions, local communities and host Governments/regulators.

**Topic boundary:** applies to the Company and to our local communities.

• Read more on pages 28 to 31

## Generating economic benefit

By generating economic value for the countries in which we operate, we aim to further enhance the potential for increased living standards and conditions for the country's inhabitants as a whole, including our employees and local communities. By ensuring a high level of transparency with regards to our economic outputs, we can maintain confidence in Petra's contributions to society.

**Stakeholders:** employees/contractors/unions, local communities, host Governments/regulators and suppliers.

**Topic boundary:** applies to the Company and to our countries of operation.

• Read more on pages 15 to 18

## Health and safety

Allowing our people to go home safe from work is Petra's number one priority and ingrained into everything we do. We also aim to encourage a healthy and happy lifestyle for our employees, taking into account prevalent local health issues, both physical and mental.

**Stakeholders:** employees/contractors/unions and local communities. **Topic boundary:** applies to the Company and to our local communities.

• Read more on pages 22 to 27

#### **Diversity**

Petra recognises the importance of diversity, given numerous studies have identified the benefits to business of more diverse teams when it comes to improved problem solving and decision making. However, improving diversity is also a mandatory requirement for companies operating in South Africa and a best practice requirement for UK-listed companies.

**Stakeholders:** employees/contractors/unions, local communities and host Governments/regulators.

**Topic boundary:** applies to Petra's business as a whole.

• Read more on pages 32 to 34



## Our Material Topics continued

#### Our material topics continued

#### Labour relations

The labour relations climate in South Africa has been notably volatile and failure to prioritise and manage this area could lead to issues such as work stoppages and poor company morale. Petra therefore places great emphasis on internal employee communications and the development of a fair and rewarding Company culture.

**Stakeholders:** employees/contractors/unions, local communities and host Governments/regulators.

**Topic boundary:** applies to Petra's business as a whole.

• Read more on pages 35 to 37

## Climate change and energy usage

We recognise the growing importance of climate change, both to our Company and to our stakeholders, and have a carbon reduction strategy in place to assist in minimising our impacts. Managing our energy usage is the most important method by which we can limit our emissions and therefore combat climate change, plus driving energy efficiency leads to significant operational and financial benefits to the Company.

**Stakeholders:** employees/contractors/unions, shareholders/bondholders, local communities and host Governments/regulators.

**Topic boundary:** applies to the Company and its countries of operation.

• Read more on pages 43 to 46

## Community development and engagement

Maintaining supportive relationships and playing a positive role in our local communities are vital to the sustainable success of our operations. Our mines are typically located in remote areas where there are limited employment opportunities, and as such they are crucial to the current and future prosperity of their local communities. We place great emphasis on engagement with our communities in order to be able to better assess our impacts and to strategically address matters of mutual importance.

**Stakeholders:** employees/contractors/unions, local communities and host Governments/regulators and suppliers.

**Topic boundary:** applies to the Company and its local communities.

• Read more on pages 50 to 57

## Environmental management

We recognise that our value emanates from the natural world and therefore protecting the environment in which we operate is integral to how we run our business. Managing our environmental impacts is a priority for Petra and in so doing we align our interests with those of our local communities.

**Stakeholders:** employees/contractors/unions, local communities and host Governments/regulators.

**Topic boundary:** applies to the Company and its local communities.

• Read more on pages 38 to 42

## Water management

Water is a scarce resource and we have identified the management of water as one of Petra's most important environmental prerogatives. Our operations are water intensive and changes in temperature may affect the availability of raw water for treatment processes and impact on natural water sources that sustain the communities around our operations. Petra is therefore committed to utilising water responsibly and efficiently, being mindful of the water scarcity in some of our areas of operation.

**Stakeholders:** employees/contractors/unions, local communities and host Governments/regulators.

**Topic boundary:** applies to the Company and its local communities.

• Read more on pages 47 to 49

## Legal compliance

The mining sector is one of the most highly regulated industries in the world. This is particularly relevant given the strategic importance of certain commodities to host Governments, thereby ensuring the extraction of these resources in an ethical and sustainable manner. Regulations applicable to mining companies are subject to continual change and Petra has therefore put the necessary management structures in place at each mine in order to maintain its adherence to all local legislation.

**Stakeholders:** host Governments/regulators.

**Topic boundary:** applies to Petra's business as a whole.

• Read more on pages 58 to 60

## Corporate Governance

Effective corporate governance is the backbone of Petra and enables each part of the business to operate efficiently, successfully and sustainably.

At a glance

## FTSE4Good

PETRA CONFIRMED AGAIN
AS A CONSTITUENT

0

FINES PAID FOR REGULATORY NON-COMPLIANCE



### Sustainable development goals





 Read more about how we apply corporate governance within Petra in our 2017 Corporate Governance Statement published in our Annual Report

### **Key achievements**

- A revised independent whistleblowing programme was implemented.
- Internal governance roadshow held at Petra's South African operations.
- Publication of first Modern Slavery and Human Trafficking Statement.

- Continuously evolving governance standards to meet new legislation and best practice requirements.
- Developing effective training programmes that are appropriate to the wide variety in skills and employee levels across the Group.



## Our Approach

#### Governance and risk management

Governance and risk management is the overall responsibility of the Board at Petra, with its Committees and the Internal Audit department also playing an important role in the identification, management and mitigation of ESG material topics and risks.

As part of establishing the sustainability risk context, there are distinct areas of accountability, namely governance and ethics (the remit of Petra's Audit Committee) and health and safety, community relations, employees and environment (the remit of Petra's HSSE Committee).

Petra's relatively flat management structure is important in its approach to sustainability management, with open, timely and effective communication and appropriate levels of accountability throughout the Group.

#### Sustainability management

Sustainability management is an integral part of all Petra operations and our management systems are constantly assessed, measured and, when necessary, updated to ensure their effectiveness.

**Petra Board HSSE** Remuneration Audit Nomination Committee Committee **Committee Committee Group sustainability team** Health **Assurance Safety** Community **Environment** Reporting **Group Steering Committees** Operational review/business management/HSSE Committee **Site-level Committees** HSE Committee/SLP Committee

 Further information on the activity of these committees can be found in our 2017 Annual Report:

Report of the Audit Committee and Report of the HSSE Committee

• More information on our approach to risk management can be found here: petradiamonds.com/aboutus/corporate-governance/ internal-control-and-risk-management Sustainability objectives exist across our operations and specific indicators are used to monitor and assess performance against targets on a mine-by-mine basis, as well as at Group level. A robust system of reporting on these indicators is in place, with information flowing up from the Health, Safety and Environmental Committees ("HSE Committees") at mine level to the Group HSE Operational Steering Committee and then to the Board, via the HSSE Committee.

The indicators are monitored on a daily basis at mine level and then monthly and quarterly reports are prepared by the mine management and Group discipline managers for the Steering Committee as well as the HSSE Committee. The HSSE Committee meets quarterly to discuss performance and strategy, before submitting quarterly HSSE reports to the Board.

If any major or significant incident occurs, Petra's established sustainability governance structure and procedures ensure that there is a clear line of communication whereby the matter is reported timeously to the highest governance body.

Our approach to managing HSSE matters is reinforced through the Group HSSE management framework and mine level policies and strategies, covering all key sustainability areas, as well as internationally recognised standards such as OHSAS 18001 (health and safety) and ISO 14001 (environment). All Group policies, standards and practices apply to the contractors working at our operations, as well as our employees.

The Company follows a risk-based operational management approach process aligned with the ISO 31000 risk management standard. This standard is based on continual hazard identification, risk assessment and instilling awareness into the workplace.

Petra complies in all material aspects with all relevant laws and regulations in the countries in which it operates and was not subject to any fines during FY 2017.

#### Remuneration

Petra's remuneration packages are weighted towards performance, with pay linked to the Group's strategic goals, and with targets taking into account best practice developments applied in a manner that is appropriate for Petra's industry and specific circumstances.

HSSE measures are explicitly included as part of the annual bonus framework, reflecting Petra's commitment to corporate responsibility.

- Further information on our remuneration policies can be found in our 2017 Annual Report: Directors Remuneration Report
- Our HSSE management framework can be found here: petradiamonds.com/sustainability/ managing-sustainability



## Ensuring Ethical Behaviour

Petra's business ethics support the Company's corporate vision, mission and values and encourage and guide our employees on how to conduct themselves professionally.

 Petra's commitment to ethical behaviour is clearly set out in the Group's Code of Ethical Conduct and we expect all employees, contractors and suppliers to conduct themselves in accordance with this Code

#### **Anti-bribery**

Bribery is a criminal offence under the UK Bribery Act 2010 and in various other jurisdictions around the world and is strictly prohibited by Petra. Bribery includes offering, giving, requesting or receiving a payment/something of value (even nominal value) to improperly influence a decision or get a party to perform their job improperly.

All Petra employees, contractors and suppliers are informed as part of the Company's induction procedure about this important corporate policy.

 Petra has a Group Anti-Bribery Policy in place which is made public on both the Company's intranet and website and which is implemented through a training and communication plan

#### Whistleblowing procedure

Petra has a whistleblowing procedure in place that provides employees and others the opportunity to independently and anonymously report conduct that is in contravention of the Code of Ethical Conduct or the Anti-bribery Policy – e.g. fraud, corruption, diamond theft or any other workplace crime. In order to uphold its independence, this

service is outsourced to an independent service provider.

The service is provided in all local languages in the countries in which Petra operates as well as a number of international languages, and the service is open to all Petra employees, contractors and suppliers, as well as any member of the public.

In FY 2017 Petra reviewed the Company's whistleblowing procedure and the requirement for appropriate independence in the reporting process and for employees to be fully briefed on steps to be taken if they wish to report a matter or incident were both addressed. The system was subsequently updated and a new, external whistleblowing and fraud hotline, which is monitored by the Audit Committee, was activated in March 2017.

Training is also provided for the various operations on anti-bribery as part of creating awareness and encouraging the reporting of any bribery or corruption.

All 'tip-offs' received, e.g. via telephone, fax, email, post or the website, are directed to the service provider's central facility for further investigation and feedback, where required. The identities of those reporting certain conduct, as well as the contents of the tip-offs received, are kept strictly confidential and protected according to applicable local and international laws.

Since inception of the new whistleblowing hotline, Petra received 37 calls, and of these, four reports involving alleged irregularities relating mostly to procurement and illegal substance abuse were considered necessary to investigate. Two of these matters could not be substantiated and investigation into the other two matters is ongoing, but they are not of a material nature.

 Details of the independent whistleblowing hotline can be accessed on Petra's website: petradiamonds.com/about-us/ corporate-governance/business-ethics

#### **Human rights**

The Company complies with and supports the UN Universal Declaration of Human Rights as well as all legislation pertaining to human rights in the countries where it operates.

Human rights is not considered to be a material risk to Petra's business, given that our operations are located in stable, constitutional democracies and given the robust internal systems we have in place.

Human rights issues are covered by internal operational policies and procedures, with the Company's Employment Equity Policy and its Disciplinary Code and Procedures expressly forbidding any kind of discrimination. Should a human rights grievance occur, it is either managed through the operational grievance procedures or, where they are seen as substantive in nature, by the collective bargaining processes that are in place with recognised labour unions.

In South Africa, human rights training is organised by Petra for union representatives through the Commission for Conciliation, Mediation and Arbitration ("CCMA"), who in turn disseminate their knowledge to their members.

Petra has aligned its principles with the International Labour Organisation Declaration on Fundamental Principles and Rights at Work. This means we have zero tolerance for child labour, forced labour or discrimination, and we respect the right of our workers to form unions. We are pleased to report that there is no risk of child labour or forced labour taking place at any of Petra's operations, due to our rigorous recruitment and pre-employment vetting process.

We do not consider there to be a risk of slavery or human trafficking with regards to our operations or supply chain, due to our due diligence processes with regards to our supply chain management.

 Petra is fully committed to upholding the human rights of all of its stakeholders, as set out in the Group's Human Rights Policy

#### Indigenous people

Contact with indigenous people is only relevant to our exploration projects in Botswana and is sporadic in nature. We respect their culture and rights and have maintained regular, proactive contact with them as and when appropriate, as well as with the local authorities, individuals and NGOs, since we began our exploration programme in 2005. Petra's activities remain at an early stage in Botswana, but we are committed to further engaging with the indigenous Basarwa people should any decision to develop commercial operations be taken.

Petra reported no disputes relating to land use or involving the rights of indigenous people during FY 2017.

## Ensuring Ethical Behaviour continued

#### **Security**

As a producer and seller of a relatively small, high-value product, security is a justifiably high priority for Petra, with a focused effort from both human and technological components to achieve our objectives in this area.

The requirements for effective security extend beyond guarding and securing production only. The effect of crime, which includes illegal diamond mining and theft of diamonds and property, extends its reach far beyond the monetary loss associated with these actions, to the impact it has on the respective operations, the personal and job security of employees, and the communities who benefit from the mining of diamonds.

Petra therefore places a high premium on maintaining and continuing to develop an effective and appropriate security capability in order to protect its people, property and product in the interest of good governance and sustaining a profitable business. Our security systems also play an indispensable role in upholding and protecting human rights at Petra.

To minimise the risk to our business of diamond theft, we focus on removing human contact with our product wherever possible. This is particularly effective in the automation of the recovery process (for example the utilisation of x-ray techniques rather than traditional grease tables) and serves to remove compromising opportunities for theft.

#### Security in South Africa

All South African security personnel are suitably qualified and are registered with the Private Security Industry Regulatory Authority ("PSIRA"). Their skills, as required in order to qualify for

registration, are continually refreshed and improved with suitable training, which includes human rights training as part of its legal component.

Petra undertakes and regularly updates risk assessments relating to security (in the three main security focus areas) at all our operations. In South Africa our security personnel only operate within our mandate and the borders of Company properties. Should any security operation impact on the local community, it is communicated with them. Although a close working relationship is maintained with public security forces in South Africa, Petra does not provide them with any assistance or materials.

#### **Security in Tanzania**

The Williamson mine has developed a security and human rights policy in line with the Voluntary Principles on Security and Human Rights, following a risk analysis. Petra's in-house security managers and all employees of our private security service provider have been trained on the Voluntary Principles. Williamson's security and human rights policy has been communicated to stakeholders of the mine, including the local police force.

Williamson has undertaken a full risk assessment and frequently conducts security meetings with the regional police chief and regional crime officer. Williamson, as part of its Community Support Programme, provides technical assistance to the local police thereby enhancing community policing.

At Williamson, we have identified trespassing and illegal mining on the Special Mining Lease ("SML") as a potential risk. Petra manages this through frequent consultation, policing patrols and relationship management.

## Case Study – internal governance roadshow



An internal governance roadshow was held at the South African operations during July and August 2017. The aim of the roadshow was to create awareness and to carry out training on specific governance-related matters. It was also aimed at creating awareness about the anonymous tip-off telephone line which has been implemented. Members of management and other employees attended. The session covered the Code of Ethics, anti-bribery and anti-corruption, conflicts of interest, security intelligence, delegation of authority and policies, insider trading and market abuse and also governance issues relating to property matters. The roadshow was presented by the Group Company Secretary, Group Legal Services Manager (also the Anti-Bribery Officer). Security Intelligence Manager and Group Operational Financial Manager.

The information provided was well received and several questions relating to the procedural side of governance, such as declarations of interests, were addressed. Employees were encouraged to make use of the anonymous tip-off telephone line. The intention is to conduct follow-up roadshows to ensure that the message is conveyed on a Group-wide basis that the Company has a culture of zero tolerance to bribery, corruption and other types of unethical behaviour. It is also important to ensure that employees are adequately trained on these topics so as to understand the legal framework within which the Company operates and to understand the consequences of non-compliance.

## Generating Economic Benefits

Petra makes a valuable economic contribution to the countries and communities in which we operate.

**KPIs** 

US\$47.2m PAID IN TAXES AND ROYALTIES IN FY 2017

US\$145.8m SPENT ON SALARIES, WAGES AND OTHER BENEFITS IN FY 2017

US\$438.1m

## Sustainable development goals













## **Key achievements**

- ▶ Publication of first Payments to Governments Report.
- Strategic simplification and streamlining of Petra supply chain underway.

- Very low economic growth in South Africa and its impact on unemployment rates.
- ► Paucity of high value capital goods suppliers in the immediate vicinity of our operations.



#### Our Economic Contribution

Our countries				
	South Africa	Tanzania		
Ethnic groups	Black African: 80% White: 8% Coloured: 9%¹ Indian/Asian: 3%	African: 99% (of which 95% are Bantu consisting of 130+ tribes) Other: 1% (Asian, European and Arab)		
Life expectancy	63 years	62 years		
Urbanisation (2015)	65% of total population	32% of total population		
Literacy rate	94%	71%		
Unemployment rate – total (youth)	26% (51%)	3% (6%)		
HIV/AIDS adult prevalence rate	19%	5%		
2016 value of diamond production	US\$1.3bn	US\$86.6m		
2016 GDP	US\$294.8bn	US\$47.4bn		
GDP growth rate in 2016	0.4%	7.2%		

Sources: The World Bank, The World Factbook – CIA, Kimberley Process Statistics, Moody's Analytics.

1. The term 'coloured' is the official and accepted term used for historically disadvantaged South Africans ("HDSAs") of mixed descent.

#### Our economic contribution

In addition to creating shareholder value, our economic contribution to the countries and communities in which we operate is an important focus for the Group. Through the employment of local people, the payment of taxes and royalties, procurement from suppliers and corporate social investment we are able to make a positive contribution to our stakeholders. Our Value Added Statement can be viewed on page 66.

#### The benefits of stable and sustainable employment

The Company currently employs 5,607 permanent staff, but given the generally accepted 'multiplier effect' in South Africa and Tanzania of x10, over

56,000 people are dependent on our operations. In FY 2017 the amount we spent on employee wages increased 16% to US\$145.8 million (FY 2016: US\$125.9 million) further to the higher employee and contractor numbers for the Year as well as expected wage inflation.

By investing in our mines over the last few years, we have put relatively long-term mine plans in place, ensuring sustainable employment for our workforce and the associated socio-economic development opportunities for the wider local communities. Read more about our social investment and how we work to generate sustainable development on pages 50 to 56.





## Our Economic Contribution continued

#### **Payments to Governments**

Petra is committed to transparency with regards to payments to Governments, both in terms of taxes and royalties, as well as our other areas of significant social expenditure. We support the principles of the Extractive Industries Transparency Initiative ("EITI") and Publish What You Pay ("PWYP"), given that publishing details of Petra's payments to Governments can increase confidence and help improve community support for its activities.

Petra published a Report on Payments to Governments for the first time in December 2016, in line with the United Kingdom's Report on Payments to Governments Regulations 2014 (as amended), which apply to large, UK-listed extractive companies.

 The report is available on our website at petradiamonds.com/investors/results-reports and will be published on an annual basis In FY 2017, the Group paid a total of US\$47.2 million in taxes and royalties (FY 2016: US\$49.6 million). Given the high levels of capital being invested in our expansion programmes in FY 2017, the Group continues to be subject to varying levels of tax shields at each of its operations. However, as the capital expenditure levels continue to fall from their peak in FY 2016, payments of taxes and royalties are due to rise considerably, in line with the profitability of each operation.

Petra's contribution to taxes and royalties in Tanzania will rise in future, in line with the Amendments to the Mining Act in 2017, meaning that royalty contributions have increased to 6% of turnover (previously 5%) and a rough diamond export levy of 1% has been applied.

 Read more about the fiscal regimes of where we operate at petradiamonds.com/ about-us/who-we-are/where-we-operate

## about-us/who-we-are/

	FY 2017	FY 2016
South Africa	34.9	35.2
Tanzania	11.9	13.9
Botswana	0.1	0.2
United Kingdom	0.3	0.3

The Company did not make any political donations during FY 2017 and received no financial assistance from Governments.

TAX summary per country - 2017 (US\$ million)

## Opening of a new Enterprise Development Resource centre



Howard Marsden, General Manager of KEM JV; Kgotatso Mohulatsi, Enterprise Development Coordinator at KEM JV; and Bongumusa Biyela of the National Empowerment Fund at the opening ceremony.

The new Enterprise Development Resource Centre at Kimberley opened on 10 March 2017. The purpose of the centre is to mentor SMMEs in terms of business management, as well as providing computer and printing facilities. The centre also assists in readying local businesses for potential opportunities to enter our supply chain. Petra now has an Enterprise Development Resource Centre in place at each of its South African operations.



## Our Supply Chain

#### Our supply chain

Petra's supply chain department is responsible for managing the Group's inbound supply chain. It performs an important role in terms of delivering on our production and expansion plans by ensuring that the right goods and services are delivered to the right location at the right time. The team is also accountable for ensuring that our supply chain operates safely, efficiently and according to the high level of ethical conduct that we expect of our business.

We proactively manage and develop a capable and commercially secure supply base, with the aim of delivering sustainable value to our Company and to our suppliers through leveraging long-term relationships and effective contract management. Our approach in this regard is guided by our procurement policy, which was revised during FY 2017.

In order to significantly simplify and streamline our supply chain, we have commenced a process to implement a supply chain management platform known as the Petra eProcure Portal throughout FY 2018. Whereas previously we operated a closed tender system, the new platform will allow all suppliers wishing to do business with Petra to be able to register their details and then be made aware of new supplier opportunities as they arise.

This will also allow us to expand our list of contractors and make our procurement system more transparent and effective.

We expect all suppliers and contractors to act with integrity and respect for human rights and therefore compliance with our Code of Ethical Conduct is explicitly required as part of the general terms and conditions of contract with the Petra Group. We have

vetting processes in place to ensure that we deal with reputable businesses, but we will continue to strengthen these processes as part of the ongoing formalisation of our supply chain practices.

There were no significant changes to our supply chain in FY 2017; however, we do foresee a substantial drop in expenditure in FY 2018, further to the advanced nature of our expansion programmes and the fact that our capital profile is now on a declining trend.

#### Local procurement

Petra sources 100% of the goods and services for its South African, Tanzanian and Botswanan operations from the countries in which they are located, as even those goods supplied by international companies are purchased through their operating branches in-country. However, we view targeted local procurement as a powerful lever for local economic development and community empowerment and preference is therefore always given to suppliers in close proximity to our mines when possible.

Despite significant progress made, challenges remain relating to the availability of BEE suppliers in South Africa and the fact that suppliers of high value capital goods are very seldom situated in the host communities of our mines. Petra therefore has a strategy in place to help develop local suppliers to be able to enter our supply chain – read more on pages 54 to 55.

The migration of our supply chain to the Petra eProcure platform in FY 2018 is expected to assist in widening the base of local SMMEs with whom we do business.

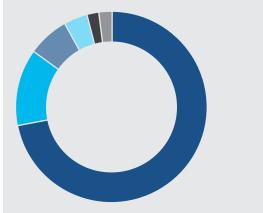
## Our supply chain in figures

2,500+

3 COUNTRIES 62%

OF SPEND IN SOUTH AFRICA WITH BEE VENDORS

#### Commodity breakdown



- Capital projects	72%
<ul><li>Electricity</li></ul>	13%
<ul> <li>Spares and maintenance</li> </ul>	7%
<ul><li>Petroleum</li></ul>	4%
<ul> <li>Plant consumables</li> </ul>	2%
- Explosives	2%

Country	Procurement spend (US\$m) FY 2017	Percentage spent with local <sup>2</sup> suppliers FY 2017
South Africa <sup>1</sup>	371.0	59%
Tanzania <sup>1</sup>	66.7	87%
Botswana	0.4	100%

- 1. South Africa and Tanzania are considered 'significant locations' due to the presence of our producing mining operations in country.
- 2. We define 'local' as suppliers based in the relevant regional province in South Africa and in the relevant regional district in Tanzania.

# Consumer Demand

Petra seeks to influence sustainable consumer demand as the future of our business is dependent on the aspiration of consumers to buy and own diamonds.

**KPIs** 

100%

PETRA PRODUCTION THAT
IS CERTIFIED CONFLICT-FREE

US\$80 billion<sup>1</sup>
global diamond jewellery
sales in 2016

US\$57 million

INVESTMENT COMMITTED BY THE

## Sustainable development goals



### **Key achievements**

- ► The Diamond Producers Association ("DPA") significantly ramped up its marketing and industry advocacy programmes.
- Participation in GIA M2M<sup>™</sup> (mine to market) programme
   a new responsible sourcing service which tracks
   the origin of a diamond from mine to consumer.

- Ensuring diamonds remain relevant and desirable to the next generation of diamond consumers (the "millennials").
- Demonstrating the ethical provenance of mined diamonds.
- Gem quality synthetic diamond supply is rising but they still represent only a small portion of global supply (circa 4 Mcts in comparison to world mined output of 134 Mcts according to Bonas & Co).



## A Sustainable Future for Our Industry

While diamonds occupy a unique cultural position in that they are used to celebrate our most special moments, their continued acceptance is reliant on ensuring they remain desirable to consumers.

#### **The Diamond Producers Association**

We seek to actively influence sustainable consumer demand via the DPA, an industry organisation formed in May 2015 by Petra and six of the other world-leading diamond companies to maintain and enhance consumer demand for, and confidence in, diamonds. By promoting the integrity and reputation of diamonds and the diamond industry, the DPA intends to play a central role in ensuring the long-term sustainability of the sector.

Petra's CEO, Johan Dippenaar, represents the Company on the board of the DPA and the Corporate Communications Manager, Cathy Malins, sits on the DPA's communications and marketing committees.

An important part of the DPA's mandate is the generic marketing of diamonds, a key support for

the industry that has been lacking for a number of years, and ensuring that diamonds remain relevant to the next generation of consumers – the so-called millennials.

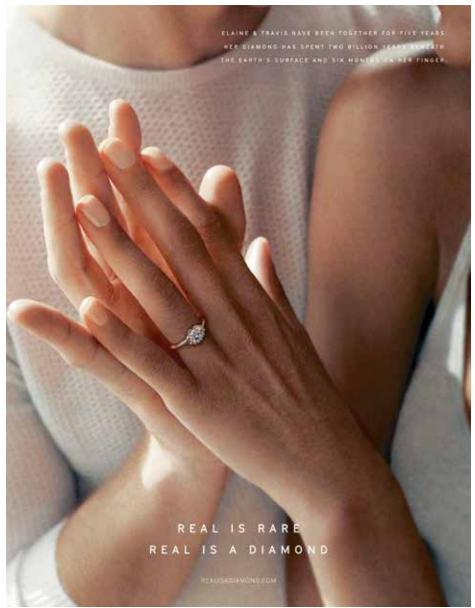
In 2017, the DPA announced that it had quadrupled its marketing budget to US\$57 million for 2017. The majority of this budget (circa US\$50 million) is assigned to US marketing, building upon its iconic platform 'Real is Rare – Real is a Diamond', and will be spent in the second calendar half of 2017. This represents a significant budget in order to execute the DPA's ambitious plans, which incorporate multichannel advertising, innovative digital programmes and high impact PR campaigns. The DPA will launch its first marketing campaign in India in late 2017 and will commence marketing in China in 2018.

Industry advocacy and trade programmes have also been developed, and the DPA will debut a new retail training support programme focused on the new diamond narrative in 2018.











## A Sustainable Future for Our Industry continued

## The Diamond Producers Association continued

As a member of the DPA, we are committed to high standards of integrity and responsibility in all aspects of our business and all activities of the diamond value chain from mine to consumer.

DPA member commitments are as follows:

- We conduct our business with integrity, ethics and high standards of corporate governance.
- We promote and encourage responsible business practices throughout the diamond supply chain.
- We comply fully with the Kimberley Process Certification Scheme and the World Diamond Council System of Warranties.
- We support transparency in the way we conduct our business and report payments made to governments in accordance with applicable legal requirements.
- We respect fundamental human rights and observe the UN Guiding Principles on Business and Human Rights.
- We respect the cultures, customs and values of others with whom we engage, including our employees, contractors and the local communities around our operations.
- We seek to further the economic, social and institutional development of communities where we operate.
- We seek to protect the wellbeing of our employees by implementing robust health and safety practices in a culture of continual improvement.
- We seek to prevent or otherwise minimise or mitigate and remediate our impacts to the environment and support the conservation of biodiversity, and continually seek to improve our environmental performance.

#### Upholding the value of diamonds

We are committed to upholding the high value placed on natural diamonds, which are given to celebrate life's most special moments and are considered as prized possessions.

Furthermore, Petra's diamonds have a unique provenance in that they are sourced from some of the most culturally significant diamond mines in the world. The names Cullinan, Finsch, Kimberley, Koffiefontein and Williamson all have rich histories associated with them, as they have produced many of the world's most spectacular and celebrated diamonds.

It is therefore vital to ensure that every aspect of our business is managed and run in keeping with the high value placed upon our product and we expect a similar commitment from all those involved in the Petra business, including employees, contractors, partners and suppliers.

As such, we monitor and manage each step in the diamond production process to the highest ethical standards and in accordance with our values, from exploration and mining, through to processing, sorting and finally marketing and sale. Read more about our commitment to ethical conduct in the Governance section on pages 13 to 14.

We will only operate in countries which are members of the Kimberley Process and each of our diamonds is fully traceable to its point of production, thereby providing assurance that 100% of our production is certified as 'conflict free'.

## The Gemological Institute of America ("GIA") M2M™ Programme

After over two years of research and development, the GIA is excited to bring the GIA M2M™ service to market. This consumer app provides retailers with a new way to tell a diamond's story, by following its unique journey through the diamond pipeline.

Petra was keen to contribute to the project as it will provide transparency on a diamond's route from mine to market, thereby enhancing consumer confidence in the industry and answering the growing requirement for demonstrable ethical product sourcing.

As part of the programme, participating manufacturers send rough diamonds to the GIA, which then records data on each stone and issues a unique serial number. Once the rough diamond is cut, the polished stone can then be resubmitted to the GIA for grading at which point the characteristics of the polished diamond are assessed and matched against those of the rough diamond, using the original serial number. In this way, the GIA can make definitive verdicts on the stone's origin.

Given it is a consumer app, Petra has focused on bringing to life the story of our diamonds. Information provided aims to demonstrate the heritage of our mines, the ethical ethos of the Company, information on our social responsibility programmes with local communities and environmental management and highlights the people who work day in, day out to bring our precious commodity to the market.

GIA M2M<sup>™</sup> has thus far been met with great interest in the US market, with over 50 retailers already engaged in the programme. GIA plans to grow the platform on a global level in the upcoming months and is expecting interest to expand relatively rapidly. For further information on this exciting project, contact m2m@gia.edu.



## Health and Safety

Ensuring our people go home safe from work is Petra's number one priority and ingrained into everything we do. We also aim to encourage a healthy and happy lifestyle for our employees.

**KPIs** 

0.27

0.05

100%

OF STAFF TRAINED IN HEALTH AND SAFETY STANDARDS IN FY 2017

100%

OF EMPLOYEES UNDERWENT MEDICAL SCREENING IN FY 2017

## Sustainable development goals





## **Key achievements**

- ► Lowest lost time injury frequency rate achieved in Company history: 0.27 (FY 2016: 0.29).
- ► Number of days lost due to governmental stoppages reduced by 50% (FY 2017: 11 vs. FY 2016: 22).
- ► Planning process for the migration of safety standards from OHSAS 18001:2007 to ISO 45001 in 2018 already well advanced.

- Addressing the fatalities that occurred in FY 2017.
- Additional 3.5 million risk hours worked in FY 2017 due to high activity around the expansion programmes across our operations.



## Safety Management

Safety is our number one priority at Petra and we strive for a 'zero harm' working environment so that we can ensure each of our employees and contractors goes home safely at the end of their day. Our health and safety strategy relies on improving our ability to proactively identify and prevent harm to our people.

Our commitment to achieving and maintaining safe and healthy operations is based on the commitment and involvement of all levels of personnel in our operations, including management and employee committees. It also involves our employees taking personal responsibility for their own safety as well as that of their colleagues.

As an employer we adopt a holistic approach to health and safety management. While legal compliance is the first step in managing health and safety at our operations and working towards our goals, we also continuously communicate and engage with employees on health and safety-related issues in order to obtain their input and co-operation with regards to future planning and developments.

Our significant material hazards that resulted in unwanted events during the Year were related to mobile machinery and human interaction, moving conveyance, rolling rock, failure of suspended loads and contact with live electrical sources.

The root causes of accidents were primarily linked to unsafe acts by individuals, resulting in the breaching of, or non-conformances to, effective, risk-based safety controls. Contributing factors highlighted at risk behaviour due to complacency and ineffective frontline supervision.

The remedial process focused on continuous behavioural and performance trending, proactive interventions by Company subject leads and specialists, operational management stop-and-fix interventions and retraining, improvement of frontline supervision through coaching and oversight, strict enforcement of risk-based controls and focused consequence management.

Leading from the front and setting the example (by proactively intervening, coaching, guiding and correcting conditions and behaviour) in the workplace is of paramount importance to ultimately achieve the objective of zero harm.

## Health and safety management system and standards

- OHSAS 18001:2007 this international safety framework provides the basis for our occupational health and safety management system and Petra has maintained its OHSAS 18001:2007 certification since 2006.
- International Council on Mining & Metals ("ICMM") – we follow the guidelines of this international industry performance standard.
- South African Chamber of Mines via its membership, Petra gains valuable insight into national industry performance standards and trends.
- National health and safety performance milestones

   our safety targets are set to achieve zero fatalities
   and a reduction of 10% in lost time injuries on a rolling, annual basis.

## South African Chamber of Mines Health and Safety Policy Committee

Our Group HSEQ department leads are members of this committee and are therefore actively involved in the development of new health and safety standards for the industry.

The following health and safety initiatives were among those to be implemented as standards, policy, codes of practice and procedure at Petra:

- fall of ground management protocols and standards;
- dust suppression protocols and standards;
- fatigue management protocols and standards;
- underground workplace entry and making safe protocols and standards;
- women in mining management protocols and standards; and
- testing and implementation of proximity detection devices to manage human-machine intervention safety more effectively.

#### Material risk management

Petra's HSE operational risk management process consists of mine-specific operational processes, with a three-layered analysis system to identify and treat all significant hazards and associated risks.

#### Baseline risk assessment

#### Workplace risk assessment

- issue-based risk assessments; and
- activity-based risk assessments.

#### Continuous risk assessment

- mini risk assessment: and
- SLAM (stop, look, assess and manage).

Any significant risks that remain after elimination and controlling at source are mitigated by administrative means in the form of codes of practice, policy, procedures, working practices and management instructions.

Health and safety material hazards and associated risks are identified when writing work programmes. The outcomes from continuous risk assessment, management walkabouts, internal audits and internal and regulatory inspections are analysed, prioritised and formally actioned by means of remedial action plans with assigned responsibility and target dates.

Every incident or accident resulting in injury, loss of life or damage or categorised as a dangerous occurrence is investigated in detail utilising the Root Cause Analysis Technique ("RCAT") model to identify causes, and action plans are designed and implemented to mitigate reoccurrences.

Periodic reviews of the risk assessments and operational controls are conducted as follows:

- once an incident or accident occurs;
- if a process or subprocess in operations change;
- on instruction from the national mine health and safety legislator or regulatory inspectorates; or
- every three years.

Petra's existing risk management system was reviewed in FY 2017.



## Safety Management continued

#### Incident reporting

Incident and accident reporting across our operations is a formalised process, which is controlled by Group policy and procedures and aligned with legislatory requirements and Company standards.

All incidents and accidents are reported, by telecom, email and IsoMetrix, to all Group and operational supervisory and management levels within 24 hours from the time of the event. These are then investigated and analysed based on an RCAT.

Shortcomings and findings are identified and remediated through a formal process of action and responsibility, whereafter learnings are shared with all operations in the Group as a proactive measure to avoid similar occurrences.

#### Health and safety committees

The HSE committees at each operation comprise of supervisory, union and management members and represent 100% of the workforce. We have 6% workforce representation in formal management – worker health and safety committees, which equates to one representative for every 16 people, well above the South African legislator requirement of one representative for every 50 people.

Prior to the finalisation of health and safety collective agreements, management must ensure that all topics have been addressed during consultation sessions with the various trade unions that represent our employees at each mine. These collective agreements are aligned with and measured against national legislation stipulations and comprise 100% of health and safety topics that are prescribed by this legislation.

Any concerns emanating from these meetings are elevated to HSE collective meetings, consisting of senior management and employee representation, where the issues can be addressed.

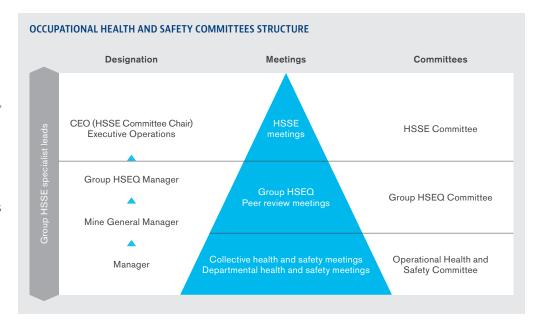
The HSE committees work in collaboration with mine management to effectively eliminate, control, minimise or monitor hazard and risk in the workplace and therefore share oversight and management of the remedial action plans in place further to our continuous risk assessment process.

#### Training and education

Every employee and contractor at Petra's operations is provided with formal health and safety training. This focuses on providing them with the required skills to execute work safely, familiarising them with workplace hazards and risks and equipping them with the knowledge to eliminate, control and minimise these hazards and risks.

The operational training departments also conduct general induction, departmental and sectional orientation training annually, in accordance with national mine health and safety legislation. A total of 17,233 employees, contractors and stakeholders were trained during the Year. According to Company policy, all personnel receive general, departmental and sectional orientation training, focused on relevant health and safety standards, prior to entering the operations.

All employees, contractors and stakeholders are briefed and trained on national legislatory stipulations pertaining to the personal responsibility surrounding health and safety, as well as the right to withdraw from unsafe working areas or workplaces, without being discriminated against.







## Health and Safety Performance in FY 2017

LTIFR is the key measure we use for general safety performance and it was encouraging that this continued its improving trend to 0.27 for FY 2017 (FY 2016: 0.29), despite the number of risk hours worked rising by 3.5 million during the Year. The number of days lost in South African production due to governmental stoppages (known as Section 54 stop notices) also reduced by 50% in FY 2017 to 11 (FY 2016: 22), as a result of dramatically improved safety standards and compliance throughout the Company.

The 60% improvement in our LTIFR over the last five years is encouraging, given that it was achieved during a period where major capital projects at the large underground mines resulted in a major increase in the number of risk hours worked over this time period.

The improvement can mainly be attributed to the health and safety strategy focus areas, regular health and safety interventions, an effective operational risk management process and quality controls implemented and maintained at all operations.

#### Fatal injuries

Although the Company has a well embedded world-class safety and material risk management system which is continually enforced by all levels of management, supervisory structures and health and safety committees, it stands to reason that the risks inherent to our type of activities and processes may result in accidents. In spite of our historically good safety record, we tragically experienced five fatal accidents in FY 2017, resulting in six fatalities.

We are deeply saddened by these incidents. Any fatality or injury at our operations is unacceptable and we send our heartfelt condolences to the families

and friends of the deceased. As a result, we have intensified our safety initiatives, which target all levels of the organisation, serving to reiterate our zero-tolerance approach to unsafe acts and working conditions and to reinforce safety as the single most important personal and organisational value. This will remain a key area of focus for the Company in FY 2018 and beyond.

The accidents were investigated in detail by specialist teams comprising operational management, Health and Safety Committee members and Group subject specialists. The outcomes of the causal analysis during investigations were analysed and actioned by updating existing controls and developing additional controls where necessary, and were implemented throughout the Group at all operations where similar incidents or accidents could potentially occur.

We have also implemented further systems to proactively remediate any at risk behaviour or conditions before they have the opportunity to escalate into an incident or accident.

#### Health management

In addition to keeping our employees safe, we also want to encourage a workforce that is healthy in both body and mind.

The key occupational health issues that can affect our workforce relate to noise-induced hearing loss ("NIHL"), respiratory illnesses and injuries resulting from repetitive activities.

 Read more about our safety turnaround strategy on page 12 of our 2017 Annual Report Outside the workplace, the main community health issues are HIV/AIDS, tuberculosis and malaria (in Tanzania only), as well as lifestyle diseases such as hypertension and diabetes.

Our health strategy addresses three focus areas:

- managing occupational health risks in order to prevent harm to our workforce;
- implementing employee health and wellbeing programmes; and
- building partnerships with external health service providers to strengthen health systems.

Where a condition cannot be prevented, we ensure that all our employees have access to the appropriate medical care.

#### Occupational hygiene

Occupational hygiene involves proactively identifying sources of, and exposures to, health hazards, profiling the associated risk, and preventing release of the hazards through controls in the workplace.

Notwithstanding the prescribed use of PPE by personnel where necessary, our performance indicators reflect the number of individuals who would be exposed to conditions that exceed those limits were they not protected by PPE. This helps to identify those hazards where we can improve controls and perhaps eliminate the need for PPE altogether.

#### Occupational medicine

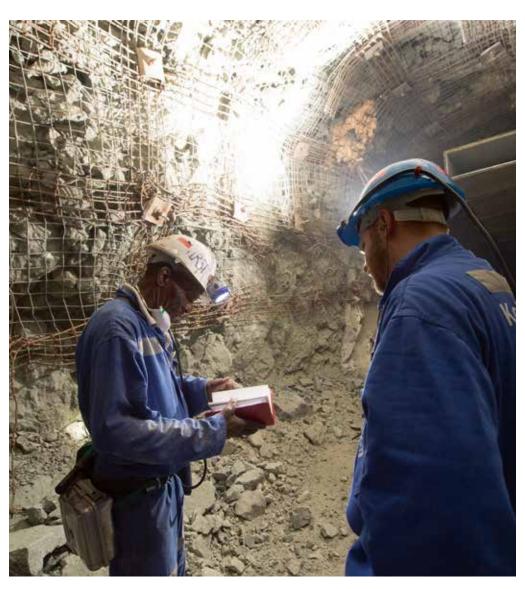
Occupational medicine is divided into three areas: Primary Health, Care Clinic and the Occupational Health Centre.

## Fatal accident causal summary

Date	Mine	Causal summary
23 August 2016	Williamson	Contact with a live electrical source via an HT overhead power line
15 September 2016	Cullinan	Contact with moving machinery, namely an ore skip conveyance underground
27 September 2016	Williamson	Failure of a suspended load, namely a mobile crane telescopic boom at the engineering workshop
9 November 2016	Finsch	Rolling rock experienced underground
5 April 2017	Cullinan	Collision between trackless mobile machinery and tip header boxes underground



## Health and Safety Performance in FY 2017 continued



## Health management continued South Africa

As part of Petra's standard conditions of employment, all full-time, permanent South African employees need to belong to a recognised and approved medical aid fund. This condition of employment aims to ensure that employees and their families are provided for medically in terms of primary health care, chronic conditions and trauma.

Contract employees are also regarded as Company employees for the purposes of occupational health and safety. As it is not practical to expect these employees to conform to the standard Petra conditions of employment, they are referred to state medical facilities for care. Petra makes use of in-house and outsourced private medical services, including occupational health service providers.

#### Tanzania

At Williamson, employees benefit from the Social Health Insurance Benefit Scheme ("SHIB") that is part of the National Social Security Fund ("NSSF"). NSSF supports the Government's efforts to increase access to health care services and provides medical support to the insured and their dependants. Williamson is in a fixed agreement with the NSSF in terms of social securities and health benefits.

Subsidised primary health care is also provided to employees, dependants and external communities by the Williamson Diamonds Hospital. The hospital is fully equipped for small to medium surgical procedures and includes a pharmacy, reproductive health facility, outpatient department, laboratory, x-ray and mortuary.

In addition, the hospital pilots various health programmes in conjunction with the Tanzanian Government and certain NGOs. The programmes include mother and child health, malaria prevention, voluntary counselling and testing ("VCT") as well as antiretroviral treatment ("ART") for HIV/AIDS. These services are provided free of charge to employees and their families, as well as community members. The programmes are financially supported by AGPAHI (Ariel Glaser Paediatric AIDS Healthcare Initiative), with infrastructural and services support from Williamson.

#### **Employee wellness**

In addition to primary health care and occupational health services, Petra has an extensive wellness programme in place to prevent, identify, monitor and support employee illnesses/conditions. We place a major emphasis on raising awareness and breaking down taboos around conditions such as HIV/AIDS, and also try to encourage healthy lifestyles in a number of ways, such as via themed days to raise awareness, through employee newsletters and other communications, and by organising health-focused community events, such as sporting events.

We also provide an employee assistance programme which includes lifestyle, psychological, financial, legal and substance dependence counselling and assistance.

18,329 medicals were conducted across all Occupational Health Clinics during the Year, consisting of pre-employment, periodical, redeployment and exit medicals.



## Health and Safety Performance in FY 2017 continued

## Health management continued

#### Employee wellness continued

During FY 2017 three people were submitted for compensation to Rand Mutual Assurance ("RMA") for NIHL and two were certified and compensated.

27 employees were diagnosed with tuberculosis and all received treatment. 15 people were submitted to the Department of Health for compensation for tuberculosis but to date none of these cases has been certified as occupation related.

One silicosis and asbestosis case has been diagnosed during a pre-employment medical, but to date no cases were diagnosed as a result of exposure to kimberlite dust (which is known to be low in silica content).

3,497 people from across Petra's operations were tested for HIV/AIDS during the Year and of these 47 tested positive. These patients were referred for treatment.

1,706 people were tested for malaria at Williamson and 310 employees and 130 contractors were positively diagnosed with this disease, all of whom received treatment.

Williamson employees underwent a full medical examination by Occupational Safety and Health Administration ("OSHA") in FY 2017, with a total of 943 people being screened. Williamson will be issued with a medical certificate by OSHA in due course.

No Wellness Days were held during the Year as an increased focus at the Occupational Health Centres delivered better monitoring results and therefore everyone could be monitored without the requirement for a Wellness Day.



Koffiefontein partnered with the South African Department of Health to observe World Tuberculosis Day on 24 March 2017. This provided the perfect opportunity to inform the local community about the disease and to raise awareness of TB prevention and care efforts.

The theme of the day was: 'Find TB, cure TB, working together to eliminate TB'. The open day saw good attendance, with over 100 employees and members of the community making use of the opportunity for testing and screening.

In addition to this, it provided the valuable chance to carry out team building, with netball

games being organised. The ladies from management took on the organised labour team in a game resulting in an 11-7 victory to the labour side.

The open day was a huge success and Koffiefontein looks forward to working with the Department of Health again.

## Employee Retention and Development

To deliver on our ambitious growth plans, we require a skilled and engaged workforce, pulling together as a team to achieve our shared vision.

**KPIs** 

11,169
PEOPLE EMPLOYED IN FY 2017

9% STAFF TURNOVER RATE

US\$7.6m
INVESTED IN STAFF TRAINING ANI
DEVELOPMENT IN FY 2017

## Sustainable development goals











## **Key achievements**

- High rate of absorption of learnership trainees into permanent workforce.
- Continued successful implementation of a wide range of programmes enabling career development and promotion.

- Additional training requirement for new hires further to increased staff turnover.
- ► Raising standards of education and skills within the local community to assist with recruitment readiness.



### Our Workforce

Petra recognises that the retention and development of our people is one of the key drivers of our future success and long-term sustainability as a company. Our people are our most valuable asset and it is only with their hard work and contribution that the significant value of our resources can be unlocked.

Petra works hard to foster a 'can-do' culture, where entrepreneurial thinking is encouraged and rewarded, big challenges are taken on and tackled systematically, change is embraced and full accountability is placed on all individuals to act with integrity and to the best of their abilities. In this way, each employee can feel that they are contributing to the ongoing success of the business.

We place great importance on the empowerment of our employees and on encouraging them to fulfil their true potential with the provision of training and attractive career development opportunities. Employees who are provided the opportunity to enhance their skillset not only contribute better to the Company's success but also have greater career satisfaction, thereby improving morale, productivity and employee retention. Our focus is not merely on Petra's current employees, but also on the next wave of employees in our local communities. Therefore it is imperative that we have programmes in place to prepare them and equip them with the skills they require.

As at 30 June 2017, the number of people employed by the Group increased 4% to 11,169 people (30 June 2016: 10,763). See page 69 for the breakdown of employee and contractor numbers.

The number of permanent employees has increased 12% to 5,607 (FY 2016: 5,005) mainly due to the merging of our operations in Kimberley with Ekapa Mining into what is now known as KEM JV. The number of contractors decreased 3% to 5,562 (FY 2016: 5,763), in line with the advanced stages of our capital programmes.

#### Local hiring

In order to foster a stable and cohesive workforce and to contribute to the development of our local communities, Petra prioritises recruitment from the local area. This makes sense from a business perspective and decreases the requirement for Company-provided services such as transport and housing.

It is also a regulatory requirement in terms of the South African Mining Charter (the "Charter") and our prescribed Social and Labour Plans ("SLPs"), which include commitments to recruit from 'labour-sending areas', i.e. their host and local communities. Commitments to this effect are often also included within agreements with the organised labour unions present at our operations.

However, skills shortages in the local communities are often a reality when recruiting for skilled positions. For this reason, vacancies for positions in the skilled bands are also advertised regionally or nationally, whereas all unskilled and semi-skilled positions are advertised locally only. Preference is still given to local applicants whenever possible.

Major contractors to the operations are expected to apply the same recruitment principle when employing workers for contracts at these operations.

#### Staff retention

Although there is still competition in the labour market for semi-skilled (60% of Petra's workforce in FY 2017) and skilled employees (24% of Petra's workforce in FY 2017), and a shortage of certain specialised skills, strained economic conditions in South Africa, in part due to the commodities downturn, have taken some pressure off recruiting for and retaining skills.

What is more, the remote location of most of our operations means that the host communities present a limited pool from which to draw skilled employees and it can be difficult to attract these skills from the larger urban centres. Staff retention is therefore important and remains a focus for Petra

In FY 2017, our total employee turnover increased from 7% to 9% due to the aforementioned competition in the labour market, particularly for semi-skilled and skilled employees in South Africa. See page 71 for the breakdown of the Petra Group turnover rate for FY 2017. However, we consider this a comparatively low staff turnover rate, on par with those of the mining sector and industry in general, resulting from the creation of a challenging but pleasant work environment and remuneration policies that are designed to attract, incentivise and retain individuals of a high calibre.

### **Developing our people**

Our total investment in training and development (incorporating both employee and community spend) increased 47% to circa US\$8.5 million in FY 2017 (FY 2016: circa US\$5.8 million). The increase is due to the integration of the KEM JV operations, as well

as an increase in centralised training expenditure on management development, bursaries and graduate programmes.

Petra endeavours for training spend to consistently exceed 5.5% of operations payroll per annum and FY 2017's spend represented 7.9% of payroll.

Main areas of expenditure continued to be in-house safety and technical training, technical training outsourced to specialist external training providers, engineering and rock-breaking learnerships, internships, bursary schemes, school support projects and centralised leadership and management development programmes.

The training programmes at Williamson continue to focus on 'on-the-job training', which includes training through regulatory bodies such as OSHAS and the Association for Tanzanian Employers ("ATE"), as well as external learning events, such as equipment manufacturer training courses, safety training or visits to other mining operations. Williamson does not currently have formal bursar and scholarship programmes in place, but it supports those engaged with self-development programmes to a limited degree.

A total of 27,706 instances of legally required training were presented across the operations during the Year (FY 2016: 26,055). These are mostly health and safety-related courses required by legislation and aimed at improving workplace safety.



## **Employee Training and Development**

Of our total training budget, circa US\$7.5 million was allocated to staff training. Employee training and development spans a wide scope of safety training, technical training and a variety of development programmes, both technical and managerial in nature.

### Supervisory, Leadership and Management Development Programmes

Petra's Leadership Development Programme ("LDP") remains an important strategic tool to assist the organisation in the identification and development of employees who display the potential to fulfil leadership positions in the future. At the end of the two-year programme all participants receive a Higher Certificate in Generic Management (NQF Level 5).

The LDP consists of various elements, such as classroom learning, mentoring, coaching and formal technical training, in order to ensure that the graduates can effectively fulfil future leadership positions in the Company.

During FY 2017, 36 employees participated in the LDP (excluding five who withdrew from the course during the Year). The LDP is considered to be an important opportunity to improve management diversity, both by race and by gender, with 28% of participants being female.

In addition to the LDP, and as a response to Petra's commitment to succession planning and the Company's focus on developing and empowering middle and senior management, we introduced the Management Development Programme and Senior Management Development programme of the

University of Stellenbosch Business School in FY 2016. A blended approach was introduced in FY 2017 for these programmes, including both formal training and leadership and management coaching. 11 employees completed these programmes during FY 2017.

A range of supervisory development interventions are also presented, ranging from short courses to skills programmes. It gave us much pleasure to see a 100% pass rate on the Supervisory Development Programme, with 14 employees completing the programme.

#### Learnerships

In South Africa, a learnership is a registered and accredited learning programme which combines practical work experience with academic learning. This mechanism is considered a very important career development opportunity seeing that most qualified learners, both current employees and non-employees, go on to be appointed as artisans or miners within our operational structures.

Learners are recruited from inside and outside the Company. Currently we have learners on a number of programmes ranging from various engineering disciplines (e.g. electrical, fitter and instrumentation) through to rock breaking and metallurgy.

We had 199 learners in FY 2017, of which 83 were engineering related, 26 mining related and 90 participating on a part-time basis in the field of metallurgy.

## Celebrating our LDP candidates - meet Daniel Phiri



Born in the Southern region of Malawi, Daniel Limbani Phiri matriculated in 2006 at the Chihame II Community Day Secondary School of Nkhata bay. Beginning his career in the mining industry as a fitter assistant, in May 2007 he decided it was time to change and focus on education and training. Daniel obtained the National Diploma in Teaching at Karonga Teachers' Training College in 2008 and during his studies he also taught at Limba Private Primary School in Malawi.

In 2009, Daniel moved to South Africa and began working for Petra in 2010 at the Helam mine,

initially as a support worker. Over the years, Daniel gained experience in various disciplines, from underground production as a trammer and rock drilling operator to a safety representative. Eventually, Daniel became a member of the training department and obtained his Assessors Certificate as a training instructor in a very short time. This achievement enabled Daniel to be an effective trainer, and he was transferred to Kimberley Underground in 2014 to work as a training instructor before being promoted to an assessor. He obtained his OD ETDP Level 4 in October 2016 and was promoted to Safety Training Officer in November 2016.

Daniel joined the LDP in July 2015, in order to provide him with the tools and techniques to be an effective leader and active team member. His communication and interpersonal skills are excellent, and have enabled him to build good relationships with colleagues and leaders, while he is also a highly motivated, reliable and creative individual who understands the importance of teamwork in achieving common goals.

"The LDP gave me an in-depth understanding that my success as a leader is not about my own output, but about others as well. My success in the LDP is hugely dependent on the support, assistance and guidance of my mentor, Mr. Riccardo Popham," says Daniel.



## Employee Training and Development continued

#### **Study Assistance Scheme**

Petra provides a Study Assistance Scheme, which is available to support employees to obtain tertiary qualifications or other training relevant to their current positions or positions that they can reasonably be expected to hold in the future.

The objectives of this scheme are to not only promote employability at the end of a career in mining, or in the event of mine closure, but also to provide employees with the opportunity for career progression, thereby qualifying the employee to apply for alternative positions in the Company. Assistance is provided in the form of a service obligation, an interest-free loan or study leave. A total of 87 employees were supported by this scheme in FY 2017.

#### Portable skills training for employees

One of the issues facing employees at our operations is the portability of their skills, i.e. their skills do not allow them to enter self-employment at the end of their careers or at mine closure. Our South African operations therefore plan and budget for training to equip employees with portable skills, such as mechanical repairs, electrical, welding and cutting technology, business skills, carpentry and a number of computer training modules.

A new addition to the courses offered was the opportunity for employees to qualify for their driver's licences, without which their opportunities for career progression and self-employment are limited.

Although employee commitment to portable skills training has often proven to be low in the past, the number of employees entering such training programmes increased significantly to 265 employees in FY 2017 (FY 2016: 154).

#### Adult Education and Training ("AET")

We make it possible for all South African employees who want to improve their literacy and numeracy skills to do so via our AET programme, (previously referred to as Adult Basic Education and Training). AET is provided free of cost or obligation to all learners and is implemented through the use of multimedia computer-based training or facilitated learning via facilities available at all of our South African operations.

In total the AET facilities were used by 105 enrolled learners in FY 2017, including 13 community members. Read more about the education and training opportunities we provide to our local communities on pages 53 to 54.

Williamson commenced the provision of AET for the first time in FY 2017 and the initial reception has been positive.

Read about the Petra Diamonds Graduation Ceremony 2017, which celebrated and recognised many of the graduates who have passed through the many development programmes within the Company, on page 13 of our 2017 Annual Report

## Celebrating our LDP candidates - meet Lizelle van der Westhuizen



Lizelle van der Westhuizen was born and raised in a small town around the Vaal Triangle of South Africa. Lizelle initially pursued her love of fashion by obtaining her National Diploma in Pattern and Clothing Construction in 1997. She then further developed her creativity and challenged her business and management skills by opening her own florist in Rustenburg.

However, her career took a different turn after she and her family moved to the Northern Cape, and Lizelle decided to follow her husband into a role in the mining industry at Koffiefontein.

Her road to success started when she was offered a temporary position in the Sort House and with hard work and dedication she was promoted to Sort House Controller. During her time in the role Lizelle attended various Diamond Identification and Evaluation courses and, given her strong performance, the Mine Manager suggested she join the LDP.

The LDP taught her to believe in herself and her team as she learnt to think of herself as a leader. Thinking about the LDP, Lizelle remembers the deadlines and struggles, but also the friends she made along the way and the self-confidence that she built, which are what she treasures most about the experience.

Lizelle's progression would not have been possible without the help of mentors and her coach, who believed in her and enabled her to leave her comfort zone. Lizelle believes she still has a long way to go, but is already on her way to reaching her goals with what she has achieved.

"The LDP has given me self-confidence, knowledge and skills that will continue to benefit me throughout my professional career," says Lizelle.

## Diversity

Petra recognises the importance of diversity, given numerous studies have identified the benefits to business of more diverse teams when it comes to improved problem solving and decision making.

#### **KPIs**

17%

OF THE WORKFORCE ARE FEMALE

43% OF PETRA'S INTERNS ARE WOMEN

28%

OF LEADERSHIP DEVELOPMENT PROGRAMME CANDIDATES ARE WOMEN



## Sustainable development goals





## **Key achievements**

- Considerable increase in attendance at diversity management training sessions across all levels at the South African operations.
- Diagnostic research on diversity and transformation was carried out at all of Petra's South African operations and its head office in Johannesburg.
- Petra's Women in Mining Committee participated in industry events to engage on gender diversity issues.

- Continued challenges in attracting women into the mining workplace.
- Competition in the mining industry for diversity candidates at all levels of management.



## **Equality and Equity**

Petra believes that diversity is an important business benefit, allowing for a broad range of views, experience and backgrounds to be drawn upon.

As such, we have a policy of no tolerance to discrimination on grounds such as gender, race, ethnic origin, colour, nationality, marital status, disability, religion or sexual orientation. We are committed to fair employment practices, meaning that these criteria are not used to discriminate against individuals, and this is reflected in equitable remuneration scales and benefits.

In South Africa, the Broad-Based Black Economic Empowerment ("BBBEE") legislation, which includes employment equity, is regarded as one of the strategic Government imperatives in dealing with the legacy of apartheid. Compliance with this legislation, as well as with the measures to this effect prescribed in other official documents such as the Mining Charter, is therefore mandatory.

We regard employment equity, which is aimed at representative diversity in the workplace, not only as a mandatory measure that needs to be complied with, but as a moral and business imperative, due to the benefits that well managed diversity brings. This, as a principle, is reflected in our Code of Ethical Conduct, as well as our Disciplinary Code, and Petra's employment policies prohibit any kind of unfair discrimination.

Employment Equity Committees continue to meet regularly to monitor the implementation of our Employment Equity Plans, which detail the identified barriers to equitable employment and specify affirmative measures to be implemented by each operation. The mines also submit their Employment Equity Reports annually to the Department of Labour as prescribed by law.

Even though 'transformation' is a regulated compliance issue in South Africa, the Company views it as the right thing to do and always strives to go beyond compliance requirements. Petra has Employment Equity Plans at all its South African operations, with specific targets regarding HDSAs and Women in Mining, where managers are compelled to comply with the Employment Equity Plans in order to address 'transformation'.

Petra held five days of intensive diversity management training sessions in FY 2017 across all levels at its South African operations and attendance increased considerably when compared with the previous year, with a total of 491 employees participating. The aim of this training is to raise awareness about issues pertaining to diversity in the workplace and to empower management and employees with the necessary skills to effectively deal with diversity matters, as well as embrace differences within our working environment.

As part of our partnership with the University of the Witwatersrand Centre for Diversity Studies ("WiCDS"), aimed at raising awareness of diversity issues amongst management and overcoming any shortcomings in our support and implementation of diversity throughout the Group, diagnostic research on diversity and transformation was carried out at all of Petra's South African operations

## Breakdown of gender diversity across the Group

	Men		Women		Total
	FY 2017	FY 2016	FY 2017	FY 2016	Number
Board	86%	87%	14%	13%	7
Senior Management	97%	94%	3%	6%	39
Management	81%	82%	19%	18%	255
Employees	83%	82%	17%	18%	5,306
Total	83%	82%	17%	18%	5,607

and its head office in Johannesburg in FY 2017. The main purpose of the research was to identify key themes arising from the diagnostic study of diversity and transformation.

The research was based on individual interviews as well as focus groups at all operations. In order to be respectful and to enable participants to answer honestly, the condition of anonymity and confidentiality was upheld and all identifying features of those who participated in the research were removed. After the research had been carried out, the consolidated report was forwarded to all stakeholders for their review in order to make any necessary changes to the focus or approach of diversity training management sessions.

Whilst not subject to the same regulation and legislation as the South African operations, Williamson in Tanzania has a policy to promote equal opportunity

and to eliminate discrimination in the workplace. Williamson also applies affirmative action measures consistent with the promotion of women in mining, particularly during the recruitment process.

The Company has procedures in place to ensure that cases related to discrimination can be reported appropriately. During FY 2017, seven cases relating to discrimination were raised by one of the representative trade unions. Upon further investigation, the allegations were found to be related to misconceptions and Petra therefore was able to address the matters fully with the trade union concerned and the incidents are no longer subject to action.



## **Encouraging Women in Mining**

Petra is committed to encouraging women in mining. The Company therefore actively pursues the appointment of women at all levels of the business, as well as the development of women to fill more senior positions. Petra's overall objective is to achieve true equity by affording women the appropriate training, development and progression opportunities within the organisation across all job levels.

Petra has a number of initiatives aimed at developing women into managerial positions, such as the LDP, which has since its inception focused on the advancement of women (28% of current participants are female). We are focused on affording women an equal role as part of the next generation of Petra employees and as a result 43% of our interns, 33% of our engineering learnerships, 31% of mining learnerships, and 26% of our bursars in FY 2017 were female.

## Women in Mining Committee ("WIM Committee")

Petra's WIM Committee was formed with the aim of creating a platform for women at Petra's South African operations to share experiences, identify challenges in the workplace and promote development opportunities.

The WIM Committee is tasked with reviewing Company policies and procedures, with the goal of attracting and retaining female representation in the Group, as well as providing input and recommendations to management on issues relating to women. The WIM Committee meets every quarter and provides input and feedback to the Petra Group HSEO Steering Committee.

## Case Study - Petra attends the Leadership Development for Women in Mining conference



In February 2017 a group of women from Petra attended the Leadership Development for Women in Mining conference in South Africa, aimed at empowering women working in our industry.

The focus of the conference was on providing women with the necessary information to understand the environment in which we operate, as well as legislative changes which are currently being carried out and how these will affect working conditions for women going forward. The conference also focused on the importance of investing in the skills base through training and development.

Attendees considered the conference to be invaluable due to the level of detail provided on each subject discussed, as well as the opportunity it provided to engage with subject matter experts on issues that are relevant to Petra's operations. The conference also provided the opportunity to network with other women in the industry who have insights into different mining technologies and systems and how these could be used to enable women to become more involved in the mining industry.

One of the highlights of the conference was a presentation given by Petra on the Company's Enterprise Development Programme and how it is changing the lives of women in mining communities. It is very encouraging to see the positive impact Petra is able to have on its local communities in this regard.

The conference also gave participants hope for the future of mining by reinforcing the notion that mines are places for women as well and should not just be considered a 'man's world'.

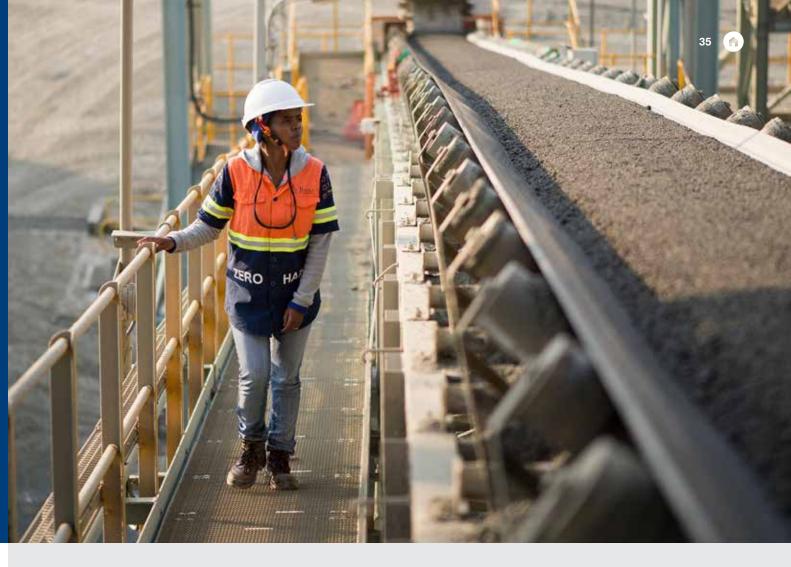
## Labour Relations

Failure to prioritise and manage labour relations could significantly impact the Company's performance.

**KPIs** 

71%
PERCENTAGE OF WORKFORCE
WITH UNION MEMBERSHIP

NUMBER OF STRIKES BY PETRA EMPLOYEES IN FY 2017



#### Sustainable development goals





## **Key achievements**

- ► No employee industrial action experienced in FY 2017 at Petra's operations.
- Continued focus on employee and union communications.
- Unification of Petra people through sports.

- ► The labour relations climate in South Africa is notably volatile and can be influenced by political factors.
- Delays experienced in the construction of the new Cullinan plant as a result of contractor industrial action.
- Labour disruption was experienced post-Year end at three of Petra's South African mines prior to the finalisation of a new three-year wage agreement.



# Our Approach

Stable labour relations is essential to our productivity and the delivery of our strategy. We therefore place great importance on this area of the business, which is impacted by company culture, fair remuneration and effective internal communications.

#### **Union representations**

We respect our workforce's right to exercise freedom of association and collective bargaining, regulated by our Recognition/Collective Agreement, across all our operations. Any union that has achieved sufficient representation in the workplace may request recognition. Union membership across our operations represents 71% of the total workforce.

Petra has aligned its principles with the Internationa Labour Organisation Declaration on Fundamental Principles and Rights at Work, as well as with the relevant legislation in the countries in which we operate, covering areas such as minimum conditions of employment, maximum allowable hours of work, collective bargaining and dispute resolution. This includes compliance with South Africa's Labour Relations Act (Act 66 of 1995), which regulates collective bargaining and outlaws any form of child forced labour, and the Employment Equity Act (Act 55 of 1998), which prohibits any kind of unfair discrimination.

Our employees in South Africa belong to four unions: the National Union of Mineworkers ("NUM") (60%), which represents the majority of our workforce, Solidarity (4%), the United Association of South Africa ("UASA") (6%) and the National Union of Metal Workers of South Africa (1%). 29% of our South African workforce is not affiliated with any union.

In Tanzania, approximately 48% of our employees are affiliated with the National Union of Mines and Energy Workers of Tanzania ("NUMET") while the Tanzania Mines, Energy, Construction and Allied Workers Union ("TAMICO") represents 32% and the remaining 20% consists of management and expatriates.

The Company has grievance processes which are regulated by our Recognition/Collective Agreements and Group Grievance Procedure. These processes are accessible to all employees, with final recourse to the CCMA in South Africa or with the Commission for Mediation and Arbitration ("CMA") in Tanzania.

We believe that dialogue is the key to management of labour relations and we are therefore focused on continuing to communicate openly with our employees, trade unions and local community representatives in order to resolve concerns as and when they arise. An important part of this approach in FY 2017 was the holding of team building and relationship building by objectives sessions at three of our mines (Finsch, Cullinan and KEM JV) in South Africa. These sessions were held between mine management and the leadership committees of the recognised trade unions in order to discuss and resolve ongoing issues that affect their relationship. We also provided economics training for union representatives in order to empower them with business knowledge.

In South Africa, the period of notification relating to operational changes varies depending on the nature of the change in question and the parties involved in the consultation process. However, the minimum notification provided by legislation ranges

from one week to one month and is governed by the Labour Relations Act. Certain changes, for example the implementation of continuous operations, are covered in collective bargaining agreements (three months' notice in this specific case).

In Tanzania, the period of notification depends on the urgency of the business situation with regards to the impact on the workforce and/or the Company.

In Botswana, the minimum notification period can be between one week and one month and is not specified in agreements.

#### Industrial action

In FY 2017, Petra did not experience any industrial action from its employees at any of its mines, but the contractor carrying out the construction of the new Cullinan plant did experience such action in December 2016/January 2017, which affected the completion dates of the project.

However, further to the completion of its prior three-year wage agreement related to its South African operations at the end of June 2017, some labour disruption was experienced in September 2017 prior to the finalisation of a new three-year wage agreement. While it was encouraging that there was no such disruption at the Cullinan mine, the Finsch, KEM JV and Koffiefontein operations were impacted. Fortunately the disruption was contained to a period of less than two weeks due to the concerted effort of Petra's top management in terms of engagement with all levels of NUM in order to find a resolution

The finalisation of a new wage agreement on 2 October 2017 for the Company's South African mines for the three years to end June 2020 bodes well for a more stable environment during this period; however, Petra remains highly committed to ongoing engagement with its employees and representative unions in order to optimise labour relations going forward, and has included 'Further develop and improve employee communication and engagement' as a key strategic objective for FY 2018 (as disclosed in our 2017 Annual Report on page 22).

#### **Engaging with our employees**

Petra believes that effective communication is at the core of all sound relationships and therefore a high premium is placed on continuously improving all types of communication internally and externally.

Petra has established a Communication Management Policy and Procedure Framework that is built on the principles of objective-based communication and recognition of the various principles that determine communication effectiveness. As a result, the Company has put in place the necessary communication systems and channels to facilitate execution of these principles over the past few years. These include written as well as electronic media, a system of face-to-face meetings at different levels of the Company, and procedures that govern the frequency and nature of these.



# Our Approach continued

#### Engaging with our employees continued

At each of the operations, the monthly management brief is regarded as the primary vehicle for regular, official communication to update employees on progress in the respective areas of their operation, including, but not limited to, health, safety and environment, production, finance, human resources, and policy and procedure updates. General Managers also use this as a vehicle to both provide guidance on what is required to ensure success at the operation, and to update employees on developments in the Group and in the macro-environment that could impact on operations.

Dissemination of the management brief takes place via a cascading system of face-to-face meetings, where the brief is read and explained to employees, who are given the opportunity to discuss the content and ask relevant questions.

Petra has just completed a survey to explore the effectiveness of our internal communications practices. The survey was aimed at canvassing opinions on the efficacy of monthly briefings provided by mine managers, special briefs and line manager meetings. It also gives employees the ability to review two-way communication between employees and their supervisors and explores their preferred methods of receiving information and communicating with the Company. Results of the survey have been collected and will be reviewed in FY 2018.

#### The Itumeleng Petra Diamonds Employee Trust ("IPDET")

The IPDET is one of our BEE partners and therefore holds a direct ownership interest (12%) in each of our South African operations. This provides the opportunity for all of our South African employees to directly share in the successful development of the mine in which they work.

The IPDET is expected to be a compelling motivator to drive enhanced employee productivity and accountability.

While Petra has not been free cashflow positive for some years now, due to the high level of capital being invested in the Group's expansion programmes, the Company still made arrangements for the IPDET to start receiving annual distributions from FY 2014. Each member of the IPDET receives the same amount regardless of their position in the Company.

#### Accommodation and living conditions

In accordance with the South African Mining Charter, Petra has developed an accommodation strategy which is organised at an operational level. Each mine has its own policy regarding the accommodation it provides.

In Tanzania, Williamson continues to provide accommodation for most of the permanent employees and some contractors, and in Botswana, tented field camps accommodate employees on field operations.

# Employee unification through sport



Above: The Finsch rugby team celebrates retaining the cup. Right: Proud medal winners.

Sport has the power to change and inspire people, regardless of their age or background, and therefore Petra has found it to be a positive way of encouraging cohesion and co-operation in our workforce.

Using sport as a tool to celebrate diversity and achieve collaboration amongst our employees, Petra once again hosted a successful Annual Sports Tournament in 2017. This was the third such event organised by the Company and was held at the AR Abass sports ground in Kimberley.

All operations were represented in the sports games, which included soccer, rugby and netball, with the exception of KEM JV which does not have a rugby team. A soccer masters team from Petra's head office in Johannesburg also attended the tournament and played against the masters from the operations.



Sport has the power to change the world; it has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand. Sport can create hope where once there was only despair. It is more powerful than government in breaking down racial barriers."

**Nelson Mandela** 

# Environmental Management

Managing our environmental impacts is a priority for Petra, and in so doing we align our interests with those of our local communities.

**KPIs** 

44% LESS WASTE GENERATED IN FY 2017

31% PROPORTION OF WASTE RECYCLED IN FY 2017

100%

NUMBER OF SUPPLIERS SCREENED

USING ENVIRONMENTAL CRITERIA

10,255 ha

#### Sustainable development goals









#### **Key achievements**

- No major environmental incidents reported for seven consecutive years.
- ▶ Significant improvement in waste management and awareness.
- ► New Group ecological management standard developed with the aim to promote biodiversity and aid in carbon sequestration.
- Introduction of Land Function Analysis for on-site rehabilitation, with the end result that certain sites in Kimberley were assessed to be fully rehabilitated.

#### **Key challenges**

- Illegal mining activities damaging previously rehabilitated areas.
- Poor management and maintenance of local Government-owned infrastructure.
- Negative perceptions of the environmental impacts of diamond mining.



# Managing Our Environmental Impacts



We recognise that our value emanates from the natural world, therefore protecting the environment in which we operate is fundamental to how we run our business

Environmental management is the responsibility of every employee. The principles of pollution prevention and continual improvement are integrated into our strategic planning, management systems and daily activities. We also promote environmental awareness amongst our employees and the communities in which we operate.

The Group HSE Policy is the guiding document for setting operational performance objectives and focuses on the following key areas:

- continual identification, elimination or control of environmental risks;
- the employment of appropriate assessments when planning new or modified facilities, processes or any other mining projects;
- continual focus on the reduction of the environmental footprint of our operations and related activities by:
- optimising the consumption of non-renewable resources, such as water and electricity, to guarantee the sustainability of our operations;
- implementation of the waste hierarchy (avoid, reduce, reuse, recycle, treat and dispose);
- endeavouring to protect and restore natural biodiversity and sensitive environments;
- identifying and undertaking specific programmes to reduce the carbon footprint of our business; and
- concurrent rehabilitation of mining areas, where practicable, in order to ensure a sustainable end land use.

Various Group strategies have been developed as a result of this policy, including: water management, mine closure and rehabilitation, ecological management, and climate change adaptation.

At an operational level, an Environmental Management System ("EMS") is in place for each mining licence. This sets out the detailed processes for the identification of environmental risks and implementation of action plans to mitigate the impacts of our activities. All our operations, with the exception of one, are certified to the international environmental standard ISO 14001:2004 through the British Standards Institution ("BSI"). All of these operations are currently involved with the migration of the EMS to the updated ISO 14001:2015 standard, to be fully implemented by August 2018.

#### Risk management

Through our annual risk analysis processes, we identify significant environmental risks that provide focus for implementing or improving the required mitigation controls.

Potential key risks caused by our operations:

- Impact on water resources, both through inefficient use and potential contamination of natural water sources: read about our focus on this area on pages 47 to 49.
- Inefficient energy consumption from non-renewable sources: read about our Carbon Reduction Strategy on pages 43 to 46.
- ► Endemic habitat change: read about our approach to management of biodiversity on pages 40 to 42.
- Permanent changes in topography: read about our rehabilitation and closure plans on pages 41 to 42.

 Changes in land use and land capability: read about our rehabilitation and closure plans on pages 41 to 42.

#### Key risks to our operations

As part of Petra's process to migrate to the ISO 14001:2015 standard, a number of key risks to the Company have been identified. These are:

- Illegal mining activities damaging previously rehabilitated areas. This is specifically relevant in the Kimberley area where illegal miners are entering already rehabilitated areas.
- ➤ Poor management and maintenance of local Government-owned infrastructure. When municipal operated waste water treatment facilities are mismanaged, untreated sewage effluent can enter operations through storm water trenches; the responsibility is then with the mine to undertake the clean-up.
- Negative perceptions of the environmental impacts of diamond mining. Negative perceptions come into play when new projects are applied for that require authorisation from Government agencies and public participation processes. This is due to the poor reputation of other commodities such as coal and gold mining, especially where they cause acid mine drainage. Diamond mines therefore have difficulty in convincing the authorities and the public that our operations do not use harmful reagents and are therefore much less harmful to the environment.
- Climate change. Climate change is a key risk to the Company, especially in how this could impact the availability of water to our operations. Petra has for the first time put a climate change adaptation strategy in place, which it will continue to develop in FY 2018 and beyond. Read more about our approach on page 46.



# Managing Our Environmental Impacts continued

#### Stakeholder engagement

Petra has processes in place to engage with its stakeholders on environmental matters, including the handling of issues raised by its local communities. The public participation processes in South Africa for obtaining environmental authorisations also make provision for direct communication with communities where their views and needs are included in management programmes.

#### Supplier environmental assessment

Petra uses pre-qualification questionnaires and site inspections (under special circumstances) to qualify suppliers before contracts are finalised. The environmental criteria used during qualification includes compliance with relevant environmental legislation and certification of their EMS.

All supply chain activities are part of the EMS of each operation and its risk identification criteria as per ISO 14001. Special attention is given to suppliers of hazardous chemicals and those which deliver high risk environmental services, such as waste management and disposal. Incidents that may lead to environmental impact are reported via the normal on-site incident reporting processes. Copies of significant incident reports are distributed to suppliers for their information. Where costs are incurred for clean-up or remediation, these are recovered from the supplier. The mechanism for cost recovery and initiation of action against suppliers are described in detail in every contract.

During the period under review, no supplier contract was terminated as a result of environmental impact and no significant impact occurred as a result of supplier action.

#### **Environmental incidents**

We aim to minimise environmental incidents at all our operations and have put in place processes to manage any incidents which may occur as effectively as possible. We classify incidents according to their severity, ranging from minor to major. Incidents are recorded and managed on an ongoing basis and are only recorded as closed once all allocated actions have been addressed and the effectiveness of the corrective actions have been verified.

For the past seven years, no 'High' or 'Major' environmental incidents were reported at any of the Group's operations. A list of environmental incidents in FY 2017 can be found on page 72.

#### Spillage management

We define a significant spillage as any chemical spill that meets the following criteria: 'The impact lasts longer than one year, will affect an area outside of the mining area, and the receptor area includes some sensitivity (vulnerable habitat/species).'

According to this criteria, there were no significant spillages at our operations during FY 2017.

#### Waste management

The effective management of waste is an environmental priority for Petra. The Group is consistently implementing processes to assist with waste management and disposal. Waste management objectives and targets are set for each operation, with these KPIs regularly monitored through internal assessments and through external audits as part of ISO 14001 certification. We optimise the recycling of waste generated at our operations and strive to prevent wastage as part of the international waste hierarchy.

As a result of an improvement in waste management awareness at all operations, the total amount of

waste generated by the Company decreased 44% to 14,407t (FY 2016: 25,723t). Of this total, the proportion of waste recycled by Petra increased significantly from 20% in FY 2016 to 31% in FY 2017.

In line with this trend, 9,868 fewer tonnes of non-hazardous waste were disposed compared to FY 2016 and the amount of hazardous waste to be disposed of reduced by 70% as waste separation at source was improved. See page 73 for a breakdown of waste disposed, recycled and incinerated.

Petra only uses reputable waste handling companies that are vetted for legal compliance prior to awarding tenders. Most of the waste handling companies are ISO 14001 certified, which adds to the level of assurance provided that waste is handled and disposed of in a responsible manner. All on-site waste handling areas are audited internally as well as externally as part of the mines' ISO 14001 management systems. Off-site handling and disposal sites are inspected on an ad hoc basis.

Petra adheres strictly to the Basel Convention in that no industrial or hazardous waste is shipped or transported over international borders as part of the Company's operations. All waste generated by the Company is recycled or disposed of within the country of origin.

The Company's mineral waste areas (coarse tailings and slimes dams) are planned, operated and maintained according to the country of operation's legislative framework. In addition, external professional engineers are appointed to monitor the safety of these facilities, according to international best practice. Each site has a unique operating procedure that is implemented with the utmost care to reduce risk and protect the communities downstream of the facilities.

#### **Materials**

The liberation of diamonds requires a process that involves mining, crushing, washing and screening of ore, followed by the recovery and sorting of concentrates, whereafter the raw product is shipped off-site for further classification. During this process, the minimum raw materials are used, with the largest inputs being:

Non-renewable resources:

- energy (in the form of fuel and electricity); and
- water.

Renewable resources:

- construction steel:
- lubricating oils; and
- ▶ media separation material (Ferro-Silicon).

No toxic chemicals are produced as a by-product of the diamond mining and processing operations. No packaging material is relevant for the shipment of the Company's primary product.

#### Biodiversity and land management

We recognise that our activities have the potential to significantly affect the biodiversity of the regions where we operate and therefore our aim is to monitor these impacts with the goal of protecting our local habitats.

Biodiversity impacts associated with mining and exploration include: habitat destruction, vegetation clearance, soil and water pollution, introduction of invasive species and permanent change to the original ecological processes. We therefore monitor for such impacts at set frequencies during and after operations, and can therefore carry out mitigation strategies only if the impact could not be avoided.



## Biodiversity and Land Management

None of our producing mining operations are located in or adjacent to conservation areas. Prior to any greenfield development, Petra evaluates each area to better understand the biodiversity and the nature of the impact that our operations may have. Approximately 3,577km² of land under exploration licence by Petra is located in Botswana's Central Kalahari Game Reserve ("CKGR"). This area is noted as sensitive and special measures are in place to protect the fauna and flora. However, Petra's exploration activity in the CKGR is at a relatively early stage and there is no indication at this point that it will lead to producing mining operations.

As part of Petra's commitment to conserve our biodiversity, protected habitats are established and maintained for local vegetation and wildlife. Our operations have protected wildlife areas totalling more than 10,255 ha, including Williamson, which maintains a large forest reserve of some 906 ha, thereby protecting the indigenous biodiversity unique to the Shinyanga province in Tanzania.

At all of Petra's operations, the area protected is either equal to or greater than the area disturbed (as demonstrated by the graph to the left), except at KEM JV where large areas have been used for storing the historic tailings dumps (the tailings resources total 140 Mt). Most of these areas are in the process of being reclaimed and remediated.

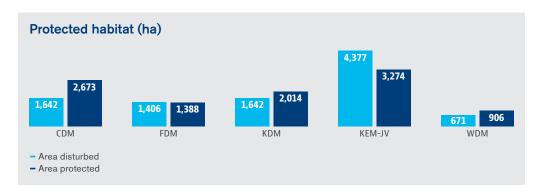
These protected areas are managed according to a new Group ecological management standard that was developed with the aim to promote biodiversity and aid in carbon sequestration. Based on the international mitigation hierarchy, Petra's ecological management standard focuses on (in order of preference) the avoidance, minimisation, restoration and offset and compensation of any impacts. There are currently no offset or compensation projects registered owing to the fact that these

two options are viewed as least desirable and will only be entertained as an absolute last resort.

A number of Red Data List species have been identified in our areas of operation. Where appropriate, protected plants are relocated, or 'no-go' areas are established around species that cannot be relocated, such as the 'Cullinan Ant' colony situated on 1 ha of undisturbed land in the middle of Cullinan's coarse tailings facility.

Programmes are run with international NGOs to assist with research into fauna, such as the Secretary Bird (Sagittarius Serpentarius) programme at Koffiefontein in conjunction with BirdLife Africa, which has been running for the last five years. More recently, work is being carried out to register the Benfontein-Rooifontein-Dronfield complex in Kimberley as an Important Bird and Biodiversity Area ("IBA") and formal provincial Protected Environment.

We are also passionate about raising environmental awareness in our local communities and hold regular awareness events and initiatives. For example, in FY 2017 KEM JV partnered with five local schools, assisting them with the removal of alien and invasive species on their property, and has donated indigenous trees to them.







Above: Didi de Abreu handing over a tree to a proud student from St Patricks' College.

Students from Herlear Primary School with environmental employees from KEM JV.

#### Rehabilitation and closure plans

Petra has implemented a standardised Group-wide approach on concurrent rehabilitation, with the objective of generating a non-detrimental, sustainable solution for the environment and socio-economic state of our communities that are left after mine closure. Progress on rehabilitation schedules is assessed annually by internal and external specialists. Necessary changes to the execution plans are communicated to mine management which is responsible for on-site resources.

The environmental impact from Petra's mining activities is not expected to last long after the cessation of the operations, due to our strategic approach and our commitment to our values at each step of the mining chain. Each project is planned with the end of mine life in mind, creating the potential to reduce double-handling of mining waste and managing impacts timeously before the end of the life of mine ("LOM"). Special measures are put in place to address latent impacts.



## Biodiversity and Land Management continued

#### Rehabilitation and closure plans continued

Rehabilitation budgets are allocated to each operation to address impacts through concurrent rehabilitation activities. Annual closure provision assessments are performed by external specialists to identify shortfalls in the provided funds. These funds are set aside, as per legislation, to cater for post-closure liability. The total rehabilitation and mine closure fund for Petra during FY 2017 was US\$90.2 million

General consensus in the mine rehabilitation community is that it is not possible to reinstate the previous pristine environment after mining has taken place. However, it is possible to restore the productive potential of each site to the benefit of its local communities. Most of our current mining areas were previously used for agriculture, thus having the potential to sustain a community. Care will therefore be taken to reinstate that economic potential, with the most appropriate end land use of each area determined within ten years before mine closure. This is achieved by setting clear rehabilitation and closure objectives for all operations in line with Government-approved closure plans. This will achieve our goal of 'no net loss'.



During FY 2017 Petra introduced the successful monitoring of on-site rehabilitation by making use of Land Function Analysis ("LFA"). The LFA method is internationally recognised as a field-based monitoring procedure, based on recent, cross-disciplinary research, and can be applied to a very wide range of landscape and climate types and a variety of land uses.

It uses visually assessed indicators of soil surface processes that gauge how effectively a landscape is operating as a biophysical system, monitoring surface hydrology, rainfall, infiltration, run-off, erosion, plant growth and nutrient cycling.

All information is gathered in the field to populate a database, providing intelligence regarding the stability, nutrient cycle and infiltration rate of the specific site. Results can then be compared with other benchmark sites ('undisturbed' areas in approximately the same location and climatic conditions).

In April 2017, LFA surveys were conducted on all of Petra's South African mine sites. The analysis indicated that some of the rehabilitated areas in the town of Kimberley are, biophysically, very healthy, and are even performing better than a corresponding site in the region of Gauteng, which experiences high rainfall. These sites in

Kimberley are also out-performing the benchmark site within Kimberley itself, which is perceived to be pristine. Subsequently, said sites can now be classified as 'rehabilitated', meaning that the financial provisions made by the mine for their immediate rehabilitation can be removed, saving costs in financial guarantees. Furthermore, it removes the need for further action at these sites, such as costly sloping, treatment of substrate or revegetation.

Petra expects to carry out an initial LFA survey at its Williamson mine in Tanzania in FY 2018.

# Climate Change and Energy Usage

Managing energy usage is an operational necessity, given the benefits to the operations of optimised power planning and usage, as well as an environmental prerogative in order to combat climate change.

**KPIs** 

2.9m gigajoules

30.6 kWh/t

643,733 tCO<sub>2</sub>-e

0.03 tCO<sub>2</sub>-e/t

#### Sustainable development goals











#### **Key achievements**

- First year of full reporting of GHG emissions.
- Improved methodologies allowed for more accurate carbon footprint calculations.
- ► Independent verification of GHG emissions reporting according to ISO 16064-3.

#### **Key challenges**

- ► Total Group energy requirements are increasing in line with the expansion programmes in place at each of our operations.
- Energy efficiency unit per tonne decreased by 6.5% due to production volumes for the Year being lower than expected.



# Our Approach

# Petra's climate change objectives

- ▶ Improve on the efficient use of energy.
- Implement adaptation measures as relevant to operational areas.

We recognise the growing importance of climate change, both to our Company and to our stakeholders. By better evaluating and understanding the risks and uncertainties that climate change represent to our business, we will be able to manage our assets in the most economically and environmentally sustainable manner possible.

As driven by the unprecedented Paris Agreement and the global call to action from the Sustainable Development Goal on 'Climate Change', we are supportive of the onus on industry to be actively involved in projects and programmes to reduce the effects of global warming and climate change, as caused by human activities. We believe that amidst present policy uncertainty and future carbon constraints, the continuing development and implementation of a comprehensive climate change framework is not only crucial to our Company's competitive position, but is also an essential component of our commitment to be a leader in the diamond mining industry.

Our business needs to be able to adapt to the changing circumstances as can be expected from global warming. In this context, adaptation means anticipating the adverse effects of climate change and taking appropriate action to prevent or

minimise the damage it can cause, or taking advantage of opportunities that may arise.

Our carbon reduction strategy is focused on the following goals:

- increase economic viability through energy efficiency;
- improve the security of energy supply by decreasing dependence on non-renewable energy while evaluating ongoing developments in renewable energy technology;
- invest in the development of biophysical carbon sequestration strategies;
- implement adaptation measures as relevant to operational areas; and
- improve stakeholder awareness and education, in order to promote environmental sustainability.

Petra has for the first time in FY 2017 reported fully on GHG emissions. This has resulted in some anomalies in comparison from year to year.

#### **Energy consumption reduction strategy**

Diamond mining is less energy intensive than other types of mining, as evidenced by the fact that energy consumption (specifically electricity) only represented 13% of total cash on-mine costs in FY 2017. However, it is recognised that non-renewable energy sources are finite and likely to become increasingly scarce over time.

Our short to long-term strategy is therefore to reduce our reliance on fossil fuel energy resources and minimise overall energy usage wherever possible. We do this by continuously evaluating opportunities

to implement initiatives to reduce energy consumption and by designing all new projects to be as efficient as possible.

The electricity conservation projects initiated during the last few years continued in FY 2017. Some of the more successful projects include:

- continuous roll-out of high efficiency electrical motors at all the operations;
- optimisation of the control of all the power factor correction banks at all operations to ensure optimal performance;
- load management carried out through the real-time energy management system, monitoring the maximum demand in the control room to ensure that systematic plant start-up and hoisting during peak times is limited to a minimum;
- control of all ventilation fans from a central control room on the mine;
- pump control on all pumps to ensure pumping occurs at off-peak times;
- variable speed drives on all conveyors that regulate the speed depending on the load;
- motion sensors to regulate lighting in low occupancy areas;
- soft start on all motors of 90 kW and above to reduce start-up currents and thus reduce maximum demand;
- replacement of all incandescent and fluorescent lights with LEDs;
- correct sizing of electrical motors to ensure that they operate in the high efficiency band; and

 renewable energy (mainly solar power through photovoltaic panels) is used in limited projects as tests for a potential roll-out post FY 2020, specifically in office and change-house applications.

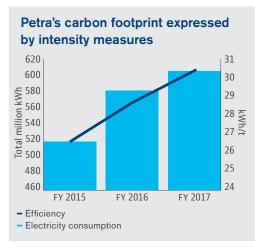
Petra currently does not have an energy reduction target in place but is reviewing this in FY 2018 with the aim to introduce one in due course.

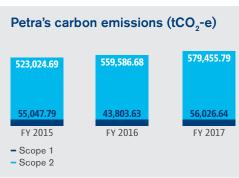


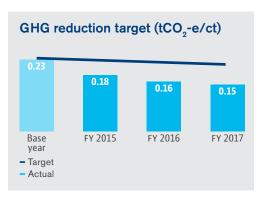
The new mill plant at Cullinan will contribute to more energy efficient production.



# **Energy Management**







#### **Energy consumption**

Our energy consumption is divided into two categories: electricity and fuel. Electricity consumption relates to direct consumption on-mine as supplied by Eskom in South Africa and TANESCO in Tanzania. Fuel consumption figures are based on diesel used by on-mine earth-moving fleets as well as diesel used for electricity generation.

Petra's total energy consumption for FY 2017 rose 7% to 2.9 million gigajoules (FY 2016: 2.7 million gigajoules), further to the large number of expansion projects underway and the updated calculation methods in line with total carbon reporting.

Our electricity consumption was 4% higher than the previous reporting period due to our expanding mining footprint, but energy efficiency initiatives helped to contain the increase from rising in proportion with our higher production (which rose 8% for the Year). Electricity efficiency of 30.6 kWh/t in FY 2017 deteriorated 7% (FY 2016: 28.7 kWh/t), due to the aforementioned increased mining footprint, coupled with lower than expected tonnage throughput for the Year.

Petra's fuel consumption (petrol, diesel and jet fuel) increased 122% to 1.4 million gigajoules (19,210,827 L) in FY 2017 (FY 2016: 0.6 million gigajoules (16,374,336 L)). The change is attributed to an updated method of calculation, using the Intergovernmental Panel of Climate Change ("IPCC") values, as well as including jet fuel (163,977 L) from the Company aircraft for the first time.

#### **Carbon emissions**

During the Year, Petra updated the methodology and systems by which it calculates the Company's carbon emissions in order to move to reporting of full GHG emissions and to comply with new carbon tax legislation in South Africa. The new methods for calculation are completed based on the Greenhouse Gas Protocol using global warming potential rates as supplied by the IPCC 2006 Guideline. This has seen the restatement of our emissions data for FY 2016, though note that the restated figure for FY 2016 still does not represent the Company's full GHG emissions as per the new methodology; however, it was not possible to restate the data for years prior to FY 2016.

In FY 2017, the direct carbon emissions linked to our operations increased 5% to 635,482 tCO $_2$ -e (FY 2016: 603,390 tCO $_2$ -e), in line with the higher energy usage for the Year. The graph to the left illustrates the history of direct carbon emissions (scope 1 and 2 activities only) from Petra's operations since 2013, though note that historic data prior is not directly comparable to FY 2017 due to the revision in reporting methodology.

Petra is also refining the methodology to accurately calculate scope 3 (other indirect) GHG emissions. Current calculations include waste disposal, business travel, diamond transport, water treatment and paper consumption, but does not yet include the impact of employee commutes. Based on this, scope 3 emissions decreased 5% to 8,250.54 tCO<sub>2</sub>-e in FY 2017 (FY 2016: 8,701.07 tCO<sub>3</sub>-e).

Petra's carbon intensity per tonne (total tCO<sub>2</sub>-e per production tonne) for scope 1 and 2 activities remained unchanged during the Year at 0.03 tCO<sub>2</sub>-e/t.

We are targeting a 1% reduction per annum in our total carbon emissions per carat as measured over a five-year period (2015–2020) from the base year of FY 2013 (when Petra first participated in the Carbon Disclosure Project ("CDP")) and this was again achieved in FY 2017. The graph to the left

shows the trend in reduction of Petra's carbon footprint since the initiation of the reduction target, with out carbon emitted per carat improving from 0.23 tCO<sub>2</sub>-e/ct in FY 2013 to 0.15 tCO<sub>2</sub>-e/ct in FY 2017.

Another indicator used to display carbon footprint between various organisations with different products is to compare the volume emissions with revenue. According to this indicator, Petra's emissions have remained consistently below 0.002 tCO<sub>2</sub>-e per US\$ for the past five years.

#### Verification

In order to test its internal environmental reporting mechanisms, Petra appointed a consultant to conduct an independent verification of GHG emissions reporting according to the principles and requirements of ISO 14064–3 standard: 'Specification with guidance for the validation and verification of greenhouse gas assertions'.

The verification was completed on GHG emissions at the South African operations for FY 2016. The aim of the assessment was to verify whether the scope 1 and scope 2 emissions as reported were accurate, complete, transparent, consistent, relevant and conservatively determined. The verification statement is as follows:

"Petra Diamonds Limited's revised GHG inventory was found to be fairly accurate for its Cullinan, Finsch and Koffiefontein operations. Although the revised GHG inventory is not a 100% accurate, the discrepancies were found within the 5% materiality threshold applied to each scope."

"Sufficient appropriate objective evidence to form an opinion as to whether the GHG assertions for KEM JV were accurate was unavailable."



## **Emissions and Climate Change Management**

# Taking care of our environment



Acknowledging that achieving a greener environment is a moral imperative for Petra as a responsible corporate citizen, the HSE team at Williamson decided to take matters into their own hands through a number of environmental initiatives in the local communities.

In December 2016, the HSE Department decided to get their hands dirty by planting and nurturing over 200 seedlings, thereby encouraging the regeneration of woodland.

The team also joined forces with a group of local villagers and went the extra mile to engage in a controlled firewood harvesting activity. This involved clearing thick forest within the mine's plant area, to obtain firewood for community use.

The team and villagers carried out some brainstorming sessions to decide upon the best use of this cleared forest and came up with an economical option, which was to produce charcoal which could then be sold as fuel to earn money and improve living standards for the local community.

The added benefit of clearing the area was that the mine's appearance also improved.

This proved to be a successful initiative for both the mine and the villagers, who volunteered to assist with the project and were happy to benefit from use of the charcoal in their homes. The mine in turn helped the villagers with transportation for the wood they collected.

This is a great example of joining hands and working together, not just to improve the local environment but also to provide mutual benefit to the local community and mine.



#### Carbon sequestration

Carbon sequestration at Petra is implemented through the maximisation of indigenous vegetated areas. According to research, each hectare of natural vegetation is responsible for the positive sequestration of 300kg of carbon per annum. Thus, the approximate 10,255 ha of protected area under Petra's control results in the sequestration of 3,077 tonnes of CO<sub>2</sub> per year.

#### Significant air emissions

Petra has no significant sources of air emissions. Diamond mining does not involve any chemical process or smelting activities that lead to the generation of nitrous ("NOx") or sulphurous oxide ("SOx") emissions. Non-point sources (i.e. environmental drop-out dust and particulate matter) as a result of surface activities are strictly regulated and annual results are submitted to authorities for evaluation. Petra has never received any directives or fines as a result of excessive air emissions. Furthermore, Petra does not produce, import or export any ozone depleting substances.

#### Climate change adaptation strategy

In recognition of the adverse circumstances that could occur as a result of climate change, Petra has put in place a climate change adaptation strategy, with the aim being to prepare itself for scenarios that include restrictions on the availability of water from surface resources (rivers and dams); and intense rainfall events. Higher rainfall intensity would require improved freeboard at all pollution prevention

facilities and dirty water impoundments. There would be more competition for resources (between industries and local communities) that may lead to reputational risk. The Company is also investigating the possibility to fund feeding schemes and to provide meal supplements to employees in the event that a decrease in the availability of maize/food production in our communities influenced our workforce. Petra will continue to develop its climate change adaptation strategy in FY 2018 and beyond.

#### Reporting to the CDP

Petra has participated in voluntary reporting to the CDP since 2013 and has demonstrated considerable improvement in its disclosure over this period. During 2017, Petra maintained the 'C' level of disclosure, which is in line with industry and region scores.



# Water Management

Our operations are water intensive and therefore Petra is committed to utilising water responsibly and efficiently to ensure the availability of water for our operations as well as local communities.

#### **KPIs**

40,587,452m<sup>3</sup>

2.04m<sup>3</sup>/t
WATER CONSUMPTION PER TONNE

52%
PERCENTAGE OF RECYCLED WATER USED ON-MINE

 $1.55 \text{m}^3/\text{t}$ 

PETRA IS TARGETING A 1.55M³/T REDUCTION IN WATER CONSUMPTION BY 2020

#### Sustainable development goals







#### **Key achievements**

- Water saving initiatives continued across all the operations.
- We pride ourselves on the level of water recycling achieved to date.
- ► Petra works with neighbours and other stakeholders to optimise water usage.

#### Key challenges

- Limiting water use while the operations are significantly expanding production.
- Severe drought conditions in South Africa have adversely affected already water stressed areas around our operations, requiring operational changes to maximise our water efficiency.



# Water Management

# Water management objectives

- Improve water use efficiency.
- Improve percentage of recycled water used in production.

Water is a scarce resource in the areas where we operate and is identified as Petra's most significant environmental risk. Our operations are water intensive and changes in temperature, as may be expected as a result of climate change, will affect the availability of raw water for treatment processes and impact on natural water sources that sustain the communities around our operations.

As part of Petra's strategy on climate change adaptation, preparation for responsible water consumption and improved efficiency projects are in progress.

The severe drought conditions in South Africa experienced in FY 2016 continued into FY 2017, further exacerbating the water stress of our local communities. We responded by putting in place operational changes to maximise our water efficiency.

#### Water consumption

Total water used by our operations in FY 2017 increased by 1% to 40,587,452m³ (FY 2016: 39,217,351m³), further to the expansion programmes in place.

In terms of efficiency, our total water usage per production tonne increased by 4% to 2.04m³/t (FY 2016: 1.97m³/t), due to the aforementioned increased mining footprint, coupled with lower than expected tonnage throughput for the Year.

Petra is targeting a reduction in gross water consumption on a per tonne basis, with a mediumterm objective of 1.55m³/t to be achieved by 2020. We are confident that this consumption per tonne target is achievable for the Group, based on the many efficiencies in both ore-handling and plant processing that are coming to bear, as well as the higher tonnage volumes that will be achieved from FY 2018 onwards.

During FY 2017, the Company consumed 13,993,433 m³/t of 'new water', compared to 19,149,650 m³/t in FY 2016, a decrease of 27%. This is attributed to the large number of water saving initiatives that were implemented at the various operations.

#### Water recycling

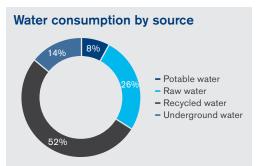
Petra prides itself on the level of water recycling achieved to date. All new projects are designed to be able to substitute either potable or raw water with reused/recycled water from various sources. Besides internal recycling, most operations also utilise treated effluent from municipal waste water treatment facilities. The percentage of recycled water used by our operations has remained above 50% for the past two years.

#### Effluent discharge

Further to the continued drought conditions in South Africa, we put in place operational changes to impound effluent water for reuse in the process. This had the additional advantage that no effluent was discharged from any of the operations during the reporting period.

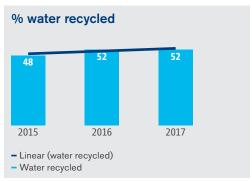
#### Co-operative agreements

We place a high value on our working relationships with external parties such as companies operating in adjoining areas to our mines and local municipalities. These relationships aim to improve the management of shared issues such as resources consumption (water) and community involvement. We have such working agreements in place at Finsch, KEM JV and Williamson.



These volumes are direct measurements and controlled by on-site water balances.







# Water Management continued

# Water saving project at Koffiefontein

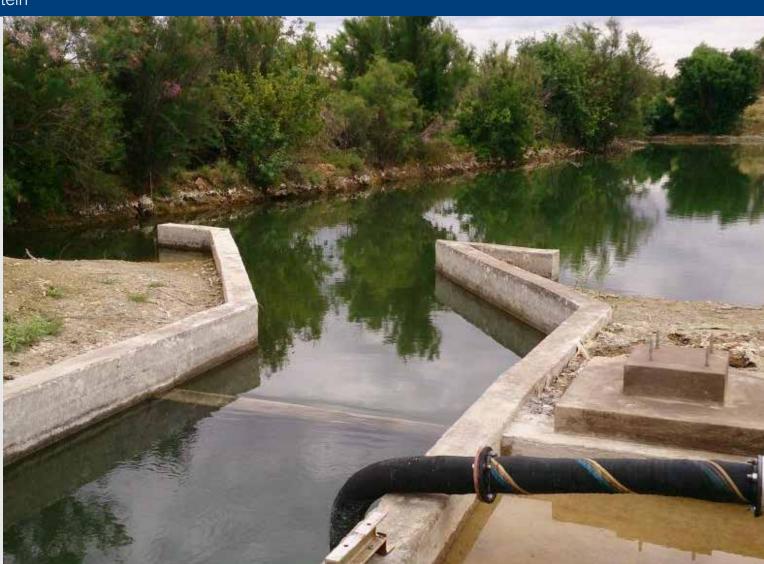
As an 'early adopter' and initiator of good environmental practice, Petra has made a commitment within its EMS at Koffiefontein to optimise the consumption of resources such as raw water. This commitment aligns with the United Nations Water Report of 2017, exploring waste water as an untapped resource.

During FY 2017, the following changes in the water circuit at Koffiefontein were implemented to optimise the use of water in the treatment process:

- desilting and recommissioning of two return water dams within the processing plant footprint to optimise waste water recovery;
- reprioritising the use of recycled water in lieu of raw water obtained from the Kalkfontein dam;
- shortening the water reticulation network within the processing plant; and
- reducing the volume of water pumped to the settling paddocks.

The latter point indicates a change in pumping philosophy which has the added benefits of reducing water losses (due to evaporation) and electricity consumption, as less pumps are needed to convey the water.

These changes have resulted in substantial water savings, via a 26% reduction in raw water consumption and a 14% increase in water recycling during FY 2017.



# Community Development and Engagement

Maintaining supportive relationships and playing a positive role in our local communities is vital to the sustainable success of our operations.

**KPIs** 

US\$3.4m SOCIAL INVESTMENT IN FY 2017

US\$0.9m

INVESTED IN TRAINING OF NON-EMPLOYEES
AND COMMUNITY MEMBERS

117

COMMUNITY STAKEHOLDER MEETINGS HELD IN FY 2017















#### **Key achievements**

- ► The Petra Foundation rolled out a number of new local community projects.
- Many of those supported by our Young Graduates
   Programme went on to find permanent employment at Petra.
- Opening of four Enterprise Development Resource Centres within the local communities surrounding each of our South African operations.
- ► Loan applications from SMMEs approved to the value of ZAR8.2 million (circa US\$0.6 million).

#### **Key challenges**

- Continued gap between community expectations and level of local government service delivery – pressure placed on Petra to meet communities' basic needs.
- Continued high levels of unemployment and lack of national/local economic growth and diversification.
- ► The escalation of illegal mining in South Africa, often as a function of limited economic opportunities, and the challenges around addressing this.

# G

# Our Approach

Due to the remote locations of our operations, predominantly in areas of relatively low levels of socio-economic development and high unemployment, Petra's mines often present the only major economic activity in the local area. In line with our mission to unlock value for all our stakeholders, our involvement in community development aims to contribute to alleviating the most critical needs in our local communities and to create life-changing opportunities.

Our community development work is focused on contributing meaningful and long-term development of our host communities via sustainable job creation, skills transfer (education and training), enterprise development and infrastructure development.

To ensure co-ordination and inclusivity in social planning and development, we strive to establish partnerships with our employees, Governments, communities, NGOs and educational institutions which can contribute to ensuring the optimal impact of our initiatives.

In terms of how we structure our community engagement and development programmes, we are guided by the Social and Labour Plans ("SLPs") and EMPs in place for each operation. These plans include by law the following:

- social impact assessments based on participatory processes;
- applicable legislations relating to diversity;
- environmental impact assessments and ongoing monitoring;
- public disclosure of results of environmental and social impact assessments;

- local community development programmes based on local communities' needs;
- stakeholder engagement plans based on stakeholder mapping;
- broad based local community consultation committees and processes that include vulnerable groups;
- occupational health and safety committees and other worker representation bodies to deal with impacts; and
- local community grievance processes.

#### Social investment

Taking into account the long potential lives of our operations, we focus on investing in long-term projects which will have a lasting positive impact and which address the socio-economic needs of the communities in which we operate. Our approach to social investment is therefore developmental in nature and aimed at creating sustainability in communities beyond the life of active diamond mining.

The success of a number of our social investment projects is dependent on our local communities having the necessary skills to implement and eventually manage them, and Petra therefore aims to provide the required training and advice wherever possible. We also facilitate steering committees to assess, implement, monitor and evaluate the progress of our projects, consisting of our employees, members of the local community and municipality, and other service providers.



Above: Cullinan GM Juan Kemp playing games with local community members at the multi-sports centre built by the mine.



Above: Finsch purchased a mobile health clinic to deliver essential health services directly to rural areas of its local communities.



#### Social Investment in FY 2017

Our Group social spend doubled to circa US\$3.4 million in FY 2017 (FY 2016: US\$1.7 million), representing 16% of the Company's net profit after tax, further to the additional roll-out of community projects, increased spend through the Petra Foundation, as well as the inclusion of KEM JV community projects commitments for the first time (taking over from previous owner De Beers).

#### **South Africa**

Social investment in South Africa is provided in the following areas:

**Local Economic Development ("LED")** is mandatory spend and corresponds with the Company's commitments as per the approved SLPs for each of the South African operations. LED projects are agreed with local municipality representatives and the DMR.

**Social Investment ("SI")** spend is discretionary and the level that can be spent on qualifying projects in the local community is agreed upon by the SI committee. These projects and its criteria are outlined in Petra's Group Social Investment Policy. Each operation has an established Committee to approve and oversee the roll-out of the projects.

**Sponsorships** are once-off expenditures, granted on a case-by-case basis, usually by a specific Petra operation, following a request received by the local community.

**The Petra Foundation ("PF")** was formally established and registered in FY 2016. The purpose of the Foundation is to attract funding from our large suppliers, contractors and multi-nationals, as well as securing other contributions. These funds are then used for community projects adjacent to our operations, which meet the criteria of the PF's Memorandum of Incorporation.

The PF is an independent Section 21 company and registered NPO and has an elected board, which assesses and approves project applications received from the operations. The PF achieved the successful roll-out of a number of projects in the communities during FY 2017, including the 'Vision 4 Change' programme at Koffiefontein (read more on page 56), the Maths Academy at Koffiefontein, the Science Laboratory at Cullinan and the sports facilities at Lime Acres (near the Finsch mine). The PF's focus during FY 2018 will be to improve its marketing in order to attract additional funding so that more projects can be implemented in the communities.

#### **Tanzania**

In Tanzania, Williamson contributes directly towards community development through assistance with the advancement of social, commercial, industrial, educational, medical and administrative infrastructure for the benefit of local communities.

Williamson's corporate social responsibility plan, which is informed by the mine's stakeholder engagement plan, concentrated on the following areas for contribution and support during FY 2017:

- upgrading local educational infrastructure, including the provision of over 3,000 desks, the construction of eight classrooms and two school ablution facilities;
- funding the construction of two village government offices;

- installation of water systems in local villages;
- upgrading children's playgrounds with a specific focus on enhancing psychomotor development in our communities;
- donations to local sports clubs;
- charitable donations;
- financial support for women's entrepreneurship group;
- assistance in community policing; and
- financial assistance for the local hospital.

Williamson also owns and runs the Mwadui primary school, providing subsidised English education for 492 students. This is the only primary school in the district which has formalised computer training and a computer centre and continues to be considered a top achiever at district, regional and national level.



Petra saw the need to include the refurbishment of an emergency water pipeline local to Koffiefontein as one of its SLP projects. This vital work was concluded in April 2016 and meant that the pipeline was up and running shortly before the beginning of a year-long drought during 2016–2017, supplying much needed drinking water to the Oppermansgronde and Koffiefontein water filtration plants.

# Expenditure by country

	FY 2017 (US\$ million)	FY 2016 (US\$ million)
South Africa	2.8	1.3
Tanzania	0.5	0.4
Group total spend	3.4	1.7



# Community Training and Development



Above: Williamson donated to the Kagera earthquake disaster.



Above: The PF funded the construction of a new science laboratory for the Chipa-Tabane High School near Cullinan.

Petra considers providing training, education and development to local community members just as important as training our own workforce, as this enables us to not only directly contribute to the economic upliftment of the community but also to prepare a pool of potential labour for our operations.

In order to address the scarcity of skills in our local communities, our mines' involvement starts at grass-roots level, in the form of the maths and science school support programme and the provision of scholarships. This is continued at tertiary education level with opportunities provided through the bursary scheme, the graduate development programme and the provision of practical experience through our experiential training programme.

During FY 2017 we spent circa US\$0.9 million on community training and education programmes, with the main areas of expenditure being the bursary scheme and school support projects.

#### **Bursary scheme**

Petra's bursary scheme focuses on supporting promising students studying towards higher qualifications in the core disciplines of the mining industry, and forms part of the South African mines' SLP commitments. The bursary covers the cost of the studies as well as accommodation and allowances and is only available to South African students.

For the 2016 academic year, the Company sponsored 20 full-time bursars and one part-time bursar; for the 2017 academic year, 23 full-time bursars and three part-time bursars are now being supported; with Petra supporting 31 full-time bursars in FY 2017. The tuition fees of the part-time

bursars, who are doing postgraduate studies, are sponsored by the Julian Baring Scholarship Fund.

The group of 31 full-time bursars is suitably diverse, consisting of 26 African students, one Indian student and four white students, meaning that it is comprised of 87% HDSAs, and 32% are female. As part of the scheme, students are supported to do vacation work or practical modules at operations as required by their respective institutions.

#### Young graduate work experience project

This project provides the opportunity for young graduates to gain work experience in the mining and minerals sector, thereby improving their chances of employment, and was evaluated to be very successful. Following completion of their studies, graduates are then employed by Petra for a period of time, during which they work with similarly qualified employees to gain experience.

During FY 2017 a total of 26 young graduates were supported, of which 96% are HDSA, and many were appointed by Petra on completion of their programmes.

#### Portable skills for community members

The issue of portability of skills also extends to local residents who are not employed by the mine, but reside in the surrounding communities. For this reason, some of these programmes are also extended to community members. In FY 2017, a total of 237 community members were enrolled for portable skills training. This form of training includes computer literacy training, technical training, plumbing, basic building techniques and carpentry, driver's license training, as well as other opportunities related to local economic activity.



### Community Training and Development continued



Above: Community members local to Finsch proudly attained their driver's licences.

# Community training and development

31

FULL-TIME BURSARS SUPPORTED

237

COMMUNITY MEMBERS ENROLLED FOR PORTABLE SKILLS TRAINING

26

YOUNG GRADUATES SUPPORTED

2

SCHOOLS SUPPORTED WITH MATHS AND SCIENCE TEACHING

#### School support project

The school support project is currently implemented at eight schools in the communities surrounding our operations. The project is intended to uplift the general level of mathematics and science education in order for more learners to achieve quality passes in these subjects. This will contribute to improving their opportunities to access tertiary studies and to secure employment. The project is aimed to develop both teacher and learner competence and targets teachers and learners from Grade 8 to Grade 12.

#### **Developing local businesses**

We believe that local business development is a key component to true sustainability and is core to the economic development of South Africa.

Local businesses face a number of challenges as start-ups often struggle to gain access to grow and expand their businesses. These challenges include access to funding, availability of skills (both management and technical) and access to established supply chains.

At Petra, we address these challenges through our Enterprise Development ("ED") and Supplier Development ("SD") programmes, which are rolled out at our operations through our Enterprise Development Resource Centres and monitored through our Group ED structure, working very closely with operational and Group-level procurement.

Each of our South African operations now has an operating Enterprise Development Resource Centre with a full time ED Co-ordinator. This centre serves as a link between local businesses and the mine's supply chain.

Services offered at the centres include:

- information on possible tender opportunities at the mine;
- access to low interest funding for qualifying SMMEs;
- formal business mentoring;
- business training;
- technical training;
- computer and printing facilities;
- boardroom facilities; and
- readiness assessments (business and technical).

Our focus in FY 2017 has been on enterprise development, involving the identification of local businesses which might not be ready to enter into established supply chains. These businesses are developed through skills training, loan funding and mentoring in order to become qualifying businesses which could successfully tender for opportunities in the mine supply chain or other established businesses.

During FY 2018 the focus will move towards supplier development, with those businesses which have been developed through our ED programme graduating and moving into our supply chain, enabling a shift towards improving and expanding the business further through mentoring and training.

## G

# Community Stakeholder Engagement



Above: School desks donated by Williamson.



Above: Petra supports the My Maths Buddy programme, a community project in association with Education Africa which aims to improve standards of maths education by providing learners with a maths dictionary.

#### Community stakeholder engagement

The implementation of a consistent and effective stakeholder engagement approach across the Group remains a priority for Petra in order to build on the robust processes covering engagement that we already have in place across the Group.

As part of its strategy to assess and manage its impacts, Petra carried out a full Social Impact Assessment ("SIA") of its South African operations in FY 2016. However, through ongoing engagement with stakeholders, these impacts are continuously being re-evaluated and reprioritised and planning adjusted accordingly. The SIA has assisted with the identification and assessment of the key stakeholders, impacts, risks and issues across the full life cycle of our South African operations and therefore serves to inform the integrated and comprehensive Stakeholder Management Engagement Plan ("SMEP") which is in place at each of the operations and for the Company as a whole.

The dynamic process of developing Group and operation SMEPs has been taking place over the last number of years and has focused on the ongoing training of relevant officials in the SMEP methodology, the identification and classification of stakeholders, and the development of stakeholder engagement plans.

During FY 2018, we are excited about the potential to further improve and track our stakeholder engagement via the development and implementation of a stakeholder engagement software platform. This will provide the capability to effectively log and

track community feedback, issues and complaints, as well as facilitating the introduction of a standardised and centralised community grievance procedure.

As part of Petra's community communications strategy, the Company aims to publish quarterly newsletters at certain of its South African operations where they are considered to be effective. Newsletters are not always the most viable means of updating local people at all operations and in these instances, communications are often facilitated by the local media and other methods.

#### Responding to issues

Petra regards direct engagement with its stakeholders as the primary means of building relationships and identifying issues to be resolved, and therefore has a continuous, planned and scheduled engagement process in place at all of its operations. Increased emphasis is being placed on tying these engagements into formal community communication structures, thereby reaching stakeholders more directly and over a broader front.

Petra is playing a pivotal role in some of our South African local communities in the establishment of broad-based facilitation processes which can bring together a range of community interest groups as well as local authorities and other Government institutions. This serves to enhance local issue identification, as well as integrated planning and service delivery by the relevant state or corporate role player. While this initiative was only at an early stage by Year end, we are confident that it will significantly contribute to sustainable development in the communities concerned.



# Community Stakeholder Engagement continued

#### Responding to issues continued

We continuously revise Petra's programmes and community projects to incorporate issues raised, wherever material. Where appropriate and within their area of control, matters are elevated to relevant Government departments and organisations for assistance and/or resolution.

As an example of community projects carried out, KEM JV is currently restoring and cleaning the Dutoitspan graveyard. The mine has also assisted with local municipal challenges when pipelines have broken or where municipal trenches around the mine needed to be cleaned.

Petra held a total of 61 internal and 56 external stakeholder engagement meetings regarding community and social development in FY 2017.

#### **Artisanal mining**

At Petra's underground operations, there is no risk of artisanal mining taking place given the defined outline of the mine site areas and the associated security. However, there is an ongoing risk of illegal artisanal mining taking place at the Williamson mine in Tanzania, due to the vast size of the orebody (146 ha) and the challenges associated with securing such a large perimeter, as well as at the Kimberley Tailings Mineral Resources ("TMRs") in South Africa, which again cover large areas which are harder to secure. There is also a risk of illegal artisanal mining taking place upon the tailings dumps at Petra's other South African operations, due to the nature of these deposits being at surface, meaning they can be more easily targeted.

In terms of various pieces of South African legislation, including the Diamond Act, the MPRDA, the Mine Health and Safety Act, the National

Environmental Management Act and others, the prospecting for or extraction of diamonds, and trade in uncut diamonds, without the necessary authorisations is illegal. Illegal mining at our operations is dealt with in terms of the aforementioned legislation in conjunction with the relevant authorities.

The scale of illegal mining at Petra's operations is not expected to have a material impact upon Petra's production in the short to medium term. However there are risks in terms of illegal miners operating on Petra operations contravening a number of regulations for which the Company is held responsible, in particular in the areas of health and safety and environmental management.

Petra is committed to finding a long-term solution, via multifaceted stakeholder engagement and co-operation with the South African police, the DMR, the Chamber of Mines and others, in order to address this challenge, as well as via its efforts to promote skills transfer and local economic development in its local communities in recognition that this issue is a direct result of South Africa's low economic growth and employment opportunities.

The highest incidence of illegal mining activities amongst Petra's operations occurs at KEM JV. Some illegal mining activities also sporadically take place at Williamson and are managed on an ongoing basis by the mine, together with the local authorities. In October 2016, a small number of illegal miners commenced activity on a dump site belonging to the local municipality, situated just outside the boundaries of Koffiefontein and the Company continues to closely monitor the situation.

# Case study – Petra Foundation supports 'Vision 4 Change'



One of the new projects supported by the Petra Foundation is 'Vision 4 Change', which is aimed at making a difference in the lives of children who are visually impaired.

Good eyesight is necessary for effective learning, progression at school and participation in sports and therefore the Department of Education has identified vision among public school children as one of its major challenges. Poor vision can disrupt visual pathways, leading to weak cognitive development, which in turn can prevent a child from developing to his or her full potential.

The Petra Foundation has provided funding to 'Vision 4 Change', which has assisted 22 schools in four areas (Jacobsdal, Koffiefontein, Petrusburg and Luckoff). As a result of the donations, a total of 6,526 students from the age of five up to Grade 12 were provided with testing and screening. Of these children, 90 were identified as having visual problems and received prescription glasses from a qualified optometrist.

One child was detected to have a growth/possible tumour in his right eye and was referred to an eye specialist for further examination and diagnosis.

# Community Stakeholder Engagement continued

# Caring for our neighbours

KEM JV visited Rest Haven Old Age Home to spend some time with the elderly as part of its annual Mandela Day charitable initiatives.









# Legal Compliance

Ensuring legal compliance is essential to our licence to operate.

#### **KPIs**

0

FINES ISSUED FOR NON-COMPLIANCE WITH ENVIRONMENTAL LEGISLATION IN FY 2017

0

FINES ISSUED FOR NON-COMPLIANCE WITH SOCIO-ECONOMIC LEGISLATION IN FY 2017



#### Sustainable development goals



#### **Key achievements**

- Successful renewal of the Mining Right for Koffiefontein in FY 2017 – valid until 2047.
- South African mining industry uniting in its response through the Chamber of Mines to the publication of the Revised Mining Charter 2017.
- All our South African mines maintained their OHSAS 18001:2007 and ISO 14001:2004 certifications and now have valid Water Use Licences in terms of the National Water Act.

#### **Key challenges**

- Publication of the revised Mining Charter 2017 in South Africa.
- Changes in the Tanzanian legislative environment.
- Engaging with relevant authorities on complex legislation and regulations.



# Legal Compliance

#### Overview

There are a host of licences, authorisations and permits that need to be in place at the Company's operations, particularly from an environmental, health and safety perspective. The need for, and periods of validity of, such permits are monitored on an ongoing basis at the operations and there is continual interaction with the authorities in this regard.

#### **South Africa**

The mining industry in South Africa is highly regulated in terms of its social and environmental performance, with companies having to uphold stringent standards, which in some cases go beyond the requirements of many international best practice guidelines, in order to maintain their licence to operate.

The primary legislation governing exploration and mining activities in South Africa is the Mineral and Petroleum Resources Development Act, 28 of 2002 ("MPRDA"). From an ESG perspective, the holder of a Mining Right in South Africa must comply with the Mine Health and Safety Act, 1996 and must also submit and have approved the following documents:

 an Environmental Management Plan that outlines the environmental management processes to be followed during operations, as well as the rehabilitation to take place before issuing of a closure certificate will be applied for; and a Social and Labour Plan that defines an operation's obligations in terms of social, labour and community issues. The SLP of an operation forms the basis for its activities and performance indicators over a five-year cycle, following which a new SLP needs to be consulted with stakeholders and approved by the DMR.

#### Tanzania

The principal legislation governing the mining sector is the Mining Act (which was amended in a number of important respects in July 2017), and operations must also comply with The Mining (Safety, Occupational Health and Environment Protection) Regulations, 2010 and The Environmental Management Act, 2004.

#### Managing compliance

Ensuring that we maintain legal compliance at all operations is a priority for Petra, given that it is essential to maintaining our licence to operate. The core responsibilities in that regard are set out in the EMP and SLP associated with each Mining Right, read together with the relevant environmental and health and safety legislation. Legal compliance is the responsibility of the respective Mine Managers and the compliance teams based at each mine, with input from the relevant specialist department teams, including health and safety, environmental and social.

Legal compliance is a complex area and there is a risk regarding the inconsistent issuing of the required authorisations due to various interpretational differences between governmental agencies and within provincial departmental offices. We mitigate this risk by ongoing engagement with the relevant governmental agencies and monitoring judicial developments.

Building the requisite internal capacity is an important part of maintaining compliance, and our mines are therefore structured and staffed with qualified, competent, knowledgeable and experienced teams who are given ongoing training in this area.

Legal compliance at all our operations is audited internally and externally by third party legal specialists on a biennial basis to ensure changes or updates to legislation are continually implemented and integrated into health and safety controls.

All of our mining operations have access to a live legal library, which contains all relevant international and national standards and national legislation. The library is provided and kept up to date by a professional registered legal firm. Notifications of updates and changes are also communicated by mail to the relevant managers at each operation.

Legal compliance audits are also conducted by a specialist legal firm, which also provides a legal electronic register and communicates legislative changes as they are promulgated or reviewed. Where relevant, the results of external audits are communicated to the Board, while internal audits are communicated on-site only, with learning points distributed to all operations.

Petra complied in all material aspects with all relevant laws and regulations in FY 2017 and was not subject to any fines related to non-compliance.

#### Health and safety

We have always considered legal compliance as the first step in managing health and safety at our operations. In addition to the processes outlined above, our South African operations are annually audited by regional Departments of Mineral Resources, third party specialist legal auditors, as well as by the BSI in compliance with the stipulations of OHSAS 18001:2007. Gaps are identified and adjustments made to ensure that changes to standards and legislation are implemented and complied with at all times.

No material findings were made with regard to non-compliance or potential health and safety-related liabilities that resulted in formal instructions, court supines or administrative fines in FY 2017.



## Legal Compliance continued

#### Managing compliance continued Environmental

We are committed to full environmental legal compliance and to meeting best practice in terms of environmental management. In addition to the standard compliance processes already covered, our operations are subject to the following regular internal and external environmental audits:

- ► EMP performance assessments at our Company's South African operations are carried out by external specialists at a frequency stipulated by the agreements for each operation with the DMR;
- internal Compliance, Assurance and Performance ("CAP") audits are performed internally on a guarterly basis;
- external ISO 14001 audits are performed by the certification body on certified operations at least once per year; and
- annual revision and verification of the financial provision for mine closure is carried out as required by the DMR for each operation.

The Company did not record any fines or non-monetary sanctions for non-compliance with environmental laws and/or regulations during FY 2017. This is the tenth year that no environmental fines were imposed on Petra.

#### Social

In South Africa, the SLP for each operation defines its obligations in terms of social, labour and community issues, and forms the basis for its social and labour-related activities and performance indicators over a five-year cycle. Following this five-year cycle, a new SLP needs to be consulted with stakeholders and approved by the DMR.

In addition to the performance indicators and commitments contained in the SLP, operations are also subject to the targets set out in the Mining Charter, as well as other laws and regulations such as the Employment Equity Act, the Broad-Based Black Economic Empowerment Act and various codes. The SLP for an operation is generally drafted to incorporate some of the targets of the Mining Charter relating to human resources development, employment equity, preferential procurement, local economic development and housing.

Annual reporting by each operation to the DMR is a mandatory element of the Mining Right process, and requires a Mining Charter Report and an SLP Report which outline the progress made towards relevant set targets. Legislation also provides for an annual audit by the DMR. During these audits, various external stakeholders that include municipal and labour representatives are present in addition to representatives from the DMR.

There were two Section 93s issued in FY 2017, as a result of non-compliance to SLP and Mining Charter targets at Koffiefontein and KEM JV. Each operation drafted a relevant response to the DMR and no feedback was received (in line with usual practice) and therefore the issues are now resolved.

Although there is no specific social legislation in Tanzania, our approach to corporate social responsibility goes beyond compliance. We are therefore committed to active and transparent stakeholder engagement, as well as striving to make a positive impact on our local communities via Williamson's Community Development Programme.

# Material legislative updates South Africa

In June 2017 the Minister of Minerals and Energy in South Africa published the Revised Mining Charter (the "RMC 2017"). The Minister has undertaken not to implement the RMC 2017 pending a court case by the Chamber of Mines in South Africa, of which Petra is a member, to review the RMC 2017.

Read more at notourcharter.co.za/

#### Tanzania

A number of important legislative amendments were passed in Tanzania in FY 2017 including amendments to the Mining Act, the Review and Re-Negotiation of Unconscionable Terms Act, 2017, the Permanent Sovereignty Act, 2017 and Regulations passed in terms of Section 109 of the Mining Act. These amendments introduce, inter alia, local shareholding requirements and a clearance fee, encourage local beneficiation of diamonds, disallow VAT credits in relation to exports and also increase the royalty on diamonds.



# Legal Compliance continued

# Q&A with Anja van Deventer, Petra's Group rehabilitation and closure specialist



#### What are your key responsibilities?

My key responsibility is to ensure that our operations are legally compliant in matters that entail rehabilitation, closure and financial provision for closure. I have also developed a Rehabilitation Strategy to steer the operations towards sustainable closure objectives. We compile annual rehabilitation plans as well as a closure plan for each mine and these plans are evaluated on an annual basis.

I particularly enjoy conducting LFAs on rehabilitated areas to determine the benchmark for initial rehabilitation, evaluate older rehabilitation and to evaluate the stability of historical sites. The aim is to scientifically validate the rehabilitation status and to remove the given area from the financial provision for closure.

Petra's operations make up a significant part of the South African and Tanzanian diamond industry heritage and therefore keeping these historical gems alive within the boundaries of the closure objectives is a key focus for me.

# What do you find most challenging about your position?

Some rehabilitation and closure concepts are 'foreign' to those who are not used to environmental jargon. I have therefore had to reinvent my way of communicating with different levels and departments within the Company in order to convey the improvement possibilities of concurrent rehabilitation.

The challenge of finding practical, elegant solutions to complex problems keeps me motivated. There is no 'one size fits all' solution for the closure strategy for Petra's operations as the community needs, physical properties of the material and weather conditions will differ in each area. This is something I have to take into account when working on our strategy.

# Why do you think there seems to be an increase in interest in mine rehabilitation and closure?

Mining has often been seen in a negative light, due to its impact on resources and ecological functions; however, the current trend to find alternative land uses in mining-impacted areas that will increase the production potential of so-called 'derelict land' has garnered significant interest.

Through mine rehabilitation, areas are now being transformed into positive, contributing resources and some of the most exciting efforts in this area include finding renewable energy options for 'problem areas'

Biomimicry is another extremely exciting area of development in the rehabilitation arena, where lessons are taken from nature and implemented in technology with minimum impact on the environment. The overall aim is to find synergies with the natural environment in order to boost the social and economic environment.

# What do you think will change about mine rehabilitation and closure over the next five years?

The traditional greening of mine-impacted land for the sake of 'doing it' will totally disappear and we will plan to restore or alter ecosystem functions. Adaptability for climate change will be a necessity, effluent will be viewed as a resource rather than something that needs to be discarded, the assistance of micro-organisms will have an unfathomable contribution and the reduction (and even positive offsetting) of carbon will influence production as well as future investment.

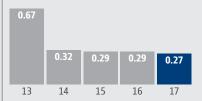




#### **KPIs**

#### SAFETY

(Group LTIFR)



STRATEGY (A) (11) (%)







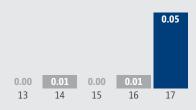
#### **PERFORMANCE AND TARGETS**

Group LTIFR for the Year of 0.27 was an improvement on FY 2016 but below our ongoing target to achieve a minimum 10% improvement in LTIFR annually. However, it still represents an alltime low for the Company and is a good achievement in the context of 3.5 million extra risk hours worked during the Year.

#### **RISK MANAGEMENT**

In addition to appropriate risk management processes, Petra has strategies, systems, effective risk-based mitigating controls and training in place to promote a safe working environment.

#### FIFR



STRATEGY









#### **PERFORMANCE AND TARGETS**

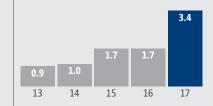
Tragically, the Company experienced five fatal accidents, which led to six fatalities during the Year. Investigations into each incident were carried out in association with the relevant South African and Tanzanian authorities and learnings were shared with the rest of the Group. Fatalities are unacceptable and we target an FIFR of zero. The Company has therefore renewed its focus on safety as its top priority.

#### **RISK MANAGEMENT**

In addition to appropriate risk management processes, Petra analyses and investigates all significant incidents and accidents in detail through a Root Cause Analysis Technique to review and align controls in mitigation of reoccurrences, and controls and training in place to promote a safe working environment.

#### SOCIAL SPEND

(US\$ million)



STRATEGY







#### PERFORMANCE AND TARGETS

Social spend doubled further to the additional roll-out of community projects, increased spend through the Petra Foundation, as well as the inclusion of KEM JV community project commitments for the first time. Petra targets base case spend of 1% of NPAT and social spend in FY 2017 represented 16% of NPAT.

#### **RISK MANAGEMENT**

Petra maintains compliance with the regulatory framework, as well as continual liaison and co-operation with social and institutional stakeholders.

#### TRAINING SPEND

(US\$ million)





STRATEGY \land 📶 🗞 🕦









#### **PERFORMANCE AND TARGETS**

Training spend (incorporating both employee and community training) increased 45% due to the integration of the KEM JV operations, as well as an increase in centralised training expenditure on management development, bursaries and graduate programmes. Petra endeavours for training spend to consistently exceed 5.5% of operations payroll per annum and FY 2017's spend represented 7.9% of payroll.

#### **RISK MANAGEMENT**

Petra maintains compliance with the regulatory framework and supports a number of different training and development programmes.













#### **KPIs** continued

13

#### **WOMEN IN THE WORKFORCE**





15

14

#### **PERFORMANCE AND TARGETS**

The percentage of women in Petra's workforce decreased to 17%, but remained higher than the 13% average for the South African mining industry as a whole<sup>1</sup>. Increasing this number is an important aspect of improving on equality, with a long-term objective of the workforce in South Africa representing the overall demographic.

16

#### **RISK MANAGEMENT**

Proactive and concerted efforts to advance workplace equality through preferential recruitment and the development of women in our workforce

#### STAFF TURNOVER



#### **PERFORMANCE AND TARGETS**

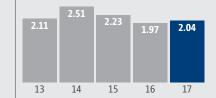
Staff turnover increased to 9% due to competition in the labour market, particularly for semi-skilled and skilled employees in South Africa. Petra endeavours to maintain turnover rates consistent with industry norms and has a number of initiatives and programmes in place to develop and retain its people.

#### **RISK MANAGEMENT**

The Group's employment policies and remuneration strategy are designed to attract, incentivise and retain individuals of the right calibre, as well as retain key management for the longer term.

#### WATER USAGE







#### PERFORMANCE AND TARGETS

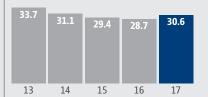
Petra's water usage per tonne increased 4% due to the increased Group mining footprint for the Year, coupled with lower than expected tonnage throughput. The Company has a medium-term objective of 1.55 m<sup>3</sup>/t to be achieved by FY 2020.

#### **RISK MANAGEMENT**

The Group endeavours to continually develop, implement and improve water efficiency measures to reduce the consumption per tonne processed.

#### **ENERGY USAGE**

 $(kWh/t^2)$ 













#### **PERFORMANCE AND TARGETS**

Petra's energy usage per tonne increased by 7% in FY 2017, due to the increased mining footprint, coupled with lower than expected tonnage throughput for the Year. Given the significant activity around the Group's expansion programmes, this still represents a satisfactory level.

#### **RISK MANAGEMENT**

Continuous development, implementation and improvement of energy efficiency measures.









<sup>1.</sup> Source South African Chamber of Mines.

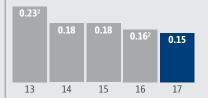
<sup>2.</sup> Consumption is reported per tonne fed to the various plants based on gross tonnes treated, comprising ROM and Tailings tonnes, as well as development waste tonnes treated (where appropriate), while specifically excluding recirculating tonnes.



#### **KPIs** continued

CARBON EMISSIONS<sup>1</sup>

 $(tCO_3-e/ct)$ 



STRATEGY (A) (11) (%)







#### **PERFORMANCE AND TARGETS**

Despite a 5% increase in our direct carbon emissions due to higher energy usage for the Year related to the expanded production footprint, our carbon emitted per carat continued its declining trend to 0.15 tCO<sub>3</sub>-e/ct further to the higher carat output for the Year, as well as the Company's focus on driving energy efficiency. Petra is targeting a 1% reduction in tCO<sub>3</sub>-e/ct per annum over five years (2015 to 2020, with FY 2013 being the base year).

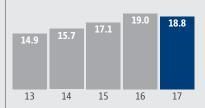
#### **RISK MANAGEMENT**

The Group endeavours to continually reduce its reliance on fossil fuel energy sources and to minimise its overall energy usage wherever possible.

#### **TONNES TREATED**

(Mt)

18.8 -1%



STRATEGY









#### **PERFORMANCE AND TARGETS**

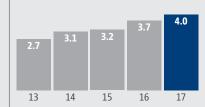
Petra's tonnage throughput decreased 1% to 18.8 Mt, below prior guidance of circa 24.0 Mt, primarily due to the fact that the Group's expansion programmes progressed slower than expected across the board. Tonnage throughput is expected to rise 15% to circa 21.7 Mt in FY 2018, with the majority of the increases to be accounted for by the continued ramp-ups in ROM throughput across all operations, partially offset by planned reductions in tailings throughput at Finsch.

#### **RISK MANAGEMENT**

Realistic operational targets, based on detailed mine production planning, with production performance monitored closely.

#### **ROUGH DIAMOND PRODUCTION**

(Mcts)



STRATEGY

for FY 2019.



PERFORMANCE AND TARGETS



Production increased 8% to a record level of

4.0 Mcts, but was 9% below Company guidance of

4.4 Mcts, due to mainly due to the delay bringing

the new plant at Cullinan into full operation and

the slower than anticipated ramp-up of the new

SLC at Finsch. FY 2018 production is expected to

Realistic operational targets, based on detailed

mine production planning, with production

performance monitored closely.

rise circa 23% to 4.8–5.0 Mcts and to 5.0–5.3 Mcts







14

13

REVENUE

(US\$ million)





16

430.9

425.0

15



#### **PERFORMANCE AND TARGETS**

Revenue increased 11% to a record level of US\$477.0 million, due to increased production and increased volumes sold, partially offset by a reduction in revenue from Exceptional Diamonds which yielded US\$10.9 million in FY 2017 (FY 2016: US\$36.3 million). Revenue for FY 2018 is expected to rise due to guided higher production and the expected improved product mix as the contribution from ROM carats increases

#### **RISK MANAGEMENT**

The key factors affecting revenue growth are delivery on production targets and diamond prices (which are outside of the Group's control).



RISK MANAGEMENT













<sup>1.</sup> Updated emissions reporting methodology implemented during FY 2017 means that historical figures are not directly comparable but the methodology change is not considered to make a material difference; read more on page 45.

<sup>2.</sup> These figures are different to those reported in Petra's 2017 Annual Report as they have been restated further to the audit of Petra's carbon emissions.



# Back-up Data

#### Generating economic benefit

#### Value added statement

For the year ended 30 June 2017

	30 June 2017 US\$m	30 June 2016 US\$m
Revenue	477.0	430.9
Paid to suppliers for material and services	167.3	136.6
Value added	309.7	294.3
Income from investments	3.6	1.7
Wealth created	313.3	296.0

#### Wealth distribution

Employees

	30 June 2017 US\$m	30 June 2016 US\$m
Salaries, wages and other benefits	145.8	125.8
Net salaries, wages and benefits	110.5	98.9
Salary-related taxes	35.3	26.9
Providers of capital	48.0	44.5
Finance cost	48.0	29.1
Dividends paid	_	15.4
Governments		
Tax paid/(received)	11.9	22.7
Reinvested in the Group	107.6	103
Depreciation and capital items	364.5	379.7
Retained earnings	(256.9)	(276.7)
	313.3	296.0

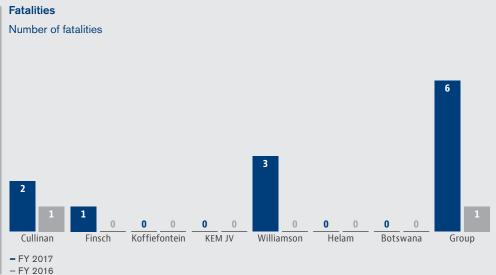
#### **Health and Safety**

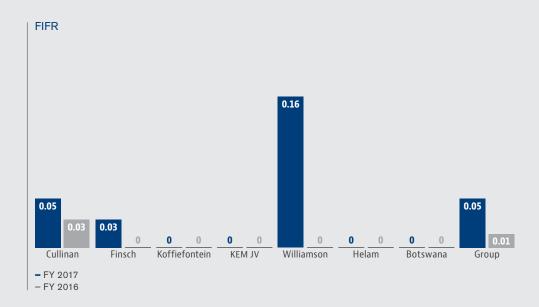
#### LTIFR unit calculations

Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Rate per 200,000 hours	0.67	0.32	0.29	0.29	0.27
Rate per million hours	3.35	1.60	1.45	1.45	1.35
FIFR unit calculations					
Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Rate per 200,000 hours	_	0.01	_	0.01	0.05
Rate per million hours	_	0.05	_	0.05	0.25



#### Health and safety continued



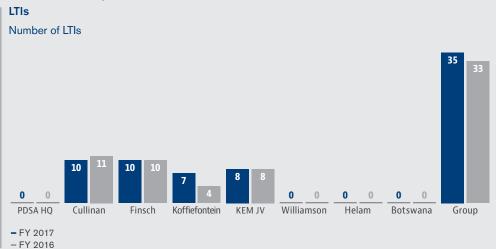


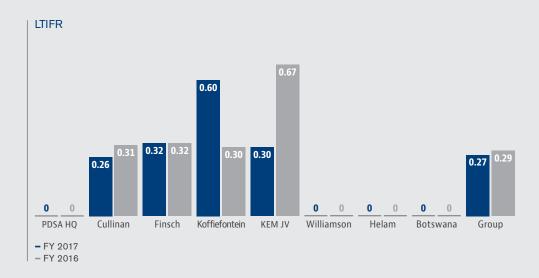


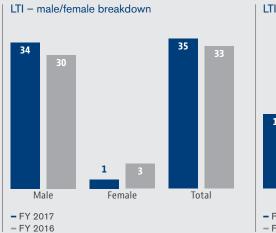




#### Health and safety continued











People

Emn	lovee	and	cont	ract	or	hreal	6	OWn

Operation						Permanent and part-time employees	Contractors	Total
Finsch						1,158	2,056	3,214
Cullinan						1,220	1,944	3,164
Koffiefontein						613	248	861
KEM JV						1,709	451	2,160
Helam						28	8	36
Helam projects						75	_	75
Williamson						590	853	1,443
Botswana						12	2	14
Head office						192	_	192
Board						7	_	7
London office						3	_	3
Total						5,607	5,562	11,169
Employee breakdown by age group								
	18-2	<u></u> .	30-5	0	50<		Total	
Board	_	_	2	0.04%	5	0.09%	7	0.12%
Senior Management	_	_	30	0.54%	9	0.16%	39	0.70%
Management	9	0.16%	167	2.98%	79	1.41%	255	4.55%
Employees	931	16.60%	3,318	59.20%	1,057	18.85%	5,306	94.63%
Total	940	16.76%	3,517	62.8%	1,150	20.5%	5,607	100.00%



#### People continued

#### Recruitment by gender for the period 1 July 2016-30 June 2017

		Gender		sed in			
Operation	Recruitment	Male	Female	Gauteng	Northern Cape	Free State	North West
Cullinan	62	44	18	62			
Finsch	134	109	25		134		
Koffiefontein	68	55	13			68	
KEM JV	722	659	63		722		
Helam	_	_	_	_	_	_	_
Helam projects	6	6	_				6
Head office	49	27	22	21	25	3	_
Williamson	17	12	5				
Botswana	7	7	_				
Total	1,065	919	146	83	881	71	6

#### Recruitment by age group: 1 July 2016-30 June 2017

Total	62	134	68	722	_	6	49	17	7	1,065	100.00
51<	5	8	5	109	_	1	7	_	_	135	12.68
30-50	30	56	29	492	_	2	21	6	7	643	60.38
18-29	27	70	34	121	_	3	21	11	_	287	26.95
Recruitment by age group	Cullinan	Finsch	Koffiefontein	KEM JV	Helam	Helam projects	Head office	Williamson	Botswana	Total	%

#### Rate of employee recruitment

		<u> </u>
Total rate of employee recruitment		19.0
Data of amplayed recruitment by gooder	Female	2.6
Rate of employee recruitment by gender	Male	16.4

Gender



# Back-up Data continued

#### People continued

#### Group turnover by type and gender

Operation	Voluntary turnover	Terminations	Total turnover	Male	Female
Finsch	43	32	75	59	16
Cullinan	56	97	153	144	9
Koffiefontein	22	75	97	79	18
KEM JV	34	50	84	66	18
Helam	_	29	29	22	7
Helam projects	10	13	23	23	_
Head office	16	9	25	16	9
Williamson	3	28	31	29	2
Botswana	_	5	5	4	1
Total	184	338	522	442	80

#### Group turnover by age group

Turnover by age group	Finsch	Cullinan	Koffiefontein	KEM JV	Helam	Helam projects	Head office	Williamson	Botswana	Total	%_
18-29	28	32	39	10	2	12	9	4	1	137	26.25
30-50	33	82	45	47	12	8	13	13	3	256	49.04
51<	14	39	13	27	15	3	3	14	1	129	24.71
Total	75	153	97	84	29	23	25	31	5	522	100.00

#### Rate of employee turnover

Total rate of employee turnover		9.3%
Data of ampleyed recruitment by gooder	Female	1.4%
Rate of employee recruitment by gender	Male	7.9%



## **Environmental management**

### Table 1: Significant environmental incidents in FY 2017

Operation	Severity	Description
Finsch	Medium	Coarse residue deposit washed away due to heavy rainfall.
Finsch	Medium	Spillage of emulsion as a result of accidentally bumping against the valve of the emulsion tank during the loading thereof onto the emulsion carrier.
Cullinan	Medium	No. 2 Pollution Control Dam overflowed as a result of heavy rainfall.
Cullinan	Medium	No. 2 Pollution Control Dam overflowed again as a result of heavy rainfall.
Koffiefontein	Medium	Cable theft in the plant resulted in malfunctioning of the water reticulation system and flooding of the plant, holding dam and paddocks and overflow to the lake.
KEM JV	Medium	A Dezi dump truck overturned on surface at Wesselton, after it had collided with the old Plant conveyor structure, resulting in diesel spillage. The spillage was cleaned.
KEM JV	Medium	Spillage of raw sewage on bare ground as a result of the Wesselton to Joint Shaft sewage line leak.
KEM JV	Medium	8,000 litres of Dustex were spilled and cleaned up without any contamination to the surrounding environment.
Williamson	Medium	Tailings material from the current disposal area slid and the retaining wall (safety berm) gave away. It resulted in the slurry being pushed into the nearby oxidation pond cells.  One of the cells was completely flooded and mud and sewage water overflowed to the other cells and the environment.

### Table 2: Water consumption by source

Element	Unit	FY 2015	FY 2016	FY 2017
Municipal water	$m^3$	1,959,773.00	3,725,858.00	3,287,943.08
Surface water	$m^3$	8,602,003.00	10,073,226.00	10,705,490.36
Recycled water	$m^3$	18,914,258.00	21,029,818.00	21,109,860.28
Ground water	$m^3$	4,883,491.00	4,388,449.00	5,484,158.00
Rain water	$m^3$	Unable to determine	Unable to determine	Unable to determine
Total water use	$m^3$	34,359,525.00	39,217,351.00 <sup>1</sup>	40,587,451.72

<sup>1.</sup> Note that this figure has been restated. Reported in 2016 as 40,179,468m³ due to 'off-mine potable water consumption' being included. This has been removed as the water used by local villages does not contribute to water used for the mining process.



## **Environmental management** continued

### Table 3: Material consumption

		FeSi (t)			Steel (t)			Grease (kg)		Lu	bricating oil (I)	<u> </u>
Operation	FY 2017	FY 2016	FY 2015	FY 2017	FY 2016	FY 2015	FY 2017	FY 2016	FY 2015	FY 2017	FY 2016	FY 2015
Finsch	818	1,061	1,462	n/a	n/a	n/a	11,465	15,666	20,015	337,414	410,346	325,655
Cullinan	1,659	1,756	2,253	n/a	n/a	n/a	15,902	16,214	14,120	143,880	182,720	261,780
Koffiefontein	302	417	386	154	188	262	1,630	4,370	2,470	153,090	69,810	86,295
Kimberley Underground	_	560	707	184	152	105	_	5,649	3,832	58,611	35,277	31,065
KEM JV	3,065	n/a	n/a	51	n/a	n/a	3,366	n/a	n/a	50,552	n/a	n/a
Williamson	191	183	287	1,270	185	205	5,760	2,753	3,035	25,111	13,235	18,154
Group	6,035	3,977	5,094	1,658	525	573	38,124	44,652	43,472	768,658	711,388	722,949

### Table 4: Waste disposal and recycling

Petra Diamonds waste	Unit	FY 2015	FY 2016	FY 2017
Hazardous waste disposed	tonnes	293.99	1,185.10	354.96
Domestic waste disposed	tonnes	2,928.13	19,371.70	9,503.92
Total waste to landfill	tonnes	3,222.12	20,556.80	9,858.88
Total waste recycled	tonnes	6,527.30 <sup>2</sup>	5,231.00	4,527.19
Total waste incinerated <sup>3</sup>	tonnes	7,521.66	18.23	21.01
Total waste generated	tonnes	17,271.08	25,723.42	14,407.09
Recycled waste as percentage of total waste	%	38	20	31

<sup>2.</sup> This figure is restated to include the disposal of electronic waste and timber (wood).

### Table 5: Energy consumption⁴ – FY 2012–FY 2017

Element	Unit	FY 2015	FY 2016	FY 2017
Total diesel consumption	L	14,703,415.50	16,320,665.35	18,881,473.86
Total electricity consumption	kWh	520,177,092.50	585,142,068.25	607,922,071.77
Total diesel consumption	GJ	558,730	620,185	717,496
Total electricity consumption	GJ	1,872,636	2,106,510	2,188,518
Total electricity consumption	GJ	1,873	2,107	2,189
Total energy consumption	GJ	2,431,366	2,726,695	2,906,014

<sup>4.</sup> Note that 'heating, cooling and steam consumption' are not applicable to Petra's business.

<sup>3.</sup> This figure includes the incineration of medical waste from mine clinics.



## **Environmental management** continued

### Table 6: Petra carbon footprint

Element	Unit	FY 2015	FY 2016 <sup>5</sup>	FY 2017
Scope 1	tCO <sub>2</sub> -e	55,047.79	43,803.63	56,026.64
Scope 2	tCO <sub>2</sub> -e	523,024.69	559,586.68	579,455.79
Total tCO <sub>2</sub> -e (Scopes 1 and 2)	tCO <sub>2</sub> -e	578,072.48	603,390.31	635,482.43
Intensity indicator 1	tCO <sub>2-</sub> e/ct	0.18	0.16	0.15
Intensity indicator 2	tCO <sub>2</sub> -e/t	0.03	0.03	0.03
Scope 3	tCO <sub>2</sub> -e	28,433.09	8,701.07	8,250.54
Total tCO <sub>2</sub> -e (Scopes 1, 2 and 3)	tCO <sub>2</sub> -e	606,505.57	612,091.38	643,732.97

<sup>5.</sup> The totals for FY 2016 have been restated further to the external audit and verification of Petra's carbon footprint post our CDP submission.

## Table 7: Ozone depleting substances

Element	Unit	FY 2017
1,1,1-trichloroethane ("TCA")	kg	_
Carbon tetrachloride ("CTC")	kg	_
Halon	kg	5.0
Methyl bromide	kg	-
R134a	kg	757.0
R22	kg	147.8
R-410		38.5
Halocarbon 22 chlorodifluoromethane	kg	-
Total ozone depleting subs	kg	948.3



## **Environmental management** continued

## Table 8: Land disturbed vs. protected

			FY 2016			FY 2017	
Operation	Unit	Area disturbed	Area protected	Requiring rehab	Area disturbed	Area protected	Requiring rehab
Finsch	ha	1,406	1,908	1,171	1,406	1,388	1,171
Cullinan	ha	1,642	2,600	1,634	1,642	2,673	1,634
Koffiefontein	ha	1,642	2,014	1,636	1,642	2,014	1,636
KEM JV	ha	4,699	2,900	674	4,377	3,274	4,322
Williamson	ha	654	906	304	671	906	311
Total	ha	10,034	10,328	5,419	9,739	10,255	9,074

#### Table 9: Red data species

Table 5. Red data species		
Red data status	Unit	FY 2017
Vulnerable	Number	6
Near threatened	Number	4
Endangered	Number	1
Data insufficient	Number	1
Least concerned	Number	5
Protected	Number	5
Total	Number	22



## **Environmental management** continued

### Table 10

The table below summarises the various acts that deal with the elements as reported on, per country of operation.

Reported issue	South Africa	Botswana	Tanzania
Environmental management	National Environmental Management Act No. 107 of 1998 and Regulations	Mines and Minerals Act 17 of 1999	The Environmental Management Act, 2004 and Mineral Beneficiation Regulation, 2010
Environmental impacts	National Environmental Management Act No. 107 of 1998 and Regulations	Environmental Impact Assessment Act 6 of 2005	The Environmental Management Act, 2004
Environmental incidents	National Environmental Management Act No. 107 of 1998 and Regulations	_	_
Waste management	National Environmental Management: Waste Act 59 of 2008 and Regulations	Waste Management Act 15 of 1998	_
Biodiversity management	National Environmental Management: Biodiversity Act 10 of 2004	Wildlife Conservation and National Parks Act 28 of 1992	The Environmental Management Act, 2004 and Wildlife Conservation Act, 2009
Rehabilitation and mine closure	National Environmental Management Act No. 107 of 1998 and Regulations	Mines and Minerals Act 17 of 1999	The Environmental Management Act, 2004
Climate change	National Environmental Management: Air Quality Act 39 of 2004 and Regulations	_	-
Energy management	The Mineral and Petroleum Resources Development Act 28 of 2002 and Regulations	_	_
Carbon emissions	National Environmental Management: Air Quality Act 39 of 2004 and Regulations	Atmospheric Pollution (Prevention) Act 18 of 1971	_
Water management	The National Water Act 36 of 1998 and Regulations	Water Act of 1968 and Boreholes Act of 1976	The Water Resource Management Act, 2009
Stakeholder engagement	National Environmental Management Act No. 107 of 1998 and Regulations	_	The Environmental Management Act, 2004

#### Table 11

The table below summarises the total mining impact in the South African context (source www.dea.gov).

Operation	Water catchment area	Total available resource (million m <sup>3</sup> /a)	Resource required for mining (million m <sup>3</sup> /a)	Total mining (%)
Finsch	Lauren Vanl	(72		1
KEM JV	Lower Vaal	6/2	0	1
Cullinan	Crocodile West	1,245	140	11
	Olifants	1,265	86	6
Koffiefontein	Upper Orange	4,449	2	<1



# Glossary

AIDS	acquired immune deficiency syndrome, a disease of the immune system caused by the HIV infection	Freeboard	vertical distance from the normal water surface to the top of a confining wall	Kimberley Process	a joint Governments, industry and civil society initiative to stem the flow of conflict diamonds
ART	antiretroviral treatment for HIV/AIDS	GRI	Global Reporting Initiative, a multi-stakeholder		(i.e. rough diamonds used by rebel movements to finance wars against legitimate Governments)
BBBEE	Broad-based Black Economic Empowerment		process and independent institution the mission of which is to develop and disseminate globally	KPIs	key performance indicators
BEE	Black Economic Empowerment is a programme launched by the South African Government to redress		applicable sustainability reporting guidelines. These standards set out principles and indicators that	kWh	kilowatt hour
	the inequalities of apartheid by giving previously		organisations can use to measure and report their	1	litres
	disadvantaged groups of South African citizens economic privileges previously not available to them	CM	economic, environmental and social performance	LDP	Leadership Development Plan. A Petra initiative to
Beneficiatio	n the refining of a commodity; in the case of diamonds	GM	General Manager hectares		assist in the identification and development of future leaders within the Group
	it refers to the cutting and polishing of a rough stone	ha HDSAs	Historically Disadvantaged South Africans refers	LED	local economic development (when used in reference
BSI	the British Standards Institution	прэмэ	to all persons and groups who have been historically		to socio-economic development)
CCMA	the Commission for Conciliation, Mediation and Arbitration Charter		discriminated against on the basis of race, gender and disability	LFA	land function analysis
CO <sub>2</sub> -e	carbon dioxide equivalent	HIV	human immunodeficiency virus which causes AIDS	LHD	load haul dumper
DMR	Department of Mineral Resources, South Africa	1111	by infecting the helper T cells of the immune system	LTI	lost time injury. An LTI is a work-related injury resulting in the employee/contractor being unable to
DPA	the Diamond Producers Association	HR	human resources		attend work and perform all of the tasks for which he/
Effluent	mine effluent is a regulated discharge from a point	HSE	Health, safety and environment		she was appointed on the next calendar day after the day of the injury; note: fatalities are recorded as LTIs
	source like a treatment plant or dam spillway	HSEC	Health, safety, environment and community	LTIFR	lost time injury frequency rate is calculated as the
EIA	Environmental Impact Assessment	HSSE	Health, safety, social and environment		number of LTIs multiplied by 200,000 and divided by
EITI	Extractive Industries Transparency Initiative	ILO	International Labour Organization		the number of hours worked
EMP	Environmental Management Programme	ISO 14001	an international standard on environmental management;	Material topic	an ESG issue that is of critical importance to both its stakeholders and to its long-term success as a business
EMS	Environmental Management System		it specifies a framework of control for an Environmental Management System against which an organisation	Mcts	million carats
ESG	environmental, social and governance		can be certified by a third party	Mining	The Broad-based Socio-Economic Empowerment
FIFR	fatal injury frequency rate: the number of fatal injuries per 200,000 hours worked			Charter	Charter for the South African mining and minerals industry. The goal of the Mining Charter is to facilitate sustainable transformation, growth and development of the mining industry



# Glossary continued

SEP

SHE

Stakeholder Engagement Plan safety, health and environment

MPRDA	Mineral and Petroleum Resources Development Act,	SI	social investment
	which came into effect in South Africa on 1 May 2004 and regulates the granting of mining rights and	SLC	Sub Level Cave
	prospecting rights	SLP	Social and Labour Plan stipulated in the MPRDA
NGOs	non-governmental organisations		and aimed at promoting the employment and advancement of the social and economic welfare
NIHL	noise-induced hearing loss		of all South Africans whilst ensuring economic
NOx	mono-nitrogen oxide		growth and socio-economic development
NPAT	net profit after tax	SMEP	Stakeholder Management and Engagement Plan
NPO	non-profit organisation	SMME	Small, medium and micro enterprises
NQF	National Qualification Framework	t	tonnes
NUM	National Union of Mineworkers	tailings	the waste products of the processing circuit which may still contain quantities of the economic mineral
OD-ETDP	the OD-ETDP qualification is for those who want to build on a Further Education and Training Certificate	tCO <sub>2</sub> -e/Ct	total CO <sub>2</sub> -e per carat produced
	from another field to enter the field of OD-ETD as	TMM	trackless mobile machinery
	a potential career, and have little or no previous exposure to education, training and development	UASA	United Association of South Africa, a South African trade union
OHSAS 1800	<b>0</b> an international occupational health and safety management system framework	VCT	voluntary counselling and testing, a programme aimed at encouraging voluntary HIV testing in order for
PPE	personal protective equipment		individuals to know their status
PWYP	publish what you pay		
rehabilitatio	n the process of restoring mined land to a condition approximating to a greater or lesser degree its original state		
ROM	run-of-mine, i.e. relating to production from the primary orebody		



# GRI Content Index

GRI standard	Disclosure number	Disclosure	Page/notes
GRI 101: Foundation			3
GRI General Disclosures	S		
Organisation profile			
GRI 102: General Disclosures	GRI 102-1	Name of the organisation	Cover
	GRI 102-2	Activities, brands, products, and services	pp.2 and 3
	GRI 102-3	Location of headquarters	Back cover
	GRI 102-4	Location of operations	p.5
	GRI 102-5	Ownership and legal form	p.2, https://www.petradiamonds.com/about-us/ who-we-are/group-structure/
	GRI 102-6	Markets served	p.2
	GRI 102-7	Scale of the organisation	p.2, 3, 16 and 17, in the 2017 Annual Report www.petradiamonds.com/investors/results-reports/
	GRI 102-8	Information on employees and other workers	p.5, 69 and 70
	GRI 102-9	Supply chain	p.17 and 18
	GRI 102-10	Significant changes to the organisation and its supply chain	p.17 and 18
	GRI 102-11	Precautionary principle or approach	p.6, 12, 39 and 51
	GRI 102-12	External initiatives	p.2, 12, 23, 39, 59, 60 and 76
	GRI 102-13	Membership of associations	p.20, 23 and 60
Strategy			
GRI 102: General Disclosures	GRI 102-14	Statement from senior decision maker	p.6
	GRI 102-15	Key impacts, risks and opportunities	p.9 and 10
Ethics			
GRI 102: General Disclosures	GRI 102-16	Values, principles, standards and norms of behaviour	p.11 to 14
	GRI 102-17	Mechanisms for advice and concerns about ethics	p.13, www.petradiamonds.com/about-us/ corporate-governance/business-ethics



GRI standard	Disclosure number	Disclosure	Page/notes
GRI General Disclosure	s continued		
Corporate governance			
GRI 102: General Disclosures	GRI 102-18	Governance structure	p.12
	GRI 102-19	Delegating authority	pp.12 and 13
	GRI 102-20	Executive-level responsibility for economic, environmental and social topics	pp.5, 12 and 24
	GRI 102-21	Consulting stakeholders on economic, environmental and social topics	pp.7 and 8
	GRI 102-22	Composition of the highest governance body and its committees	2017 Annual Report, www.petradiamonds.com/ investors/results-reports (p.55 to 57)
	GRI 102-23	Chair of the highest governance body	2017 Annual Report, www.petradiamonds.com/ investors/results-reports (p.56)
	GRI 102-24	Nominating and selecting the highest governance body	2017 Annual Report, www.petradiamonds.com/ investors/results-reports (p.83)
	GRI 102-26	Role of highest governance body in setting purpose, values and strategy	p.12, 2017 Annual Report, www.petradiamonds. com/investors/results-reports (p.55, 59)
	GRI 102-27	Collective knowledge of highest governance body	2017 Annual Report, www.petradiamonds.com/ investors/results-reports (p.62)
	GRI 102-29	Identifying and managing economic, environmental and social impacts	pp.7 to 10
	GRI 102-30	Effectiveness of risk management processes	p.12, 2017 Annual Report, www.petradiamonds. com/investors/results-reports (pp.84 and 85)
	GRI 102-31	Review of economic, environmental and social topics	p.12
	GRI 102-32	Highest governance body's role in sustainability reporting	p.2 and 12, 2017 Annual Report, www. petradiamonds.com/investors/results-reports (p.85)
	GRI 102-33	Communicating critical concerns	pp.12 and 24
	GRI 102-35	Remuneration policies	p.12, 2017 Annual Report, www.petradiamonds. com/investors/results-reports (pp.86 to 101)
	GRI 102-36	Process for determining remuneration	p.12, 2017 Annual Report, www.petradiamonds. com/investors/results-reports (pp.86 to 101)
	GRI 102-37	Stakeholders' involvement in remuneration	2017 Annual Report, www.petradiamonds.com/ investors/results-reports (pp.86 to 101)



GRI standard	Disclosure number	Disclosure	Page/notes
GRI General Disclosures	s continued		<u> </u>
Stakeholder engagement			
GRI 102: General Disclosures	GRI 102-40	List of stakeholder groups	pp.7 and 8
	GRI 102-41	Collective bargaining agreements	pp.13 and 36
	GRI 102-42	Identifying and selecting stakeholders	pp.51 and 55
	GRI 102-43	Approach to stakeholder engagement	pp.6, 7, 8, 40, 51, 55–56 and 60
	GRI 102-44	Key topics and concerns raised	pp.7, 8, 55 and 56
Identified material topics			
GRI 102: General Disclosures	GRI 102-45	Entities included in the consolidated financial statements	2017 Annual Report, www.petradiamonds.com/ investors/results-reports (p.142)
	GRI 102-46	Defining report content and topic boundaries	pp.7, 9 and 10
	GRI 102-47	List of material topics	pp.9 and 10
	GRI 102-48	Restatements of information	pp.45, 65 and 74: restatement of FY 2013 and FY 2016 emissions data and p.72: restatement of FY 2016 water consumption. These restatements are considered to be non-material
	GRI 102-49	Changes in reporting	No significant changes in reporting
Report profile			
GRI 102: General Disclosures	GRI 102-50	Reporting period	Year ended 30 June 2017
	GRI 102-51	Date of most recent report	23 November 2016
	GRI 102-52	Reporting cycle	Annual reporting cycle
	GRI 102-53	Contact point for questions regarding the report	p.2
	GRI 102-54	Claims of reporting in accordance with the GRI standards	p.2
	GRI 102-55	GRI content index	p.79 to 88
	GRI 102-56	External assurance	p.2



GRI standard	Disclosure number	Disclosure	Page/notes
GRI Material Topics			3
Economic performance			
GRI 103: Management Ap	pproach GRI 103–1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	pp.16 to 18
	GRI 103-3	Evaluation of the management approach	pp.16 to 18
GRI 201: Economic Performance	rmance GRI 201–1	Direct economic value generated and distributed	pp.16–18 and 66
	GRI 201-4	Financial assistance received from government	p.17
	MM	Report countries of operation that are either candidate to or compliant with the EITI	Tanzania and the United Kingdom are members of the EITI – https://eiti.org/countries
Procurement practices			
GRI 103: Management Ap	pproach GRI 103–1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	pp.17–18; 54 and 55
	GRI 103-3	Evaluation of the management approach	pp.17 and 18
GRI 204: Procurement Pra	actices GRI 204–1	Proportion of spending on local suppliers	p.17
Environment			
Materials			
GRI 103: Management Ap	pproach GRI 103–1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.38 to 40
	GRI 103-3	Evaluation of the management approach	pp.38 to 40
GRI 301: Materials	GRI 301-1	Materials used by weight or volume	pp.40 and 73
Energy			
GRI 103: Management Ap	pproach GRI 103–1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.43 to 45
	GRI 103-3	Evaluation of the management approach	pp.43 to 45
GRI 302: Energy	GRI 302-1	Energy consumption within the organisation	pp.45, 64 and 73
	GRI 302-3	Energy intensity	pp.64 and 73



GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics</b>	continued		
Environment continued			
Water			
GRI 103: Management Ap	proach GRI 103–1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.47 and 48
	GRI 103-3	Evaluation of the management approach	pp.47 and 48
GRI 303: Water	GRI 303-1	Water withdrawal by source	pp.48 and 72
	GRI 303-3	Water recycled and reused	pp.48 and 72
Biodiversity			
GRI 103: Management Ap	proach GRI 103–1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.39 to 41
	GRI 103-3	Evaluation of the management approach	pp.40 to 41
GRI 304: Biodiversity	GRI 304-1	Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas	p.41
	GRI 304-2	Significant impacts of activities, products, and services on biodiversity	pp.40 and 41
	GRI 304-3	Habitats protected or restored	pp.4, 41 and 75
	GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	pp.41 and 75
	MM	Disclosures on approach to biodiversity management should include consideration of ecosystems services and associated values (e.g. the functions of ecosystems that provide benefits to people, such as fresh water, fisheries, forests, climate and natural hazard regulation, cultural and recreational services, plus functions that provide benefits such as food, health, shelter and raw materials)	pp.40 to 42
	MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	pp.41 and 75
	MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	Each mine's EMS sets out its commitment to biodiversity management and protection, including the requirements of South Africa's National Environmental Management:  Biodiversity Act and other initiatives applicable to our operations
	MM10	Number and percentage of operations with closure plans	p.41-42



GRI standard	Disclosure number	Disclosure	Page/notes
GRI Material Topics cont	inued		
Environment continued			
Emissions			
GRI 103: Management Approac	:h GRI 103-1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.43 to 46
	GRI 103-3	Evaluation of the management approach	pp.43 to 46
GRI 305: Emissions	GRI 305-1	Direct (Scope 1) GHG emissions	pp.45 and 74
	GRI 305-2	Energy indirect (Scope 2) GHG emissions	pp.45 and 74
	GRI 305-3	Other indirect (Scope 3) GHG emissions	pp.45 and 74
	GRI 305-4	GHG emissions intensity	pp.45 and 74
	GRI 305-5	Reduction of GHG emissions	p.45
	GRI 305-6	Emissions of ozone-depleting substances ("ODS")	pp.46 and 74
	MM	Disclosure of approach to emissions should include discussion of the management of fugitive emissions such as dust from mining and processing activities or noise and seismic impacts from explosives use through e.g. monitoring activities and compliance with regulatory limits	p.46
Effluents and waste			
GRI 103: Management Approac	:h GRI 103-1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.40 and 48
	GRI 103-3	Evaluation of the management approach	pp.40 and 48
GRI 306: Effluents and waste	GRI 306-1	Water discharge by quality and destination	pp.48 and 72
	GRI 306-3	Significant spills	pp.40, 72; there were no significant spillages in FY 2017
	MM	Indicator G4-EN23 refers to site waste, e.g. waste oils, spent cell lining, office, canteen and camp waste, scrap steel, tires and construction waste  Large-volume mining and mineral processing waste should be reported under MM3	p.73
	MM	Includes spillage of tailings, slimes, or other significant process materials	pp.40 and 72



GRI standard	Disclosure number	Disclosure	Page/notes
GRI Material Topics	ontinued		
Environment continued			
Environmental compliance			
GRI 103: Management Appr	roach GRI 103–1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.59 and 60
	GRI 103-3	Evaluation of the management approach	pp.59 and 60
GRI 307: Environmental Compliance	GRI 307-1	Non-compliance with environmental laws and regulations	p.59
Supplier environmental ass	essment		
GRI 103: Management Appr	roach GRI 103–1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.8, 17, 18, 38 and 40
	GRI 103-3	Evaluation of the management approach	pp.17, 18 and 40
GRI 308: Supplier Environmental Assessment	GRI 308-1	New suppliers that were screened using environmental criteria	p.38
Labour practices			
Employment			
GRI 103: Management Appr	roach GRI 103–1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	pp.28 to 31
	GRI 103-3	Evaluation of the management approach	pp.28 to 31
GRI 401: Employment	GRI 401-1	New employee hires and employee turnover	pp.29, 64, 70 and 71
	MM	Employment: report how all policies, standards and practices are applied to contractors	p.12
Labour/management relation	ons		
	MM4	Number of strikes and lock-outs exceeding one week's duration, by country	p.35 and 36



GRI standard	Disclosure number	Disclosure	Page/notes
GRI Material Topics cont	inued		
Labour practices continued			
Occupational health and safety	/		
GRI 103: Management Approac	:h GRI 103-1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	pp.22 to 24
	GRI 103-3	Evaluation of the management approach	pp.22 to 27
GRI 403: Occupational Health and Safety	GRI 403-1	Workers representation in formal joint management–worker health and safety committees	p.24
	GRI 403-4	Health and safety topics covered in formal agreements with trade unions	p.24
	MM	Provide a description of each accident resulting in a fatality, and actions taken following the accident. These may be aggregated where the causes of accidents or the actions taken are similar	pp.23 and 25
Training and education			
GRI 103: Management Approac	:h GRI 103-1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	pp.29 to 31; 53 and 54
	GRI 103-3	Evaluation of the management approach	pp.29 to 31
GRI 404: Training and Educatio	n GRI 404-2	Programmes for upgrading employee skills and transition assistance programmes	pp.29 to 31
Diversity and equal opportunity	/		
GRI 103: Management Approac	:h GRI 103-1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	pp.32 to 34
	GRI 103-3	Evaluation of the management approach	pp.32 to 34
GRI 405: Diversity and Equal Opportunity	GRI 405-1	Diversity of governance bodies and employees	p.33



GRI standard	Disclosure number	Disclosure	Page/notes
GRI Material Topics conti	nued		
Human rights (Note: human rights management is in the extractive industries generally.)		rate governance; it is not considered to be a material risk for Petra's operations but disclosures have been made in recognition of the fact that th	is is considered a material topic for companies working
Non-discrimination			
GRI 103: Management Approach	n GRI 103-1	Explanation of the material topic and its boundary	p. <u>9</u>
	GRI 103-2	The management approach and its components	pp.13, 33 and 36
	GRI 103-3	Evaluation of the management approach	p.33
GRI 406: Non-discrimination	GRI 406-1	Incidents of discrimination and corrective actions taken	p.33
Child labour			
GRI 103: Management Approach	n GRI 103-1	Explanation of the material topic and its boundary	p. <sup>0</sup>
	GRI 103-2	The management approach and its components	p.13
	GRI 103-3	Evaluation of the management approach	p.13
GRI 408: Child Labour	GRI 408-1	Operations and suppliers at significant risk for incidents of child labour	p.13
Forced or compulsory labour			
GRI 103: Management Approach	n GRI 103-1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	p.13
	GRI 103-3	Evaluation of the management approach	p.13
GRI 409: Forced or compulsory labor	ur GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	p.13
Rights of indigenous people			
GRI 103: Management Approach	n GRI 103-1	Explanation of the material topic and its boundary	p.9
	GRI 103-2	The management approach and its components	p.13
	GRI 103-3	Evaluation of the management approach	p.13
GRI 411: Rights of indigenous peop	le GRI 411-1	Incidents of violations involving rights of indigenous peoples	p.13; there were no such incidents in FY 2017
	MM	Indigenous rights: report on any policies relating to community consultation and support (including free, prior and informed consent), and settings where such dialogues are required by company policy and where they are not	p.13
	MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number/percentage of operations or sites where there are formal agreements with indigenous peoples' communities	p.13
	MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples	p.13



GRI standard	Disclosure number	Disclosure	Page/notes
GRI Material Topics con	tinued		
Society			
Local communities			
GRI 103: Management Approa	ch GRI 103-1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.6, 8 and 50 to 57
	GRI 103-3	Evaluation of the management approach	pp.50 to 57
GRI 413: Local Communities	GRI 413-1	Operations with local community engagement, impact assessments and development programmes	p.51
	MM	Lengthy guidance on reporting re. local communities	pp.50 to 57
	ММ	Local communities report whether there are programmes in place for assessing the impacts of operations on local communities prior to entering community, while operating in the community and while making decisions to exit the community	p.51
	MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes	pp.13 and 55 and 56
	MM8	Artisanal and small-scale mining: number (and percentage) of company operating sites where artisanal and small-scale mining ("ASM") takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks	p.56
Socio-economic compliance			
GRI 103: Management Approa	ch GRI 103-1	Explanation of the material topic and its boundary	p.10
	GRI 103-2	The management approach and its components	pp.59 and 60
	GRI 103-3	Evaluation of the management approach	pp.59 and 60
GRI 419: Socio-economic Compliance	GRI 419-1	Non-compliance with laws and regulations in the social and economic area	pp.12 and 59 and 60
	MM	Report a summary of judgements made against the organisation in the areas related to health and safety and labour laws	pp.59 and 60



52–53 Conduit Street London W15 2YX United Kingdom

+44 207 494 8203 Tel: Email: info@petradiamonds.com

Produced by www.petradiamonds.com

**design**portfolio