

PetraDiamonds

# Optimising value

Petra Diamonds Limited Sustainability Report 2018





# 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.

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## About Petra

Petra Diamonds is a leading independent diamond mining group and a consistent supplier of gem-quality rough diamonds to the international market.

Petra is quoted with a premium listing 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's strategy is to focus on value production rather than volume production by optimising recoveries from its high quality asset base in order to maximise its efficiency and profitability. The Group has a significant resource base of circa. 290 million carats, which supports the potential for long-life operations.

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.

• **Read about our business model**  
[petradiamonds.com/about-us/who-we-are/our-business-model](https://petradiamonds.com/about-us/who-we-are/our-business-model)

• **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](mailto:InvestorRelations@petradiamonds.com) or +44 20 7494 8203

## About this report

We are pleased to present the Petra Diamonds Limited Sustainability Report 2018 ("the Report") covering Petra's 2018 financial year ("FY 2018" or "the Year"), being the 12 months to 30 June 2018, and the operations of the Group, as set out on page 5. It should be read in conjunction with Petra's 2018 Annual Report, which is available to download at [www.petradiamonds.com](http://www.petradiamonds.com).

This Report has been prepared according to the GRI Standards, which are 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 management of these Topics, a balanced review of performance in FY 2018 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 65), women in the workforce (page 65), training spend (page 64) and social spend (page 64) are key performance indicators and have been subject to specific agreed upon 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").

The following exchange rates have been used for this announcement: average for the Year US\$1:ZAR12.86 (FY 2017: US\$1:ZAR13.59); and closing rate as at 30 June 2018 US\$1:ZAR13.73 (30 June 2017: US\$1:ZAR13.05).

• **Petra's historical sustainability reports can be accessed on the Company's website here:**  
[petradiamonds.com/investors/results-reports](https://petradiamonds.com/investors/results-reports)

• **Discover more about Petra online**  
[www.petradiamonds.com](http://www.petradiamonds.com)



## Introduction from the Chairman and CEO



**Adonis Pouroulis**  
Non-Executive Chairman

### Ethical responsibility

As Petra's Chairman, I am responsible for ensuring good corporate governance within the business and setting clear expectations with regards to our culture, values and behaviour. One of our core values is 'Let's do it right' and this flows into everything we do as a business, with priority being placed on ethical conduct and responsibility.

Petra adheres to a wide range of internal policies and procedures, as well as complying with external standards and international best practice, which we have listed at the beginning of each section of this Report.

We place great importance on upholding the high value placed on natural diamonds, Petra's exquisite product, mined from some of the world's most culturally significant operations, and ensuring that every aspect of our business is managed in keeping with this.

I hope that this comes across in our Sustainability Report, in which we aim to provide an update on the ESG matters that are considered to be most material to Petra and have the greatest impact on our stakeholders.

### The future of our industry

The Diamond Producers Association ("DPA"), of which Petra is a founder member, continues to work hard in seeking to actively influence consumer demand for diamonds and to educate on the integrity of the modern diamond industry. Its budget for the year was significantly increased to circa US\$70 million,

enabling it to expand upon its US marketing efforts and to reach additional regions, launching in India in November 2017 and China in the summer of 2018, the largest markets for diamond jewellery demand outside of the US – read more on page 19.

### Governance roadshow

Tony Lowrie, our Senior Independent Non-Executive Director, and I carried out a governance roadshow in November 2017, giving us the opportunity to discuss important governance and ESG matters in an open and transparent way with our top shareholders. We canvassed the opinion of our investors regarding which ESG topics are considered to be of material importance, thereby ensuring that our thinking is aligned. Read more about defining materiality and our material topics on pages 8 to 13.

Key areas of focus for shareholders included Petra's turnaround approach to safety, further to the fatalities in FY 2017, and its handling of the labour disruptions experienced in September 2017. Read more about the roadshow in our 2018 Annual Report on page 70.

### Ensuring a sustainable future for our assets

We announced the proposed disposal of our interest in KEM JV post Year end, stating that the rationale for this was to ensure a sustainable future for the operation by placing it under the sole stewardship of an operator best suited to maximise its value. Ekapa Mining's extensive experience of operating specifically within Kimberley and its ability to solely focus on these assets is expected to provide the right fit for the operation, thereby ensuring continuation of diamond mining employment and related economic activity in this renowned diamond centre.

**Adonis Pouroulis**  
Non-Executive Chairman  
23 October 2018



**Johan Dippenaar**  
Chief Executive Officer

### Safety first

Safety, as always, remains our number one priority at Petra and underpins all of our daily activities. I am very encouraged by the strong safety performance demonstrated by the Group in FY 2018 and am glad to see the impacts of the renewed focus on this area being displayed in our results. Due to the advanced stages of our expansion programmes, we saw a significant decrease in risk hours worked, negatively impacting injury frequency rates, and therefore it is an impressive achievement to see the continued improving trend in LTIFR to 0.23 for the Year, which compares very favourably against our industry as a whole.

### Protecting our environment

Acknowledging the importance of effectively managing our environmental impacts, we place great importance on energy-saving programmes, water recycling, responsible waste management and carbon reduction. I am pleased to note that we achieved a 10% reduction in total carbon footprint for the fourth consecutive year.

### Developing our people

We recognise that one of the key drivers of our future success is the retention and development of our people and we therefore place great importance on the empowerment of employees. Our investment in

training in FY 2018 increased in line with our efforts to ensure the sustainability of our workforce and we recorded nearly 60,000 shifts spent on training over the Year. This was in addition to the successful implementation of a wide range of developmental programmes enabling career development and promotion.

### Entering a new phase

As we enter this new phase in the Company's development, which will see us reaching steady-state production following a long period of heavy capital investment and development activity, there will be new elements of focus for Petra.

The future optimisation of the business will not solely be focused on tangible financial benefits but also on the impacts of the Group as a whole as we look at ways of further improving our safety practices, minimising our environmental impacts, maximising our potential to positively influence our local communities and providing the essential tools for social development in terms of education, training and business development.

With the winding down of certain development projects comes the inevitable decrease in contractor numbers across our operations and we would like to thank all those who have worked tirelessly to get the operations to where they are today. This goes for all Petra's employees, partners and stakeholders alike – your enthusiasm and perseverance in working together to achieve the Company's goals is greatly appreciated.

**Johan Dippenaar**  
Chief Executive Officer  
23 October 2018



## FY 2018 Sustainability Snapshot

### Occupational Health and Safety

LTIFR reduced by  
**15%**



**13,857** medicals  
were conducted  
across all  
Occupational  
Health Clinics



### Responsible Business

**FTSE4Good**  
Petra confirmed  
again as constituent



### People

ca. **95,000**  
people are  
dependent on  
our operations



**44%** of Petra's  
interns are women



### Environment

**79%** of  
waste recycled



### Positive Impacts

**72** approved loans  
for local SMMEs



**80** community  
stakeholder  
meetings held



**1%** decrease  
annual reduction  
target in total  
carbon emissions  
per carat





## Our Operations

# Driving sustainable development in our local communities

● Producing mine ● Exploration; currently under review

### ① Finsch

Employees **1,157** Contractors **1,530** Mine plan<sup>1</sup> **12 years**

- ▶ **Local operating environment:** the mine is the primary economic contributor to the district in which it is located
- ▶ **Opportunities:** raise maths and science education standards and support local economic development
- ▶ **Challenges:** fairly isolated location, high youth unemployment and poverty

### ② Cullinan

Employees **1,288** Contractors **1,028** Mine plan<sup>1</sup> **12 years**

- ▶ **Local operating environment:** Cullinan is well connected in terms of urban amenities and infrastructure
- ▶ **Opportunities:** diamond heritage tourism and raise maths and science education standards
- ▶ **Challenges:** high youth unemployment and limited housing

### ③ Koffiefontein

Employees **624** Contractors **148** Mine plan<sup>1</sup> **13 years**

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

### ④ Williamson

Employees **574** Contractors **871** Mine plan<sup>1</sup> **15 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

### ⑤ Kimberley Ekapa Mining JV<sup>2</sup>

Employees **1,619** Contractors **393** Mine plan<sup>1</sup> **17 years**

- ▶ **Local operating environment:** KEM JV is a significant economic contributor to the region
- ▶ **Opportunities:** diamond heritage tourism, support local economic development and promotion of environmental awareness
- ▶ **Challenges:** high youth unemployment, labour relations and illegal mining

### Marketing and corporate

Petra also has diamond marketing operations in Kimberley and Johannesburg, South Africa, and Antwerp, Belgium, as well as corporate offices in London and Johannesburg.

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

2. The proposed disposal of KEM JV was announced shortly after Year end.





## Our Countries and Economic Contribution



### South Africa

<b>Ethnic groups</b>	African: 89%; European: 8%; Indian/Asian: 3%
<b>Life expectancy (2018)</b>	Male: 60.2 years; Female: 67.0 years
<b>Urbanisation (2016)</b>	66% of total population
<b>Literacy rate (2015)</b>	94.4%
<b>Unemployment rate – total (youth)</b>	27.7%
<b>HIV/AIDS adult prevalence rate (2016)</b>	18.90%
<b>2017 value of diamond production</b>	US\$1.3bn
<b>2017 GDP</b>	US\$349.4bn
<b>GDP growth rate in 2016</b>	1.3%

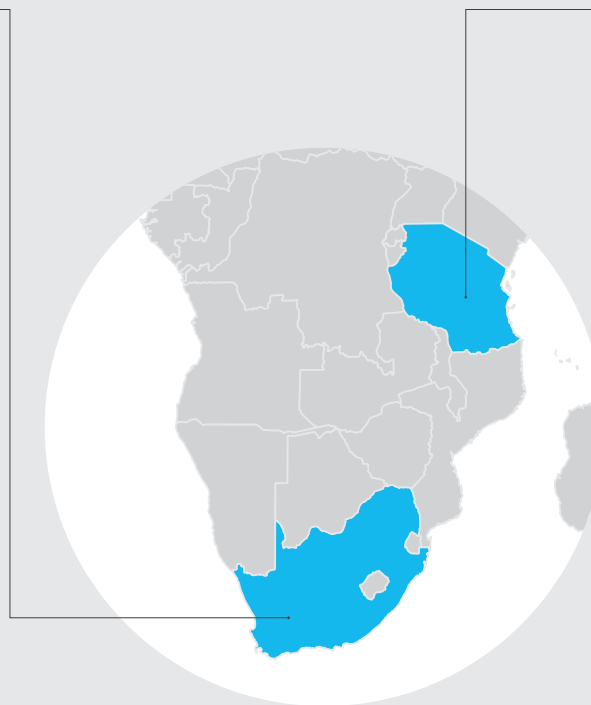
Capital invested<sup>1</sup>  
**US\$138.8m**  
 Employee wages<sup>1</sup>  
**US\$103.4m**  
 Social investment<sup>1</sup>  
**US\$0.9m**  
 Training<sup>1</sup>  
**US\$9.4m**  
 Supplier expenditure<sup>1</sup>  
**US\$177.0m**



### Tanzania

<b>Ethnic groups</b>	African: 99% (of which 95% consisting of 130+ tribes); Other: 1% (Asian, European and Arabian)
<b>Life expectancy (2018)</b>	Male: 62.0 years; Female: 65.8 years
<b>Urbanisation (2016)</b>	33% of total population
<b>Literacy rate (2015)</b>	77.9%
<b>Unemployment rate – total (youth)</b>	2.2%
<b>HIV/AIDS adult prevalence rate (2016)</b>	4.70%
<b>2017 value of diamond production</b>	US\$79.4m
<b>2017 GDP</b>	US\$52.1bn
<b>GDP growth rate in 2016</b>	7.1%

Capital invested  
**US\$4.6m**  
 Employee wages  
**US\$35.7m**  
 Social investment  
**US\$0.1m**  
 Training  
**US\$0.03m**  
 Supplier expenditure  
**US\$19.7m**



Sources: The World Bank, World Health Organization, The World Factbook – CIA, Kimberley Process Statistics.

1. Including KEM JV, excluding capitalised borrowing costs.



## Our Values in Action



### Let's do no harm

Group LTIFR decreased 15% in FY 2018 to 0.23

### Let's do it right

GIA Mine2Market programme trialled in FY 2018



### Let's take control

115 employees have graduated from our Leadership Development Programme since inception in 2008



### Let's make a difference

461 employment opportunities created by SMME support in FY 2018

### Let's do it better

All of our mines in South Africa transitioned their Environmental Management System to ISO 14001: 2015







## Defining Materiality

# Defining our material topics

1

### Define

Petra defines a material topic as an environmental, social or governance ("ESG") issue that could significantly impact the delivery of the Company's strategy and future performance, and/or could have a material impact on individuals, groups or communities that are impacted by Petra's operations.

In the sustainability sphere, materiality encompasses a company's impacts on the outside world and our 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.

2

### Engage

A formal stakeholder engagement and management evaluation process was carried out in FY 2016 to identify our material issues and, at the time, the aim was to conduct this process every two years. However, this approach has since been reviewed and, whilst stakeholder engagement is an ongoing and continuous process, it was deemed impractical to hold a formal process on a biennial basis.

In the interim, Petra has conducted various canvassing exercises both internally (in the form of internal communications surveys) and externally (an example being the governance roadshow conducted in November 2017, in which ESG matters were discussed with our largest shareholders).

► **Stakeholder engagement**  
Pages 9 and 10

3

### Determine

Petra identified its material topics in accordance with the GRI Standards process and guidelines. These topics form the basis of our sustainability reporting and have been grouped into five key areas for inclusion in this Year's report.

The next formal review of our material topics will take place in FY 2019, following a full engagement and internal evaluation process.

► **Our material topics**  
Pages 11 and 12

4

### Align

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:

[www.undp.org/content/undp/en/home/sustainable-development-goals.html](http://www.undp.org/content/undp/en/home/sustainable-development-goals.html)

► **Our material topics**  
Page 13



## Defining Materiality continued

### 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.

#### Employees/contractors



##### 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, healthy and safe workforce, Petra would be unable to implement its strategy.

##### HOW WE ENGAGE

- ▶ Workplace meetings and internal committees
- ▶ Employee briefs and publications
- ▶ Notice boards and electronic channels
- ▶ Annual CEO tour of operations
- ▶ Various mine forums and trade union representation on other committees

##### HOW WE DELIVER VALUE

- ▶ Salaries, wages and other benefits  
**US\$139.1 million**
- ▶ Employee training and development expenditure  
**US\$9.5 million**
- ▶ Graduates of Leadership Development Programme since inception in 2008  
**115**

#### 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 ensuring an ethical supply chain for our product.

##### HOW WE ENGAGE

- ▶ Continuous communication with our client base
- ▶ Open door policy and high level of business transparency
- ▶ Full certification of our products
- ▶ Site visits to operations
- ▶ Industry advocacy via the Diamond Producers Association ("DPA")

##### HOW WE DELIVER VALUE

- ▶ Conflict-free production  
**100%**
- ▶ Mcts sold<sup>1</sup>  
**4.6**
- ▶ Marketing spend committed by DPA in 2018  
**ca. US\$70 million**

#### 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.

##### HOW WE ENGAGE

- ▶ Regular briefings via public announcements, webcasts, presentations and social media
- ▶ Regular direct engagement via meetings, conferences and site visits
- ▶ Annual and sustainability reporting
- ▶ Dedicated investor relations department

##### HOW WE DELIVER VALUE

- ▶ Total production from FY 2006–FY 2018<sup>1</sup>  
**27.4 Mcts**
- ▶ Total revenue from FY 2006–FY 2018<sup>1</sup>  
**\$3.6 bn**
- ▶ Operating cashflow FY 2006–FY 2018<sup>1</sup>  
**\$1.2 billion**

1. Including KEM JV.



## Defining Materiality continued

### Stakeholder engagement continued

#### 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.

##### HOW WE ENGAGE

- ▶ Public participation processes and meetings
- ▶ Community newsletters and local media
- ▶ Partnerships on socio-economic projects
- ▶ Establishing positive relationships through ongoing engagement with community structures

##### HOW WE DELIVER VALUE

- ▶ Social spend<sup>1</sup>  
**US\$1.0 million**
- ▶ Community training spend<sup>1</sup>  
**US\$0.9 million**
- ▶ Community members enrolled for portable skills training  
**467**

#### Host Governments/regulators



##### WHY THEY ARE IMPORTANT

- ▶ Support from Governments and regulators is required for our social licence to operate.
- ▶ Petra ensures it complies in all material respects with all relevant legislation in each of the countries in which it operates. Where new legislation is enacted or regulations are passed, Petra engages with Government when required.

##### HOW WE ENGAGE

- ▶ Continuous consultation
- ▶ Scheduled meetings
- ▶ Membership of Minerals Council South Africa
- ▶ Regulatory site visits and audits
- ▶ Active involvement as members of Government-initiated forums and other consultative structures

##### HOW WE DELIVER VALUE

- ▶ Taxes and royalties<sup>1</sup>  
**US\$50.9 million**
- ▶ Average life of mine plans ranging from 12 years to  
**15 years**
- ▶ Estimated number of dependants on our direct employees<sup>1</sup>  
**55,000+**  
(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.

##### 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 procurement expenditure<sup>1</sup>  
**US\$351.0 million**
- ▶ BBBEE and HDSA suppliers<sup>1</sup>  
**78% of discretionary spend**
- ▶ Tanzania procurement expenditure  
**US\$57.2 million**

1. Including KEM JV.





## 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, local communities, host Governments/regulators and suppliers.

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

➤ **Read more on pages 16 to 18**

### 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 54 and 55**

### 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, local communities, host Governments/regulators, and suppliers.

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

➤ **Read more on page 19**

### Occupational 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 23 to 29**

### 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 32 and 33**

### 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 34 and 35**



## Our Material Topics continued

### Labour relations

The labour relations climate in South Africa has been notably volatile. While Petra has experienced largely stable labour relations over the last three years, 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 initiatives such as the Itumeleng Petra Diamonds Employee Trust, which aims to align employee, management and shareholder interests.

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

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

➤ **Read more on pages 36 to 38**

### 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 41 to 45**

### 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, local communities and host Governments/regulators.

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

➤ **Read more on pages 46 to 48**

### 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 49 to 51**

### 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. Our mines are typically located in remote areas where there are limited employment opportunities and, as such, are crucial to the current and future prosperity of their local communities. We place great emphasis on engagement with our stakeholders in order to be able to better assess our impacts and to strategically address matters of mutual importance.

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

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

➤ **Read more on pages 56 to 63**

### 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 the Petra business as a whole.

➤ **Read more on pages 20 to 22**



## Our Material Topics continued

### UN Sustainable Development Goals

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.

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Corporate governance								●				●					
Generating economic benefit	●							●		●	●						●
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												●					

► Read more at: [undp.org/content/undp/en/home/sustainable-development-goals.html](https://undp.org/content/undp/en/home/sustainable-development-goals.html)





## Responsible Business

- 16 Corporate Governance
- 19 Consumer Demand
- 20 Legal Compliance



### Stakeholders

- ▶ Employees/contractors/trade chains
- ▶ Local communities
- ▶ Host Governments/regulators/suppliers

### At a glance

# 100%

PERCENTAGE OF PETRA PRODUCTION  
THAT IS CERTIFIED CONFLICT FREE

# US\$82 billion

GLOBAL DIAMOND JEWELLERY MARKET IN 2017

# US\$70 million

INVESTMENT COMMITTED TO GENERIC  
MARKETING BY THE DPA IN 2018

# FTSE4Good

PETRA CONFIRMED AGAIN AS A CONSTITUENT

# 0

FINES PAID FOR REGULATORY NON-COMPLIANCE

## Responsible Business

### Responsibility



#### Key achievements

- ▶ Continued success of the independent whistleblowing programme.
- ▶ Petra's HSSE Committee was further strengthened with new appointments at Board and Senior Management level.
- ▶ 11 years with no environmental fines imposed on Petra.
- ▶ Continued reporting to key benchmarking agencies and international standards to further improve Petra's transparency.

#### Key challenges

- ▶ Continuously evolving governance standards to meet new legislation and best practice requirements.
- ▶ Developing effective training programmes to educate employees on governance matters.
- ▶ Ensuring security at KEM JV in relation to illegal mining activities.
- ▶ Navigating the changes to the legislative environments in both South Africa and Tanzania.

#### Objectives for FY 2019

- ▶ Continued implementation of governance standards.
- ▶ Continue working with the DPA to assist it in its goals to sustain consumer demand for diamonds.
- ▶ Sustained dialogue with the Government of Tanzania and local practitioners in relation to recent legislative developments.
- ▶ Continued emphasis on ensuring suitable and effective HSSE policies and systems are in place across the Group.
- ▶ Review of Code of Ethical Conduct.

#### Company policies

- ▶ Code of Ethical Conduct
- ▶ Human Rights Policy
- ▶ Anti-Bribery Policy
- ▶ Whistleblower Policy
- ▶ PAIA Manual
- ▶ Modern Slavery and Human Trafficking Statement
- ▶ International Labour Organization Declaration on Fundamental Principles and Rights at Work

#### Standards we follow

- ▶ UK Corporate Governance Code
- ▶ UK Bribery Act
- ▶ ISO 31000 Risk Management Standard
- ▶ The Kimberley Process Certification Scheme

▶ **Read more about how we apply corporate governance within Petra in our 2018 Corporate Governance Statement published in our Annual Report**

1. Two of Petra's Board members sit on the HSSE Committee – Johan Dippenaar and Dr Pat Bartlett.

2. Post Year end the formation of a Social, Ethics & Diversity Committee was approved. Therefore in FY 2019 the HSSE Committee will be restructured to form the HSE Committee.



## Corporate Governance

### Our approach

#### Governance and risk management

Governance and risk management are 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 issues and risks.

As part of establishing the sustainability risk context, there are two 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). Further information on the activity of these Committees can be found in our 2018 Annual Report – please refer to the [Report of the Audit Committee](#) and [Report of the 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.

More information on our approach to risk management can be found here: [www.petradiamonds.com/about-us/corporate-governance/internal-control-and-risk-management](http://www.petradiamonds.com/about-us/corporate-governance/internal-control-and-risk-management).

### Sustainability management

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

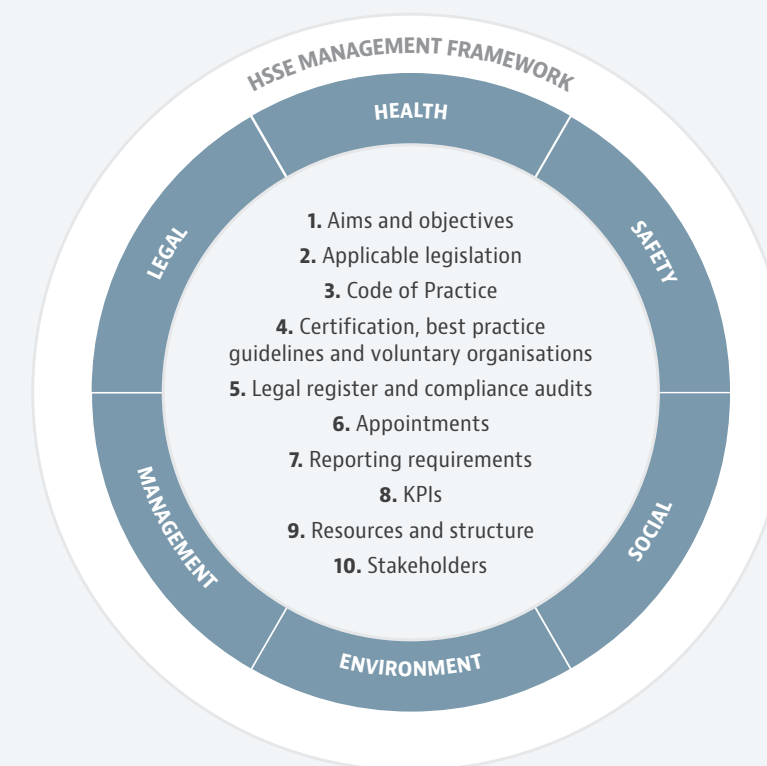
Sustainability objectives exist across our operations and specific indicators are used to monitor and assess performance against targets on a mine-by-mine basis, as well as at Group level. A robust system of reporting on these indicators is in place, with information flowing up from the Health, Safety 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 timely to the highest governance body.

Given the importance we attach to the HSSE Committee as a company, we took the decision to strengthen its membership at Board and Senior Management level with the appointment of Dr Pat Bartlett (NED) and Luctor Roode (COO).

### Petra's HSSE Management Framework



The Group's HSSE Management Framework aims to ensure that we meet our sustainability objectives, comply with relevant legislation, effectively monitor and improve our performance and meet (or, where possible, exceed) best practice.





## Corporate Governance continued

### Our approach continued

#### Sustainability management continued

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).

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 South Africa and was not subject to any fines during FY 2018. In Tanzania, Petra is in ongoing dialogue with the Government and local practitioners in relation to recent legislative developments.

#### 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.

Health, safety, social and environment 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 2018 Annual Report – please refer to the **Directors' Remuneration Report**.

#### Transparency and disclosure

Petra's reporting is aligned with a number of international standards as noted on page 2. We also provide disclosure to the following:



#### Ensuring ethical behaviour

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.

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.

#### 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 its job improperly. No facilitation payments were made in FY 2018.

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

The Audit Committee receives a security intelligence report at each meeting, detailing the implementation of the Anti-Bribery Policy and any investigations.

#### 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, harassment or 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.



Petra has an external whistleblowing and fraud hotline, which is monitored by the Audit Committee. Employees are fully briefed on whistleblowing and details can be accessed on Petra's website: [www.petradiamonds.com/about-us/corporate-governance/business-ethics](http://www.petradiamonds.com/about-us/corporate-governance/business-ethics). Training is also provided to the various operations on anti-bribery as part of creating awareness and encouraging the reporting of any bribery or corruption.



## Corporate Governance continued

### Our approach continued

#### Whistleblowing procedure continued

All 'tip-offs' received, i.e. via telephone, fax, email, post or the website, will be 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 will be kept strictly confidential and protected according to applicable local and international laws.

In FY 2018 Petra received 36 reports involving alleged irregularities considered necessary to investigate, relating mostly to fraud and recruitment scams. Of these reports, 25 were resolved and closed and 11 remain under investigation.

#### Human rights

Petra is fully committed to upholding the human rights of all of its stakeholders, as set out in the Group's **Human Rights Policy**. The Company therefore 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"), which in turn disseminates its knowledge to its members.

Petra has aligned its principles with the International Labour Organization 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.

#### • Read more about our supply chain on page 55

#### Indigenous people

Contact with indigenous people is mostly 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 are limited (and currently under review) in Botswana, but we are committed to responsible engagement with the indigenous Basarwa people as required.

Petra reported no disputes relating to land use or involving the rights of indigenous people during FY 2018.

### 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 which 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 of intelligence, product protection and guarding) 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.

Additional security efforts were required at KEM JV in FY 2018 in relation to the illegal mining activities affecting certain of the surface operations. The proposed disposal of Petra's interest in the KEM JV was announced shortly after the Year end. See further detail in the 2018 Annual Report.

#### 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.



## Consumer Demand

### 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

As a member of the DPA, we are committed to high standards of integrity and responsibility in all aspects of their 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 ("WDC") 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 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 Chief Executive, 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 to ensure that diamonds remain relevant to the next generation of consumers – the so-called 'millennials'. Another key part of the DPA's remit is to educate consumers about the integrity of the modern diamond mining industry. Read more of the positive impacts of Petra on pages 52 to 63.

#### DPA activities in FY 2018

- ▶ The DPA's advertising budget grew to US\$70 million for 2018 to enable it to expand its efforts in the US, as well as to launch in both India and China.

- ▶ The majority of its budget is allocated to the major US market, which represents circa 50% of diamond sales worldwide. One of the key focuses in the US is female self-purchasing, with research showing that this is a major and growing market.
- ▶ Having launched in India in November 2017, it launched in China in the summer of 2018, applying the 'Real is Rare' concept but in a way specific to the Chinese consumer.

'DPA Light' has been developed for Europe, which involves a pared-down version focused on digital, PR and training. This launched in France in the spring and will launch in the UK this autumn.

#### 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 that our duty 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 14 to 22.

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 DPA's 'Real is Rare' campaign was launched in India in November 2017

Sharing her thoughts on the launch, Richa Singh, Managing Director, India, Diamond Producers Association, said: "In India, the 'Real is Rare. Real is a Diamond.' campaign shares a deep-rooted thought of love built through rare instances in the minds of consumers."





## Legal Compliance

### 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 is 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 ("EMP") 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 ("SLP") 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.

#### Botswana

A formal community development approach has not yet been adopted for Botswana, where our exploration operations are limited (and currently under review). However, Petra Diamonds Botswana's comprehensive Health, Safety, Environment and Quality ("HSEQ") Policy Guidelines and Due Diligence Checklist make provision for the continued assessment of any impact of its drilling programme and development work.



### Safety and environmental audit at Koffiefontein

Having retained both ISO and OHSAS certifications, Koffiefontein was then audited externally by BSI for ISO 14001:2004 and the transition to ISO 14001:2015 as well as the OHSAS 18001:2007 in November 2017, and it was found that the operation was ready to transition to the new ISO standard.

Koffiefontein was the first mine within the Group's portfolio to be certified on ISO 14001:2015, which is indicative of the strong work of the environmental team, and the other South African operations followed shortly after.

The standard is an environmental management system to help organisations:

- ▶ minimise how their operations (processes, etc.) negatively affect the environment;
- ▶ comply with applicable laws, regulations and other environmentally oriented requirements; and
- ▶ continually improve the above.

Certification gives the Company a competitive advantage and the trust of stakeholders as they are ensured of an organisation that processes in a manner that is safe and sustainable.



## Legal Compliance continued

### 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 around delays from Governmental departments in processing applications for permissions and authorisations as well as in 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 which 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 email to the relevant managers at each operation.

Specified 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 2018 in South Africa and was not subject to any fines related to non-compliance. In Tanzania, Petra is in ongoing dialogue with the Government and local practitioners in relation to recent legislative developments.

### 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, 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 from formal instructions, court subpoenas or administrative fines in FY 2018.

### 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:

- ▶ Environmental Management Programme ("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 as per schedule;
- ▶ 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 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 2018. This is the 11th 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 ("HRD"), employment equity ("EE"), preferential procurement, local economic development ("LED") and housing.

Annual reporting by each operation to the DMR is a mandatory element of the Mining Rights 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.

Petra received two Section 93 Notices in FY 2018, one at Cullinan and one at Koffiefontein; responses for both were provided before the Year end.

Although there is no specific social legislation, our approach to corporate social responsibility goes beyond compliance and 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.



## Legal Compliance continued

### Material legislative updates

#### South Africa

A revised draft of the Mining Charter was published for public comment on 15 June 2018. The Minerals Council South Africa, which represents the South African mining industry and of which Petra is a member, provided submissions in relation to the draft Charter. Petra welcomes ongoing engagement with the Minister through the Minerals Council in relation to the finalisation of the Mining Charter.

On 27 September the South African DMR published a new Mining Charter which has served to remove uncertainty and address a number of concerns which we believe will be positively received within the mining industry.

In particular, Petra is pleased to note that, in line with the recognition of the continuing consequences of the 'once empowered, always empowered' principle, existing mining right holders that have achieved a 26% BEE shareholding will be recognised as compliant for the duration of the mining right.

#### Tanzania

In 2017 there were amendments to the legislative framework in Tanzania. These include the enactment of the Review and Re-negotiation of Unconscionable Terms Act, 2017, the Permanent Sovereignty Act, 2017 and amendments to the Mining Act. The most important of these impacting on Williamson are:

- ▶ 16% free carry in favour of the Government of Tanzania ("GoT") (with a right to increase to 50% at a value to be determined with reference to tax expenditures);

- ▶ Mining Commission established (with broad supervisory and regulatory powers in the mining industry);
- ▶ Mines Resident Officer to be established (responsible for monitoring daily production, records, etc.);
- ▶ royalty increased from 5% to 6% (also 1% clearing fee in 2017 Finance Act);
- ▶ VAT input claims can also be denied if related to exports;
- ▶ the GoT has the option to buy if it believes goods are undervalued;
- ▶ establishment of mineral and gem houses (auction centre, minerals exchange and clearing house) and Government mineral warehouse (which is to be custodian of minerals and gemstones won by mineral right holders in Tanzania);
- ▶ all minerals recovered are to be stored in a storage facility, recorded by the Mines Resident Officer and then moved to Government minerals warehouse to await disposal for home refining, authorised mineral dealers or, where permitted, export;
- ▶ minerals to be sorted/valued in presence of Mines Resident Officer and Revenue Official (report used to determine royalties) and beneficiated in Republic (although export permissible in certain circumstances); and
- ▶ in procurement, preference to be given to local citizens and companies.

In addition, the implementation of the Mining (Minimum Shareholding and Public Offering) Regulations, 2016, and the Mining (Minimum Shareholding and Public Offering) (Amendment) Regulations provides for:

- ▶ minimum local shareholding of the holder of a special mining licence (like WDL) shall be 30%;
- ▶ 'local shareholding' in relation to a corporate body means shares in which at least 50% are held by Tanzanian citizens or the GoT;
- ▶ minimum shareholding should be obtained through a public offer on the DSX (if unsuccessful holder may apply to Minister for a waiver); and
- ▶ effective six months from 24 February 2017 (namely, 23 August 2017).

On 13 July 2018, new mining regulations and guidelines were issued in Tanzania in relation to an integrity pledge as well as a guideline for submission of local content plan to the Tanzanian authorities. The integrity pledge is a mechanism to enforce corporate governance at companies involved in the Tanzanian mining industry. The local content plan relates to guidelines and targets in relation to local procurement and related practices. Petra is in ongoing dialogue with the Government and local practitioners in relation to recent legislative developments.





# Occupational Health and Safety

25 Safety

28 Occupational Health

## Stakeholders

- ▶ Employees/contractors/unions
- ▶ Local communities

## At a glance

LTIFR: 0.23

FIFR: 0.00

82%

ROLLING IMPROVEMENT IN LTIFR  
OVER PAST SEVEN YEARS

100%

OF STAFF TRAINED IN OCCUPATIONAL HEALTH  
AND SAFETY STANDARDS IN FY 2018

100%

OF EMPLOYEES UNDERWENT MEDICAL  
SCREENING IN FY 2018



## Occupational Health and Safety

### Responsibility

**Chief Executive Officer** Johan Dippenaar

**Petra Board**

**Chief Operating Officer** Luctor Roode

**HSSE Committee**

**Group HSEQ Manager**  
**Group Health and Safety Leads**

**HSEQ Steering Committee**  
**Health and Safety Peer Review Committee**

**General Manager**  
**Mine Manager**  
**Chief Safety Officers**  
**Safety Officers**

**Collective Health and Safety Committee**  
**Departmental Health and Safety Committee**  
**Sectional Health and Safety Committee**

#### Key achievements

- ▶ Zero fatal accidents.
- ▶ Rolling improvement in LTIFR of 82% over past seven years.
- ▶ LTIFR for the Year improved by 15%.
- ▶ Severity rate improved 43%.
- ▶ Mandatory compliance 100%.
- ▶ OHSAS 18001:2007 certification maintained through BSI since 2016.

#### Key challenges

- ▶ Reduction in risk work hours in FY 2018 (3.7 million hours lower than in FY 2017) significantly impacting frequency rates.
- ▶ The quality of leadership in the workplace, timeous intervention and critical control enforcement.
- ▶ Non-work-related and unsafe acts or mistakes by individuals triggering 44% of all significant unwanted events during the Year.

#### Objectives for FY 2019

- ▶ Sustaining safe operations in support of our first core value, 'let's do no harm'.
- ▶ Zero fatalities.
- ▶ 10% reduction in LTIs.
- ▶ 90% achievement on all safety KPIs.
- ▶ Focus on culture and leadership, systems and tools, HIRA, visibility and communication and review and consequence management.

#### Company policies

- ▶ Group HSEQ Policy
- ▶ HSE Operational Risk Management Process
- ▶ Group HSEQ Standards

#### Standards we follow

- ▶ OHSAS 18001:2007 – this provides the basis for our Occupational Health and safety management system
- ▶ International Council on Mining & Metals ("ICMM") – industry best practice, new initiatives and trending
- ▶ Minerals Council of South Africa – via its membership, Petra gains valuable insight into national industry performance standards, policy committee guidance and trends (including the South African Health and Safety Policy Committee)
- ▶ South Africa – national health and safety performance milestones



## Safety

### Safety management

Safety is our number one priority at Petra and we strive for a 'zero harm' working environment. Our fundamental aim is to 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 in 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 related to mobile machinery, trackless mobile machines and material handling. 60% of significant accidents were due to unsafe acts or mistakes. 44% of all recorded significant accidents were non-work related (slips and trips) caused by a lack of focus and concentration and complacency.

The following key components required to maintain safety in the workplace are carried out by working crews in the workplace on all shifts:

- ▶ maximum visibility;
- ▶ involvement;

- ▶ leading;
- ▶ coaching;
- ▶ enforcement of standards and controls;
- ▶ stop-and-fix interventions; and
- ▶ strict 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.

An overview of standards relating to health and safety followed by Petra is included on page 24. A transition process is scheduled over the period 2019–2020 for all operations to migrate from the OHSAS 18001:2007 system to the newly promulgated ISO 45001:2018 standard.

### Minerals Council – South African 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.

### Material risk management

Any significant risks that remain after elimination and control 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, internal and regulatory inspections are analysed, prioritised and formally actioned by means of remedial action plans with assigned responsibility and target dates.

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.



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 sub-process 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 2018.

### Incident reporting

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

Causes, failures and shortcomings 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.



## Safety continued

### Safety management continued

#### HSE Committees

The HSE Committees at each operation comprise supervisory, union and management members and represent 100% of the workforce. We have 4.5% workforce representation in formal management-worker HSE Committees', which equates to one representative for every 22 people (significantly higher than the South African legislator requirement of one representative for every 50 people).

100%

OF THE WORKFORCE REPRESENTED  
BY SUPERVISORY, UNION AND  
MANAGEMENT MEMBERS

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 the specific 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. 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.

19,282

NUMBER OF EMPLOYEE, CONTRACTOR  
AND STAKEHOLDER TRAINING COURSES  
COMPLETED THIS YEAR

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

### Safety performance in FY 2018

Our health and safety objectives and KPIs are underpinned by the aim to achieve zero fatalities and a reduction of 10% in lost time injuries on a rolling annual basis.

Due to the Group's commitment to achieving 'zero harm' by all employees, contractors and stakeholders,

Petra saw a significant improvement in its safety performance when compared to FY 2017. The Group improved on 91% of all measured safety KPIs during FY 2018.

### Fatal Injury Frequency Rate

0

FATAL ACCIDENTS WERE RECORDED  
DURING FY 2018

The Group Fatal Injury Frequency Rate ("FIFR") improved to 0 (FY 2017: 0.05).

### Lost Time Injury Frequency Rate

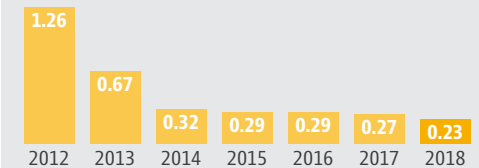
LTIFR is the key measure we use for general safety performance and it was encouraging that this continued its improving trend to 0.23 for FY 2018 (FY 2017: 0.27), despite the significant reduction of risk work hours by 3.7 million during the Year. The number of Section 54 Instructions, issued by the Department of Mineral Resources in South African operations, reduced by 71% in FY 2018 to nine (FY 2017: 31), as a result of the improvement of standards overall.

The 82% rolling improvement in our LTIFR over the past seven years is a clear indication of the effectiveness of the implemented management system and associated tools.

-26%

OUR LOST TIME INJURIES ("LTIs") REDUCED TO  
25 IN FY 2018 COMPARED WITH 35 IN FY 2017

### LTIFR – rolling trend



The improvement can mainly be attributed to a 'back to basics' strategy focused on management walkabouts, serving leadership, coaching, proactive intervention, enforcement of standards and practices in the workplace and consequence management every day during every shift.



### Petra wins safety awards

For the third consecutive year, Finsch won the 'National Winner of the Diamond Mining Category' at the annual MineSafe Conference in South Africa. Koffiefontein received the trophy for the 'Most Improved Mine in the Diamond Mining Category'.



## Safety continued



### Drumming our way to a safer working environment

On 16 November 2017 the Finsch Safety Department hosted drumming sessions for all employees as part of the Festive Season Safety Awareness Campaign. Drumming has been used for thousands of years to create and maintain physical, mental and spiritual health. The theme for the Finsch drumming session was teamwork, concentration and focus when doing any task.

The drumming sessions were facilitated by Drumming SA and started as early as 4.30am and not even the cold weather dampened the spirit and enthusiasm that the employees showed throughout the day. The sessions were scheduled every 30 minutes during the day to allow as many employees as possible to participate. Great feedback was received from employees and for many it was their first time drumming.



### Plant employees take initiative to improve safety

Employees from the Concentration section of the Plant at Finsch have taken initiative and implemented several improvements in this section.

At 307-18 conveyor, access to the head pulley discharged chute for depagging and cleaning purposes was improved by installing stairs.

At 314-18 conveyor, stairs were installed to improve access next to the conveyor for inspection and pull wire testing.

Cover lids for the cyclone overflow hoppers in the FDMS were fabricated and installed. These

lids prevent Ferrosilicon spillage at the cyclone overflow hoppers and also improve spillage management. The cyclone is used to effect separation according to density of the ore treated. Material and diamonds with a high density will report to the recovery and material with a low density will report to the cyclone overflow hopper.

Ferrosilicon is used as a dense medium to effect the separation within the cyclone. Ferrosilicon is recycled in the DMS circuit and spillages should be kept to a minimum.





## Occupational Health

### Health management

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

Our health strategy addresses the following three focus areas:

#### ► Managing Occupational Health risks in order to prevent harm to our workforce

##### Occupational hygiene

Occupational hygiene involves proactively identifying sources of, and exposures to, health hazards, profiling the associated risk and preventing the 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.

#### ► Implementing employee occupational health programmes

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 targeted campaigns, 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.

#### ► Building partnerships with external health service providers to strengthen health systems

##### 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 dependents.

Williamson is in a fixed agreement with 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 anti-retroviral 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.



### Biggest Loser Wellness Campaign

Finsch launched the Biggest Loser Wellness Campaign in June 2018, aimed at employees and community members who wish to become healthy and lose weight. Nutrition plans were designed by a certified dietician and exercise programmes for varying fitness levels were developed by a bio-kineticist. Exercise plans for

those with back or knee pain and various other health issues were also included.

Life Employee Health Solutions representatives monitor those who partake in the scheme and guide them on their journey to becoming more healthy, with incentives available to the 'Biggest Losers' over a 12-week period.



## Occupational Health continued

### Occupational Health management and performance in FY 2018

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.

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.

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

13,857 medicals were conducted across all Occupational Health clinics during the Year, consisting of 2,909 pre-employment, 7,545 periodical, 454 redeployment and 2,949 exit medicals.

During FY 2018 ten cases of diseases related to employees' occupations were submitted to the Department of Health ("MBOD") and Rand Mutual Assurance ("RMA") evaluation as an 'occupation disease'. We are awaiting confirmation and certification of the submissions made. These cases can be classified as follows: one case of asthma, one of NIHL and eight of pulmonary tuberculosis ("PTB").

Williamson employees underwent full medical examinations by Occupational Safety & Health Administration ("OSHA") post Year end. Williamson will be issued with the medical certificate by OSHA in due course.

# 100%

OF OUR EMPLOYEES WERE OFFERED  
THE OPPORTUNITY TO VOLUNTARY  
TEST FOR HIV/AIDS

### HIV/AIDS testing

The uptake for voluntary testing during medicals was 64% of the people that partook; of these, 34 tested positive. These patients were referred for treatment. The number of HIV-positive employees enrolled on our HIV wellness programme is 220 (2017: 212). The increase in numbers is a result of improved case management. The uptake of anti-retroviral therapy ("ART") by HIV-positive employees is 189 employees or 86%.

### Malaria

645 people were tested at Williamson; of those tested, 21% of employees and 6% of contractors were positively diagnosed with this disease, all of whom received treatment.



### Petra forms partnership with the Department of Health ("DOH")

One of the issues identified by Petra with regards to health management within our workforce was access to practical health care for employees. With our mines being located far from towns, we have noted that many employees were either not starting or continuing treatment following their annual medical checks.

In order to address this issue, Petra negotiated a Memorandum of Understanding ("MOU") with the DOH in March 2018. Finsch was selected as the first mine to implement the MOU. Several audits were carried out by the DOH to ensure all legal requirements were met. Implementation of the MOU is pending at Koffiefontein and Cullinan.

As a result of this partnership, employees and contractors can now receive treatment at the Finsch Diamond Mine Occupational Health Centre ("FDMOHC"), thereby making it more convenient for them and also lessening the time spent away from work.

In the past, employees living in Lime Acres who were newly diagnosed with hypertension had to spend three days away from work to go to the clinic, start treatment and receive follow-up. Now they are able to do this at the FDMOHC, where over 70 people now receive treatment for the condition.

Petra's HIV programme also greatly benefits from the MOU in that employees can be tested, diagnosed and treated.

Another benefit of the MOU involves the training of Occupational Health Clinic staff; when the DOH carries out training sessions, our staff are invited to attend at no cost, which assists us in improving our service to the workforce.

Since the MOU has been in place, we have seen a visible improvement in compliance to treatment by our workforce, which is of great value to the Company.



# People

32 Employee Retention  
and Development

34 Diversity

36 Labour Relations

## Stakeholders

- ▶ Employees/contractors/unions
- ▶ Local communities
- ▶ Host Governments/regulators

## At a glance

9,486

PEOPLE EMPLOYED IN FY 2018

US\$9.5 million

INVESTED IN STAFF TRAINING  
AND DEVELOPMENT IN FY 2018

18%

OF FEMALES IN THE WORKFORCE

44%

OF PETRA'S INTERNS ARE WOMEN

23%

OF LEADERSHIP DEVELOPMENT PROGRAMME  
CANDIDATES ARE WOMEN



# People

## Responsibility

Executive oversight	Petra Board				Social, Ethics & Diversity (“SED”) Committee <sup>1</sup>		
Group oversight	RSA Legislation	Recruitment Policy	Employment Equity (“EE”) Policy	Women in Mining/ Maternity Policy	Promotion Policy	Ops Remuneration Committee	Central Negotiation Forum
Operational oversight	Procedures	Future Forums	EE Committee	Incapacity Committee	Recruitment Panels	Mine Negotiation Forum	

### Key achievements

- ▶ Successful implementation of a wide range of developmental programmes enabling career development and promotion; 29 employees qualified as artisans and eight as miners.
- ▶ Implementation of a Koffiefontein project to support employees to complete national technical education and development (“NATED”) courses that may prepare them for further studies in technical disciplines.
- ▶ Implementation of the Career Advancement Programme for A- and B-band employees. This programme endeavours to create opportunities for A- and B-band employees to obtain skills and qualifications that will lead to promotion into the skilled bands. 34 employees commenced this programme in FY 2018.

### Key challenges

- ▶ Low levels of literacy amongst our communities (especially the rural ones) limit the pool from which to recruit scholars, bursars and interns.
- ▶ The mining industry is not always considered attractive and therefore it can be difficult to attract and retain the correct skills.

### Objectives for FY 2019

- ▶ To provide support to our women in management through the launch of our ‘Women in Leadership Programme’.
- ▶ To ensure employee development needs are met by conducting a skills audit to identify current training gaps and future training needs.
- ▶ To continue to foster a culture of tolerance and recognition of the importance of diversity in the workplace.
- ▶ To strive to improve the scholastic skills within local communities in order to create an input into our education pipeline.

### Company policies

- ▶ Petra policies on employee benefits, HR services and recruitment
- ▶ Social and Labour Plans (“SLP”)
- ▶ Communication Management Policy
- ▶ Code of Ethical Conduct and related policies
- ▶ Group Training and Development Policy, with additional related policies
- ▶ Policy Statement: Political Activity on or Using Company Facilities

### Standards we follow

- ▶ The Constitution of RSA
- ▶ The South African Mining Charter
- ▶ International Labour Organization Declaration on Fundamental Principles and Rights at Work
- ▶ Labour Relations Act (Act 66 of 1995)
- ▶ Employment Equity Act (Act 55 of 1998)
- ▶ Basic Conditions of Employment (Act 75 of 1997)
- ▶ Employment Equity Act (Act 55 of 1998)
- ▶ MPRDA 28 of 2002
- ▶ Collective/Recognition and other Agreements with relevant unions

1. The SED Committee was established after Year end. As a result, the HSSE Committee was then restructured to form the HSE Committee.





## Employee Retention and Development

### Our approach

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 with the opportunity to enhance their skillsets 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 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.

9,486<sup>1</sup>

PEOPLE EMPLOYED BY THE GROUP  
OR 7,474 EXCLUDING KEM JV

### Our workforce

As at 30 June 2018, the Group employed 9,486 people (a 15% decrease on 30 June 2017: 11,169) or 7,474 excluding KEM JV. See page 69 for the breakdown of employee and contractor numbers.

The number of permanent employees decreased by 2% to 5,502 (FY 2017: 5,607) or 3,883 excluding KEM JV, mainly due to retrenchments at Helam projects and several retirements completed during the Year. The number of contractors decreased significantly due to the advanced stages of our capital programmes, which saw a 28% fall to 3,984 (FY 2017: 5,562) or 3,591 excluding KEM JV.

### 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 SLPs, which include commitments to recruit from 'labour-sending areas', i.e. their host and local communities. Commitments to recruit locally 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 will still be 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 (39% of Petra's workforce in FY 2018) and skilled employees (61% of Petra's workforce in FY 2018), 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.

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 2018, our total employee turnover increased from 9% to 11%, mainly due to retrenchments at Helam, terminations of fixed-term contracts of employment at KEM JV and several retirements during the Year. See page 71 for the breakdown of the Petra Group turnover rate for FY 2018. 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.

### Employee training and development

Our investment in employee training and development increased 12% to circa US\$9.5 million in FY 2018 (FY 2017: circa US\$8.5 million) due to an increase in the number of full-time trainees, notably interns, which increased from 30 in FY 2017 to 41 in FY 2018. The increase is also related to the implementation of the 'True Blue' course, focusing on the engagement of employees in order to unlock their 'True Blue Value', which was attended by 108 supervisors.

Petra endeavours for training spend to consistently exceed 5.5% of operations payroll per annum and FY 2018's spend represented 6.8% of payroll<sup>1</sup>.

Main areas of expenditure continued to be in-house safety and 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 OHSAS and the Association for Tanzanian Employers ("ATE"), as well as external learning events, such as formal original 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 30,106 instances of legally required training were presented across the operations during the Year (FY 2017: 27,706). These are mostly health and safety-related courses required by legislation and aimed at improving workplace safety.

Employee training and development spans a wide scope of safety training and technical training and a variety of development programmes, both technical and managerial in nature. The table below indicates the total shifts spent on core and support skills training per South African operation as well as the average number of days spent on training per year.

1. Including KEM JV.



## Employee Retention and Development continued

### Employee training and development continued

We recorded a total of nearly 60,000 shifts spent on training across our South African operations in FY 2018, which averages out as 12.4 shifts per employee.

ca. 60,000

SHIFTS DEDICATED TO TRAINING IN SOUTH AFRICA

### 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 2018, 35 employees participated in the LDP. The LDP is considered to be an important opportunity to improve management diversity, both by race and by gender, with 23% of participants being female. From inception of this programme in 2008, a total of 115 employees have graduated. Of the graduates, 73 were promoted, 22 of whom in the last Year. To date, 24 female graduates have been promoted (six of these during FY 2018). Three female graduates were appointed to middle management positions.

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 ("MDP") and Senior Management Development Programme ("SMDP") presented by the University of Stellenbosch Business School in FY 2018. In FY 2018, nine employees completed the MDP (33% of the candidates were females) and three the SMDP. The formal programme is complemented by leadership and management coaching sessions to further contribute to performance improvement and personal efficiency.

A range of supervisory development interventions are also presented, ranging from short courses to skills programmes. 31 candidates were enrolled in the Supervisory Development Skills Programme, 29 of whom completed the programme successfully. 108 experienced supervisors attended 'True Blue', a bespoke short course on supervision. This intensive course is conducted over three days and focuses on providing supervisors with the skillset to effectively engage their teams in the workplace.

### 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 191 learners in FY 2018, of which 83 were engineering related, 35 mining related and 73 participated, on a part-time basis in the field of metallurgy.

### 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.

118

EMPLOYEES SUPPORTED BY STUDY ASSISTANCE SCHEME IN FY 2018

Information available indicates that employees who were promoted in FY 2018 based on qualifications achieved through the Study Assistance Scheme include three female employees, respectively promoted from change house cleaner to HR officer, from miner to safety officer and from training co-ordinator to senior training officer. Two males were also promoted – one from artisan to acting safety officer and one from miner to trainee mining engineer.

### Portable skills training for employees

One of the issues facing employees at South African operations is the transferability 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 operations therefore plan and budget for training to equip employees with transferable skills, such as mechanical repairs, electrical, welding and cutting technology, business skills, carpentry, the ability to qualify for their driver's licences and a number of computer training modules.

The positive trend of FY 2017 continued with employees committing to transferable skills training; however, the total number decreased to 154 employees (FY 2017: 265), mostly due to high production requirements.

### Adult education and training ("AET")

Due to the country's unique history and the comparatively poor standard of education, South Africa has relatively high levels of adult illiteracy.

For this reason, we make it possible for all 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 94 enrolled learners in FY 2018, including 22 community members. Read more about the education and training opportunities we provide to our local communities on pages 56 to 63.

Williamson commenced the provision of AET for the first time in FY 2017 and, whilst the initial reception was positive, implementation has been slow in FY 2018.

## Diversity

### Breakdown of gender diversity across the Group as at 30 June 2018

	Men		Women		Total (number)
	FY 2018	FY 2017	FY 2018	FY 2017	
Board	88%	86%	12%	14%	8
Senior Management	97%	97%	3%	3%	38
Management	80%	81%	20%	19%	253
Employees	82%	83%	18%	17%	5,203
<b>Total</b>	<b>82%</b>	<b>83%</b>	<b>18%</b>	<b>17%</b>	<b>5,502</b>

### Stimulating diversity

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, political alliance 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.

As part of Petra's continuous drive for transformation and diversity inclusion, diversity management training sessions were held at our South African operations between February and March 2018, with a total of 437 participants.

As with the previous year's training, the aim 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.

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.

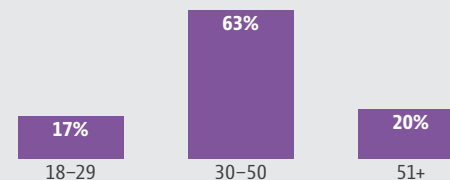
The Company has procedures in place to ensure that cases related to discrimination can be reported appropriately. During FY 2018, one case relating to discrimination by a contractor employee was raised by the Trade Union, where, upon further investigation, the Company decided to terminate the services of that individual contractor.

### Equality and equity

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

### Age distribution at Petra



to the benefits that well-managed diversity brings. This, as a principle, is reflected in our Code of Ethical Conduct ([www.petradiamonds.com/about-us/corporate-governance/business-ethics/](http://www.petradiamonds.com/about-us/corporate-governance/business-ethics/)), as well as our Disciplinary Code, and Petra's employment policies prohibit any kind of unfair discrimination.

Employment Equity Committees continue to meet regularly in order to monitor the implementation of 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 HDSA and women in mining, where managers are compelled to comply with the Employment Equity Plans in order to address 'transformation'.



### AET Certification Ceremony at Finsch

In April 2018 the AET centre at Finsch hosted a Certification Ceremony for a number of our learners who had successfully completed their Numeracy and Literacy Levels. Alet Mostert, the Senior Training Officer, opened the ceremony and shared an inspirational letter written by an adult learner with the group. Dorothy Koza, the Literacy Facilitator and Lianie Rule, the Maths Literacy Facilitator also spoke and congratulated the learners and thanked them for their commitment during the year. One of our learners, Fransisco Tovele then spoke and told the group how he was promoted to the position of LHD Operator as a result of completing the Communication in English Level One course and that he plans to continue with the classes that have helped him to be promoted in the workplace. The certificates were handed out by Services Manager Malcolm Links and each learner was also given a Finsch jacket as recognition of their achievement.





## Diversity continued

### Encouraging women in mining

Petra is committed to encouraging women in mining at all levels of the business. 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 (23% of 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 44% of our interns, 33% of our engineering learnerships, 40% of our mining learnerships, 39% of our bursars and 33% of employees attending the Management Development Programme in FY 2018 were female.



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

Petra formed a WIM Committee 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 HSEQ Steering Committee.

In February 2018 a group of Petra employees represented the Company at the 9th ITC Annual Leadership for Women in Mining Conference in Johannesburg. The conference was attended by approximately 300 women and provided an excellent opportunity for networking and sharing information and experience of the industry.

Speakers from the South African mining industry spoke on a wide range of topics including "Opportunities for SMME supplier development", "Empowering women through successful private and public collaboration with financial institutions", "Forming Regional Committees for the advancement of women in mining" and "Empowering women in mining outside of the workplace". There were also presentations from representatives from mines in Kenya, Namibia, Botswana and Ghana. The conference also included panel sessions that addressed health and safety for women in mining and sexual harassment in the workplace.





## Labour Relations

### Our approach

Stable labour relations are 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, our employee share trust, 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 Collective/Recognition Agreement, across all our operations. Any union that has achieved sufficient representation in the workplace may request recognition. Union membership across our operations represents 72% of the total workforce in South Africa and 79% in Tanzania.

Petra has aligned its principles with the International Labour Organization 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.

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

### UNION MEMBERSHIP

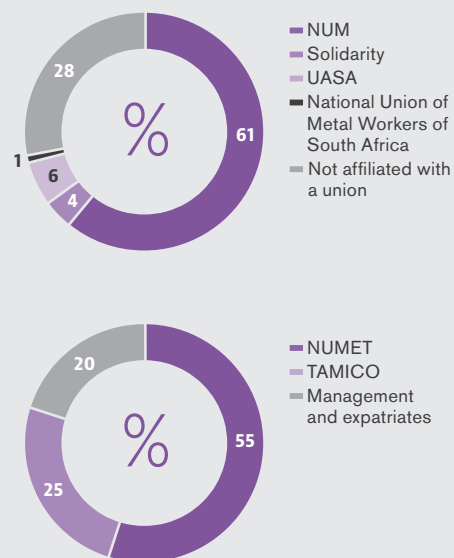
72%

SOUTH AFRICA

79%

IN TANZANIA

The below pie charts represent union membership amongst our employees in South Africa and Tanzania.



Note: See glossary for full titles of each union.

We believe that dialogue is the key to the management of labour operations 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.

In addition to mandatory engagements directed by statutory laws, we hold annual relationship building sessions with all recognised Trade Unions at our operations in South Africa in order to improve relationships. The sessions focus on reviewing and rebuilding relationships between parties, as well as setting objectives and agreeing on action plans to restore or strengthen them. Independent facilitators oversee the process to ensure fairness.

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 changes due to the urgency of the business situation and on the nature of the change and its impact on the workforce/Company.

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

In South Africa, labour legislation sets out the maximum allowed number of hours of work per cycle. Standard shift working arrangements are designed to prevent excessive hours being worked. Procedures are in place to monitor and manage maximum hours of work, based on the clock records and timesheets of employees. It includes the management of standby and overtime, as well as the scheduling of lay-off periods.

### Industrial action

Petra underwent a circa two-week period of labour disruption at its South African mines (excepting Cullinan) in September 2017. Fortunately the disruption was contained to a relatively short period of time due to the concerted effort of Petra's management to engage with all levels of the National Union of Mineworkers in order to find a resolution.

Subsequent to the new three-year wage agreement, reached at the end of September 2017, we then experienced a more stable labour environment throughout the rest of FY 2018. The agreement will be effective until June 2020.

Petra remains highly focused on managing labour relations and on maintaining open and effective communication channels with its employees and the appropriate union representatives at its operations.



## Labour Relations continued

### Engaging with our employees and employee satisfaction

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's established, and frequently reviewed, Communication Management Policy and Procedure Framework 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 the execution of these principles over the past few years. These include written as well as electronic media, social media, a programme of face-to-face meetings at different levels of the Company, and procedures that govern the frequency and nature of these channels.

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

Whilst employee policies are not translated into other languages, they are explained in the vernacular as and when required to ensure full understanding.

#### Internal communication survey

As it is established practice to review the success of internal communication on a two- to three-yearly basis, a full internal communication survey was conducted across all South African operations during FY 2018 (the previous such audit having been conducted during FY 2015). In line with the general two-pronged communication management approach, the effectiveness of both communication systems and communication execution was surveyed during this study.

The results from the survey, in which a total of 641 employees across all operations and levels of employment participated, indicated significant improvement in both systems and communication execution when compared with the FY 2015 survey. Employee satisfaction with most of the systems was generally high, and the majority of participants indicated that they have access to the systems and information they require. Unsurprisingly, the impact of technology, such as social media, on communication was clear, as well as the strong influence it has on employees' communication preferences. What was surprising, however, was the emphasis that employees still place on notice boards as a source of information and effective communication, which is in contrast with popular opinion that these communication channels are outdated and ineffective.

Our employees also indicated that communication is mostly well executed; however, there were some indicators that point to a need for improved involvement of line management in this regard. This, together with learnings from the survey in terms of using different systems as channels of

communication, will therefore be the focus of the measures we will implement to further improve internal communication.

A specific indicator in the above regard that raised concern was the unsatisfactory feedback that employees receive on questions and/or requests for more information. Although a multitude of feedback systems, verbal, written and electronic, are in place at all operations, measures will be taken to ensure that line managers follow up on these questions and provide the necessary and timely response. Additionally, it is evident that not all employees receive mandatory communication, such as Company or operational briefs, which is a cause for concern and will be addressed.

Due to our ongoing focus on materiality, the internal communication survey also included a question to gauge employee opinion on Petra's most material issues. This feeds into our stakeholder engagement work and the process will be repeated when the material issues for the Company are next reviewed. The survey showed safety as our employees' most material issue, which also corresponds to the Company's view that this should underpin everything we do as our number one priority.

We recognise that a high level of employee satisfaction is paramount to maintaining motivation amongst our workforce and therefore we organise events to encourage cohesion and team building. An example of this is our annual sports day. Sport plays an important role in public and social life in any country and, beyond its obvious pleasure of spectatorship, it gives participants of all ages a chance to improve both their physical and mental health, whilst encouraging camaraderie amongst friends and colleagues.

### 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 plays an important role in our Labour Relations Strategy as annual distributions to employees are expected to be a compelling motivator to drive enhanced employee productivity and accountability.

Annual distributions to the IPDET commenced in 2014 and 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 overseen at an operational level. Each mine has its own policy regarding the accommodation provided. In 2015 Petra, in consultation with the Trade Unions, implemented a Group Assisted Home Ownership Strategy to enable employees to have access to home loan finance in order to build, renovate or purchase an existing home.

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.



## Labour Relations continued



### Finsch employee engagement sessions

In FY 2018 Finsch initiated employee engagement sessions which take place on a quarterly basis. This forum creates the opportunity for management and employees to engage with each other face to face. Finsch's General Manager, Ntoko Ngema, presented an overview of the 2018 financial Year in the above session, providing the operational plan and targets for the next quarter and financial Year.



### Employee sports day

On the weekend of 20 and 21 April 2018, Cullinan hosted employees from all of Petra's operations across South Africa for our annual sports day. Teams from Koffiefontein, Kimberley, Lime Acres and Johannesburg took part in a number of soccer, rugby, netball and cricket matches.

Teams and supporters were welcomed by the hosting General Manager, Juan Kemp, and the festivities were officially opened by our Group Support Manager, Egbert Klapwijk. The first event of the tournament was cricket.

The team from Cullinan took the first victory but it was the team from Finsch that ultimately defeated their rivals from the other operations. The action continued with soccer, netball and rugby and the weekend was closed off with an awards ceremony.

It was a well organised and fun event for all participants and spectators and not only did it provide an opportunity for teams and supporters from across our operations to come together, it also encouraged camaraderie amongst friends and colleagues.





# Environment

- 41 Environmental Management
- 46 Climate Change and Energy Usage
- 49 Water Management

## Stakeholders

- Employees/contractors/unions
- Local communities
- Host Governments/regulators

## At a glance

# 79%

PROPORTION OF WASTE RECYCLED IN FY 2018

# 28.8 kWh/t

(KPI ≤ 28 kWh/t)

ELECTRICITY EFFICIENCY PER TONNE

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

CARBON INTENSITY PER TONNE

# 0.65 m<sup>3</sup>/t

(KPI ≤ 1.20 m<sup>3</sup>/t)

CLEAN WATER INTAKE FOR PRODUCTION

# 59%

(KPI ≥ 50%)

PERCENTAGE OF RECYCLED WATER USED ON MINE





## Environment

### Schematic of how we manage this



#### Key achievements

- ▶ No major environmental incidents reported for eight consecutive years.
- ▶ 83% of operations certified to ISO 14001:2015.
- ▶ Appointment of the Group Closure and Rehabilitation Specialist as a member to serve on the South African Roster of Experts ("RoE") of the United Nations Convention to Combat Desertification ("UNCCD").
- ▶ Successful implementation of our Water Management Strategy.
- ▶ All integrated water use licences awarded.
- ▶ Independent verification of GHG emissions reporting according to ISO 16064-3.
- ▶ Successful 10% reduction in total carbon footprint for a fourth consecutive year.
- ▶ Restatement of the GHG base year based on operational changes.
- ▶ Expansion in the number of activities included in Scope 3 GHG calculations.

#### Key challenges

- ▶ Implementation of rehabilitation schedules.
- ▶ Identification of local waste recyclers in the Northern Cape.
- ▶ Ageing Government-controlled infrastructure supplying production water to Finsch.
- ▶ Identifying and implementing additional measures to improve water use efficiency even where maximum efficiency has already been met.
- ▶ Obtaining verifiable data from operations due to the unavailability of monitoring equipment.
- ▶ Expanding energy requirements throughout the Company.
- ▶ Difficulty in verification of source documentation at operational level. Processes to be implemented to link source documentation with environmental data sets.

#### Objectives for FY 2019

- ▶ Implementation of an integrated water management strategy.
- ▶ 1% annual reduction in carbon emissions (FY 2015 to FY 2020) from the base year of FY 2016.
- ▶ Year-on-year improvement in waste recycling.
- ▶ Five-year clean-up for legacy underground waste (initiated in FY 2018).

#### Company policies

- ▶ Group HSE Policy
- ▶ Environmental Management System ("EMS") for each operation
- ▶ Group standard on the optimisation of waste management

#### Standards we follow

- ▶ ISO 14001:2015
- ▶ ISO 14064-3
- ▶ ISO 31000
- ▶ ISO 19011

▶ **Read more about how we apply corporate governance within Petra in our 2018 Corporate Governance Statement published in our Annual Report**



## Environmental Management

### 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.

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. As per Clause 6.1.2 of ISO 14001:2015, the impacts of our activities, products and services are evaluated considering a life cycle perspective. This is not a life cycle analysis ("LCA") in the strict definition as an LCA is not relevant to diamond production but rather the analysis of a continuum of interlinked stages from service providers and suppliers through the use of resources up to final disposal of waste products/packaging material.

All our operations, with the exception of one (thus 83% of operations), are certified to the international environmental standard ISO 14001:2015 through the British Standards Institution ("BSI").

### Group HSE Policy

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; and
- ▶ 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, re-use, 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.

This Group HSE Policy and selected Group Standards are provided to all suppliers, service providers and contractors as it is expected of people working for or on behalf of Petra to comply with the principles and commitments contained in these documents.

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.

### 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 49 to 51.
- ▶ Inefficient energy consumption from non-renewable sources: read about our Carbon Reduction Strategy on pages 46 to 48.
- ▶ Endemic habitat change: read about our approach to the management of biodiversity on pages 43 and 44.
- ▶ Permanent changes in topography: read about our rehabilitation and closure plans on pages 44 and 45.
- ▶ Changes in land use and land capability: read about our rehabilitation and closure plans on pages 44 and 45.

#### 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 sewerage

effluent can enter operations through storm water trenches; the responsibility is then with the mine to undertake the clear-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 concern acid mine drainage. Diamond mines therefore have difficulty in convincing the authorities and the public that their 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. Read more about our approach on pages 46 to 48.



## Environmental Management 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 into management programmes.

### 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 reporting year, ten significant environmental incidents were reported. See page 72 of the report on the detail of these incidents.

For the past eight years, no 'High' or 'Major' environmental incidents were reported at any of the Group's operations.

### Spillage management

0

**SIGNIFICANT SPILLAGES<sup>1</sup> AT OUR OPERATIONS IN FY 2018**

Any hydrocarbon spillage on soil or tailings are either treated in situ or removed to a formal bioremediation site depending on the practicality and situational risks of the area. Approved biocides are applied according to a set procedure to ensure maximum biological digestion of the hydrocarbons. Soil samples are analysed to determine the level of digestion before the treated material is placed back on location, signed off as treated or stored to be used as rehabilitation material.

### Waste management

Petra manages separate waste streams within the organisation:

- ▶ business waste<sup>1</sup>;
- ▶ hazardous waste<sup>1</sup>; and
- ▶ mining waste<sup>1</sup>.

### Business and hazardous waste

The Group is consistently implementing processes to assist with waste management and disposal. Waste management objectives and targets are set for business and hazardous waste at each operation, with these KPIs regularly monitored through internal assessments and external audits as part of ISO 14001:2015 certification.

In addition to the normal systemic management tools implemented, Petra has also developed a Group standard on the optimisation of waste management, based on international best practice and which aims to identify all waste streams that can be eliminated. For those streams that cannot be eliminated, the best practical options for repurposing and recycling optimisation are suggested.

We strive to improve recycling of waste generated at our operations and to prevent unnecessary wastage as part of the international waste hierarchy. By increasing recycling volumes, the overall volume of waste that needs to be disposed to landfill reduces.

The overall volumes of combined waste (business and hazardous) generated by the Company increased by 115% to 31,032 t (FY 2017: 14,407 t), as a result of a clean-up of scrap metal at Williamson (18,586 t). The percentage of waste recycled by Petra increased from 31% in FY 2017 to 79% in FY 2018 as a result of the scrap metal clean-up at Williamson. Omitting the effect of the inclusion of the scrap metal at Williamson on numbers, the total amount of business and hazardous waste generated by the Company decreased by 14% to 12,446 t as a result of an improvement in waste management at all operations.

21%

**DECREASE IN HAZARDOUS WASTE DISPOSAL IN FY 2018**

In line with this trend, 3,225 fewer tonnes of non-hazardous waste were disposed compared to FY 2017 and the amount of hazardous waste to be disposed reduced by 21%. See page 74 for a detailed breakdown of waste disposed, recycled and incinerated.

A small percentage of waste is incinerated. This is medical waste generated at mine clinics and sewerage screenings at the Lime Acres (Finsch) waste water treatment works. Williamson does not have access to a hazardous waste disposal facility. Therefore it incinerates its small volume of hazardous waste as well. This practice and the installation conforms to EU standards and practices.

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, transported and disposed of in a responsible manner. This includes the management of hazardous waste.

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.

1. See Glossary for definitions.



## Environmental Management continued

### Waste management continued

#### Business and hazardous waste continued

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.

#### Mining waste

Petra operates a number of different mining waste facility types:

- ▶ Coarse residue deposits ("CRD"): all ore mined and processed through the processing plants may contain a percentage of waste rock in addition to the diamondiferous ore. CRDs are dry waste facilities with a maximum moisture content of 5%.
- ▶ Fine residue deposits ("FRD"): the slurry fraction of mining waste produced as part of ore processing. The small ore particles are deposited in suspension with water in dam-like structures of various designs (valley dams and ring dams are preferred).
- ▶ Paste facilities: a process whereby coarse and fine materials are blended to form a paste consistency to be deposited simultaneously in the same facility.
- ▶ Waste rock dump (overburden): portion of mined ore that is not diamondiferous and not treated through the ore processing plants.

The Company's mining waste areas 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.

None of the mining waste facilities are lined as the risk to groundwater and soil pollution is minimal. The chemical content of all operations' mining waste facilities were analysed according to the relevant legislation in South Africa<sup>1</sup>. All the results indicated that the mining waste will not pose an unacceptable risk to the environment and is not hazardous.

Only one of the Petra operations is depositing mining waste into a mined-out pit. All other facilities are land-based disposal sites.

#### 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 where after the raw product is shipped off site for further classification. During this process, the minimum raw materials are used, with the largest input being:

#### Non-renewable resources:

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

#### Renewable resources:

- ▶ timber.

#### Chemicals:

- ▶ explosives;
- ▶ lubricating oils and grease;
- ▶ moisture sealant; and
- ▶ DMS material (Ferro-Silicon).

No toxic chemicals are produced as a by-product of the diamond mining and processing operations.

Bulk chemical storage areas are built according to SANS 10263-0:2017 specifications to prevent

pollution from accidental spillages and inappropriate handling.

The Company's procurement position is such that preference is given to recycled products as far as practically possible.

#### Packaging material

Only re-usable canisters are used for the shipment of the Company's product. Therefore no waste is generated by the transport of our product.

#### Transportation impacts

Petra identified the impact from various transportation activities as part of each operation's ISO 14001:2015 risk assessment process. Impacts due to the transportation of employees, ore and product were evaluated. The identified impacts include:

- ▶ consumption of non-renewable resources (fuel and electricity);
- ▶ air pollution due to exhaust gases and dust liberation; and
- ▶ nuisance noise.

#### Biodiversity and land management

We recognise that our activities have the potential to significantly affect the biodiversity and topography. Biodiversity impacts associated with mining and exploration include: habitat destruction, vegetation clearance, 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. Therefore mitigation strategies are implemented only if the impact could not be avoided.

The Company has implemented measures to integrate biodiversity in the management of its operations, including:

- ▶ environmental impact assessments prior to any 'Greenfield' development;
- ▶ training of all employees on biodiversity during the induction process; and
- ▶ relevant biodiversity management guidelines in the form of a Group standard on ecological management.

None of our producing mining operations are located in or adjacent to protected areas.

Approximately 55km<sup>2</sup> 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. These measures include, but are not limited to:

- ▶ vegetation clearing is limited to the footprint of the prospecting activities;
- ▶ areas showing erosion due to storm water flow are addressed timeously. The treatment of the erosion depends on the type of erosion observed;
- ▶ vehicle and equipment repairs take place off site;
- ▶ existing roads are used as far as practicable and the construction of additional roads is limited;
- ▶ relocation of affected woody plant;
- ▶ the purchasing of firewood from local communities is not permitted; and
- ▶ buying meat/biltong from surrounding communities is prohibited.

1. Waste Classification and Management Regulations (GN R. 634 of 2013) as promulgated in terms of the National Environmental Management: Waste Act No. 59 of 2008.





## Environmental Management continued

### Biodiversity and land management continued

As part of Petra's commitment to conserve its biodiversity, protected habitats are established and maintained for local vegetation and wildlife.

10,581 ha

PROTECTED WILDLIFE AREAS AT FINSCH,  
CULLINAN, KOFFIEFONTEIN AND KIMBERLEY

Williamson maintains a large forest reserve of some 906 ha, thereby protecting the indigenous biodiversity unique to the Shinyanga province in Tanzania.

In all but one of Petra's operations, the area protected is either equal to or greater than the area disturbed. The only exception is at the KEM JV operation, where large areas have been used for storing the historical tailings dumps (KEM's 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 the Group ecological management standard that was developed with the aim of promoting biodiversity and aiding 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 or protection. 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 six 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.

### Biodiversity certification

There is no current standard to certify biodiversity management. The Endangered Wildlife Trust is working on a Biodiversity Disclosure Project, but it will still be a few years before this is up and running.

Other companies have sourced recognition through sponsorships to the Endangered Wildlife Trust, subscription to the Integrated Biodiversity Assessment Tool ("IBAT") or registration of specific projects on the International Union for Conservation of Nature ("IUCN") website. Petra is doing similar work with BirdLife Africa as mentioned above.

Petra's Ecological Management Strategy captures the principles of the IFC's Performance Standard 6 ("PS6"): Biodiversity Conservation and Sustainable Management of Living Natural Resources. The IFC only requires compliance to PS6 for funding of projects.

Most of the mining houses in South Africa are part of the National Biodiversity and Business Network. Petra supports the initiative by taking part in meetings and discussions.

The 2E2I (Effective Environmental Improvement Interventions) initiative from the Department of Environmental Affairs is to develop a platform for information sharing on restoration projects throughout the whole spectrum of industries in South Africa. This initiative is almost ready for implementation.

The BS 8583:2015 'Biodiversity – Guidance for businesses on managing the risks and opportunities' is listed as a standard by the British Standards Institution ("BSI") but no certification body is currently accredited for issuing such certification. Petra will investigate this standard for future certification.

### Achievements in biodiversity management

The Petra Group Mine Rehabilitation and Closure Specialist, Anja van Deventer, is a scientist who specialises in the field of land degradation and restoration. During April 2018 Ms van Deventer was formally appointed by the Department of Environmental Affairs ("DEA") as a member to serve on the South African Roster of Experts ("RoE") of the United Nations Convention to Combat Desertification ("UNCCD").

### 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 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 residual impacts.



## Environmental 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 2018 was US\$74.8 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'.

Operation	Closure objective/target examples
Finsch	Rehabilitate disturbed areas to their pre-mining land capability and use potentials.
Cullinan	Promoting ecological and biodiversity integrity in areas that support natural ecological systems.
Koffiefontein	Promote a sustainable post-closure land use.
Williamson	To achieve a level of safe decommissioning options for all structures that were established due to the mining activities at WDL, site rehabilitation and ecosystem restoration to meet the legislative requirements.
Kimberley	To reinstate a mixed land use that is stable and safe in the long term, potentially comprising wilderness, heritage tourism and urban development aligned to the IDPs of the area, taking account of the unavoidable remaining constraints posed by the reclaimed mine site.

### Rehabilitation of the Dutoitspan cemetery

Sometimes erroneously referred to as the 'Chinese cemetery', the Dutoitspan cemetery is Kimberley's oldest official cemetery (although it is likely that there would be older individual graves, or possibly clusters of graves, long gone from memory and sight). The condition of this cemetery has, over the years, deteriorated and it had reached a general state of disrepair that was not indicative of the historical significance of this site. Vandalism and desecration of graves were widespread throughout the cemetery and the land had also become overgrown with trees, shrubs and grass, several of which are invasive.

KEM JV initiated a project of cleaning and renovating the Dutoitspan cemetery after taking ownership of the property in question. This project, which started at the beginning of June 2017, enables the Company to pay respect to those who are long gone but who made a huge contribution during their lifetime in the Kimberley area.

On 15 July 1871 (the day before the discovery of The Big Hole), The Diamond News reported that there were at least 43 graves in the cemetery, of which 15 were children who had died of croup. Some of the individuals who are buried in this cemetery were pioneering members of the workforce in the mining fields of Dutoitspan and Bultfontein during the 1800s.

Originally in the shape of a coffin, the cemetery was extended and reasonably well maintained up to the 1980s. Through the project, the graves have been cleaned and rubbish, trees, shrubs and overgrown grass have been removed.

Approximately 350 headstones have been mended and 98 graves have been exposed from beneath layers of sediment with a special machine used in the gold mines to clean gold dust. This constitutes the first application of these machines in the field of grave restoration.

The KEM JV environmental team and mine management are honoured and privileged to be able to pay their respects to those who were once part of the mine and their families through the implementation of this project. A memorial wall is in the process of being erected in memory of all the people involved in diamond mining. The grand reopening of the cemetery and revealing of the wall took place on 26 September 2018.



Photo courtesy of Evd Westhuizen-Coetzer.



## Climate Change and Energy Usage

### Our approach to climate change and energy usage

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 emission 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.

### 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 with local communities) that may lead to reputational risk.

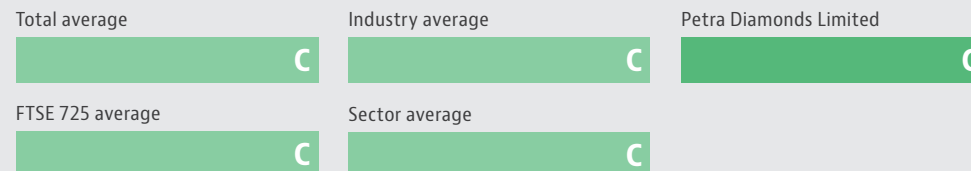


### Reporting to the CDP

Petra has participated in voluntary reporting to the CDP since 2013, with year-on-year improvement of scores on every report. During 2016 and 2017, Petra scored a 'C', which is in line with industry and region scores.

### Average CDP scores

#### Final score



### 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 '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 2017. 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:



Based on the limited assurance verification procedures, guided by the ISO 14064-3 standard, it is the opinion of the verifier that there is no evidence that Petra Diamonds Limited's revised GHG assertion is not materially correct and is not a fair representation of the GHG data and information, with the following qualifications:

- ▶ the verification was limited to Petra Diamonds' South African mines (Finsch, Cullinan, Koffiefontein and KEM JV) and the respective Scope 1 (fuel combustion (diesel, petrol and LPG)) and Scope 2 (electricity usage) emission sources; and
- ▶ the verifiers were not able to confirm the potential impact of the exclusions of the Head Office, the London Office, the Helam mine (currently under care and maintenance) and the exploration projects in Botswana and South Africa would have on the overall inventory."



## Climate Change and Energy Usage continued

### 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 14% of total cash on-mine costs in FY 2018 (FY 2017: 13%). However, it is recognised that non-renewable energy sources are finite and therefore 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 (i.e. the new Cullinan plant).

Electricity conservation projects that were initiated over the last few years continued in FY 2018. Some of the more successful projects include:

- ▶ continuous roll-out of high-efficiency electrical motors at all the operations;
- ▶ continuous 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;
- ▶ pump control on all pumps to ensure pumping occurs at off-peak times;
- ▶ variable speed drives on conveyors;

- ▶ motion sensors to regulate lighting in low-occupancy areas (tests at Finsch and Cullinan);
- ▶ Group standard on soft start on all motors of 90 kW and above to reduce start-up currents and thus reduce maximum demand (implementation is phased in over five years);
- ▶ replacement of incandescent bulbs with energy-efficient lighting;
- ▶ 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 investigated to be used in limited applications, specifically in office and change house applications.

Energy efficiency initiatives were implemented during the construction of the new Cullinan plant. Improvements were realised through the:

- ▶ reduction in the number conveyor transfer points;
- ▶ implementation of power correction factors;
- ▶ installation of IE3-level efficiency motors;
- ▶ installation of variable speed drives ("VSD") on all pumps and belts;
- ▶ implementation of soft starts; and
- ▶ control of efficient pumping regimes.

All these changes brought about an improvement of roughly 16 kWh/t. The previous plant's average efficacy was 58 kWh/t, while the Mill plant extension is measured at 42 kWh/t.

### Energy management

#### Energy consumption

Petra's total energy consumption for FY 2018 rose by 7% to 3.1 million GJ (FY 2017: 2.9 million GJ), further to the updated calculation methods in line with total carbon reporting. Note that these totals only reflects energy use from non-renewable resources<sup>1</sup>.

Our electricity consumption was 8% higher than the previous reporting period due to our expanding mining footprint, but energy efficiency initiatives meant that our consumption did not increase in proportion with our higher production (which rose by 14% for the Year).

# 5%

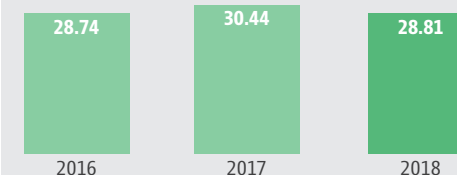
**IMPROVEMENT IN ELECTRICITY EFFICIENCY  
IN FY 2018**

Electricity efficiency of 28.8 kWh/t in FY 2018 improved by 5% (FY 2017: 30.44 kWh/t) due to more efficient processes, specifically at Cullinan, where the new plant was fully commissioned at the beginning of FY 2018.

Petra's fuel consumption (petrol, diesel, LPG and jet fuel) increased by 3.5% to 0.71 million GJ or 18,631,835 L in FY 2018 (FY 2017: 0.69 million GJ; 18,009,824 L). The change is attributed to a 4% increase in diesel use as a result of increased production.

See further details on page 75.

#### Electricity efficiency (kWh/t)



1. FY 2017 values are the amended audited values, while 2018 values have not been audited yet. There may therefore be difference with these values reported in the 2017 Sustainability Report.



## Climate Change and Energy Usage continued

### Carbon emissions

Petra commenced in 2013 with the tracking of its Scope 1, Scope 2 and Scope 3 emissions at each of its operations at Cullinan, Finsch, Koffiefontein and Kimberley Underground (South Africa) and Williamson (Tanzania). The Group's emissions for 2013 were calculated as 569,250 tCO<sub>2</sub>-e and an intensity metric of 0.23 tCO<sub>2</sub>-e/ct. Due to 2013 being the first year of reporting on emissions as a result of the availability of verifiable emissions data, 2013 was chosen as the base year and a target of 1% improvement on a year-on-year basis, commencing with the baseline value of 0.23 tCO<sub>2</sub>-e/ct, was set.

In FY 2018 a recommendation was made that the base year be recalculated due to the following changes that occurred since FY 2016:

- ▶ the emissions calculation method was updated by aligning it to the IPCC methods and constants and the inclusion of further parameters, e.g. fugitive emissions (Scope 1); and
- ▶ the incorporation of the surface mining activities of De Beers and Superstone and KEM JV, to the South African operations.

Thus FY 2016 was chosen as the new base year with an intensity emissions base year value of 0.20 tCO<sub>2</sub>-e/ct.

In FY 2018, the direct carbon emissions linked to our operations increased by 5% to 661,124 tCO<sub>2</sub>-e (FY 2017: 628,907 tCO<sub>2</sub>-e), in line with the higher energy usage for the Year. The graphs to the right illustrate the history of carbon emissions (Scope 1 and 2 activities only) for Petra as well as the reporting year's performance at all operations.

Petra is still refining its methodology to accurately calculate Scope 3 (other indirect) GHG emissions. The FY 2018 calculations include waste disposal, scrap metal recycling, water treatment, paper consumption and the pumping of potable water (not included in the FY 2017 calculation). Based on this, Scope 3 emissions decreased by 22% to 6,439.64 tCO<sub>2</sub>-e in FY 2018 (FY 2017: 8,250.54 tCO<sub>2</sub>-e).

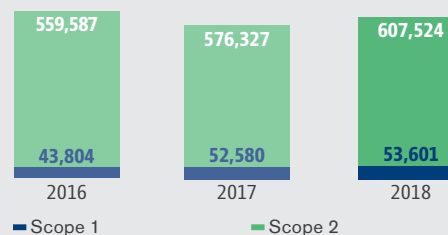
Petra's carbon intensity per tonne (total tCO<sub>2</sub>-e per production tonne) for Scope 1 and 2 activities remained unchanged during the Year at 0.03 tCO<sub>2</sub>-e/t.

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 restated base year of FY 2016 and this was again achieved in FY 2018. The graph below shows the trend in reduction of Petra's carbon footprint since the initiation of the reduction target, with our carbon emitted per carat improving from 0.23 tCO<sub>2</sub>-e/ct in FY 2013 to 0.14 tCO<sub>2</sub>-e/ct in FY 2018.

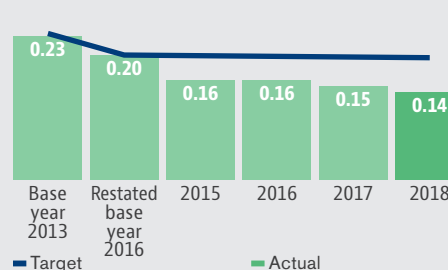
Another indicator used to display the carbon footprint between various organisations with different products is to compare the volume emissions with revenue. According to this indicator, Petra's emissions have remained consistently below 0.002 tCO<sub>2</sub>-e per US dollar for the past six years.

**1% per annum**  
TARGETING REDUCTION IN TOTAL CARBON  
EMISSIONS PER CARAT

### Carbon emissions (tCO<sub>2</sub>-e)



### GHG reduction target (tCO<sub>2</sub>-e/ct)



**3,077 tonnes**  
OF CO<sub>2</sub> SEQUESTRATION PER YEAR

### 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 carbon per annum; thus, the approximate 10,255 ha of protected area under Petra's control results in the sequestration of 3,077 tonnes CO<sub>2</sub> per year.

In addition, Petra is participating in a project in collaboration with other major diamond producers and academic institutions that focuses on the potential of carbon sequestration through mineralisation. Although this project is in the very early stages, Petra is confident of the positive contribution possible through the capturing of atmospheric carbon during mining waste deposition. Updates on this project will be provided in subsequent reports.

### Significant air emissions

Petra has no significant sources of air emissions. Non-point sources of dust and particulates (i.e. environmental drop-out dust and particulate matter pm10) 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.



## Water Management

### Our approach to water management

Petra identified water demand and water conservation management as its most significant environmental risk to operations. This is mainly due to water scarcity in the areas where we operate and the fact that our operations are water intensive. Three of Petra's operations are located in areas that receive less than 600 mm rainfall per annum (Finsch, KEM JV and Koffiefontein).

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 resources that sustain the communities around our operations. Scenario analysis indicates that Petra's operations will be in conflict with local communities for the availability of water due to expected explosive population growth in the centres that provide employment. This is expected to specifically impact Cullinan, which is situated in Gauteng (the biggest area of commerce and employment in South Africa).

#### Petra's short- to medium-term strategy to secure water resources is through:

- ▶ approval of water use licences/permits for current and future production needs;
- ▶ service-level arrangements and co-operative agreements with local Government (Kimberley municipality) and neighbouring industries;
- ▶ reduction of consumptive water losses by:
  - ▶ maximising internal recycling and water use efficiency;
  - ▶ reducing evaporation through shortening reticulation pathways;
  - ▶ lining return water facilities; and
  - ▶ active dewatering of seepage plumes under tailings facilities;
- ▶ using phytoremediation and stabilisation to treat domestic effluent;
- ▶ securing water from Governmental water schemes;
- ▶ expanding on own internal storage capacities; and
- ▶ maximising 'greywater harvesting' through internal domestic infrastructure and waste water treatment effluent use.

#### The long-term strategic planning for water management is based on:

1. the South African Department of Water and Sanitation's Long-term Adaptation Strategy, which includes adaptation scenarios specifically for water management; and
2. the World Resource Institute's Water Risk Atlas – looking specifically at the 'business as usual' scenario for the period up to 2030 where most of the current life of mine planning resides. This scenario focuses on water stress in areas due to resources supply versus development and expansion.

Our plans include inter alia the development of:

- ▶ drought plans for Koffiefontein;
- ▶ flood resilient water infrastructure at Cullinan;
- ▶ investing in the Sedibeng water supply pipeline for Finsch. This operation joined the Northern Cape Manganese Leadership Forum to capitalise on sectoral pressure for water demand management;
- ▶ closure and rehabilitation plans which focus on end land use capable of the management of storm water; and
- ▶ awareness programmes for employees and communities on the effects of climate change.

Future initiatives to improve water management at all operations include the implementation of an integrated water management strategy with three distinct ambitions:

1. to determine current and future operational water needs by managing demand, quality and infrastructure;
2. to ensure a resource capable of not only supporting production but also improving the lives of those around us; and
3. to operate within the regulatory framework provided by international, national and local legislation.



## Water Management continued

### Water consumption

Total water used by our operations in FY 2018 increased by 17% to 47,366,805m<sup>3</sup> (FY 2017: 40,587,451m<sup>3</sup>).

In terms of efficiency, our total water usage per production tonne increased by 2% to 2.09 m<sup>3</sup>/t (FY 2017: 2.04 m<sup>3</sup>/t), due to increased requirements as a result of higher ROM tonnages throughput for the Year specifically at the new Cullinan plant. (Production tonnages increased by 14% from 2017.)

During FY 2018, the Company consumed 14,733,130 m<sup>3</sup>/t 'new water', compared to 13,993,433 m<sup>3</sup>/t in FY 2017, an increase of 5%. This is a relatively small increase in relation to the increased production.

### 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 re-used/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 three years. The total volume of recycled water used during FY 2018 was 27,838,472m<sup>3</sup>, a significant increase of 32% compared to FY 2017 (21,109,860m<sup>3</sup>). Finsch improved its reporting methodology and put a number of recycling initiatives in place. KEM JV also improved recycling by changing some processes to receive recycled water.

### Effluent discharge

Further to the ongoing drought conditions in South Africa, we continued to implement major operational changes to impound effluent water for re-use in the process. This had the additional advantage that no effluent was discharged from any of the operations during the reporting period.

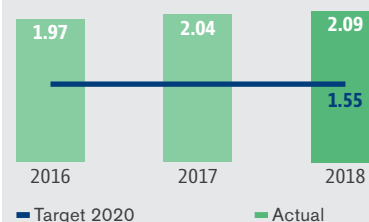
### Co-operative agreements

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.

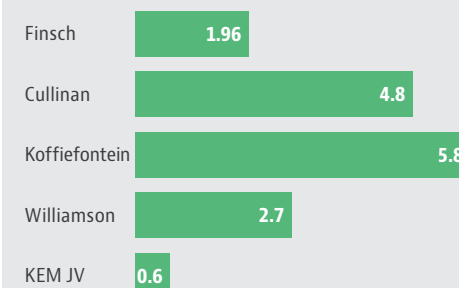
### United Nations Global Compact CEO Water Mandate

Petra takes note of the UN Global Compact CEO Water Mandate. Although the Company has not registered as a participant, the six elements of the mandate (direct operations, supply chain and watershed management, collective action, public policy, community engagement and transparency) are included in the daily management of our operations.

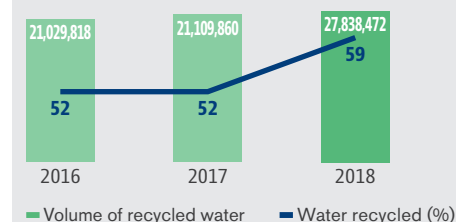
### Water efficiency (total water use) (m<sup>3</sup>/t)



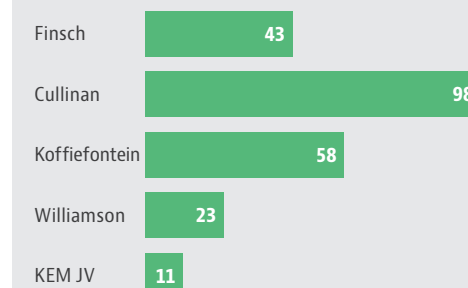
### Water efficiency per operation FY 2018 (m<sup>3</sup>/t)



### Water recycled (% and m<sup>3</sup>)



### Water recycled per operation FY 2018 (%)





## Water Management continued



### Emergency water pipeline

The emergency pipeline was originally built by De Beers in conjunction and agreement with the Letsemeng Local Municipality, before Koffiefontein was mothballed and later sold to Petra.

Since the handover of the pipeline to Letsemeng Local Municipality, it has been the main source of water for Oppermansgronde, with the option to run water to Koffiefontein when droughts occur.

Until early 2015, there has been no requirement for this; however, we then needed to investigate whether the system would properly support the mine. It was found that the system had been badly neglected and not maintained. The system

communications failed and pumps at various points had been removed and not replaced. Motors that power those pumps were also removed, and the booster pumps were never started and were so badly rusted that they could not be started under their own power.

Electricity bills for the booster pump station were also stopped as they were not used.

Petra therefore prioritised the requirement to return the pipeline to operation and decided to include the pipeline as one of its SLP Projects. All stakeholders approved and decided that it was a priority to upgrade and refurbish the pipeline.

The pipeline is fed from the Orange-Riet river canal that is filled from the Vanderkloofdam. It runs from the canal through Oppermansgronde, and many farmers' land, via the booster pump station to Koffiefontein raw water dam.

The upgrades on the system included the integration of a PLC system that automatically controls the water flow, wi-fi communication towers that were erected, replacing and refurbishing pumps at the main pump station as well as the booster pump station, rewiring and upgrading of the control panels at the various pump stations and reservoirs to enable

communication between the various points along the system to automate the system. Despite challenges, the project was completed within the allotted time frame. It was up and running (with final tests and ongoing maintenance) in April 2016. A year-long drought then ensued.

This pipeline has been running since then, supplying water to both Oppermansgronde and Koffiefontein water filtration plants, providing two towns with access to much needed drinking water.





## Positive Impacts

54 Generating Economic Benefit

56 Community Development and Engagement

### Stakeholders

- ▶ Employees/contractors/unions
- ▶ Local communities
- ▶ Host Governments/regulators and suppliers

### At a glance

US\$50.9 million

PAID IN TAXES AND ROYALTIES

US\$139.1 million

SPENT ON SALARIES, WAGES AND OTHER BENEFITS

US\$1 million

SOCIAL INVESTMENT

ca. 3,000

SUPPLIERS ACROSS TWO COUNTRIES

80

COMMUNITY STAKEHOLDER MEETINGS HELD



## Positive Impacts

### Responsibility

Executive oversight	Petra Board		HSSE Committee	
Group oversight	Group CSI Policy	Group LED Policy	Group Training and Development Policy	
Operational oversight	Procedures	CSI Committee	LED/SLP Committee	HRD Committee

#### Key achievements

- ▶ Launch of Onverwacht Primary School and sports centre in Tshwane.
- ▶ Successful roll-out of the Insite system to manage sustainable reporting and ensuring efficiencies in order to achieve transformation objectives.
- ▶ Successful roll-out of IsoMetrix Stakeholder Engagement and Management ("ISEM") software, which will assist us to strengthen our partnerships with stakeholders and manage and report our engagements effectively.
- ▶ Finsch completed phase three of the project to upgrade the existing electrical network of Danielskuil as part of the mine's continued commitment to community development.
- ▶ Bursary scheme delivered four graduates in FY 2018.
- ▶ Nine schools benefited from the School Support Project, aimed at improving performance in maths and science.
- ▶ 467 community members attended portable skills training, which could facilitate their entrance into the mining sector.
- ▶ Procurement software is developed to include environmental management screening before contracts are awarded.

#### Key challenges

- ▶ Adverse regulatory changes and socio-political instability in South Africa which have the potential to disrupt operations and affect investments.
- ▶ The uncertainty that has been created by policy and regulatory changes in terms of the finalisation of the South African Mining Charter.
- ▶ Social instability and increased levels of unemployment resulting in unrealistic expectations for business to uplift communities.

#### Objectives for FY 2019

- ▶ Finalise Social and Labour Plans and seek approval from the DMR.
- ▶ Increased community engagement.
- ▶ Implementation of the Supplier Development Plan.
- ▶ Roll-out of approved local economic development programmes and projects.
- ▶ Supply chain initiative to enhance codification of spend.

#### Company policies

- ▶ Code of Ethical Conduct
- ▶ Social and Labour Plans ("SLP")
- ▶ Environmental Management Plans ("EMP")
- ▶ Group Corporate Social Investment Policy
- ▶ Group Local Economic Development Policy
- ▶ Stakeholder Management Engagement Plan

#### Standards we follow

- ▶ UK Corporate Governance Code
- ▶ Extractive Industries Transparency Initiative ("EITI")
- ▶ Publish What You Pay ("PWYP")
- ▶ United Kingdom's Report on Payments to Governments Regulations 2014 (as amended)



## Generating Economic Benefits

### Our 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 67.

### The benefits of stable and sustainable employment

ca. 95,000

PEOPLE DEPENDENT ON PETRA'S OPERATION

The Company currently employs 9,486 employees and contractors, but given the generally accepted 'multiplier effect' in South Africa and Tanzania of x10, circa 95,000 people are dependent on our operations. In FY 2018 the amount we spent on employee wages decreased 5% to US\$139.1 million (FY 2017: US\$145.8 million), a lower figure in line with cost rationalisation across the operations, despite inflationary increases, coupled with the negative effect of translating the South African operations ZAR denominated payroll costs at the stronger ZAR:USD exchange rate.

By investing in our mines over the last number of 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 56 to 60.

### 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 EITI and PWYP, given that publishing details of Petra's tax payments to Governments can increase confidence and help improve community support for its activities.

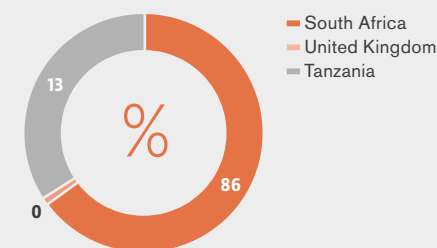
Petra publishes an annual Report on Payments to Governments, in line with the United Kingdom's Report on Payments to Governments Regulations 2014 (as amended), which applies to large, UK-listed extractive companies. The report is available on our website at [www.petradiamonds.com/investors/results-reports](http://www.petradiamonds.com/investors/results-reports).

In FY 2018, the Group paid a total of US\$50.9 million in taxes and royalties (FY 2017: US\$47.2 million). Given the high levels of capital being invested in our expansion programmes in FY 2018, 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.

In line with the amendments to the Mining Act in 2017, royalty contributions in Tanzania 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 [www.petradiamonds.com/about-us/who-we-are/where-we-operate](http://www.petradiamonds.com/about-us/who-we-are/where-we-operate).

### Tax summary per country<sup>1</sup> (US\$ million)

	FY 2018	FY 2017
South Africa	43.8	34.9
Tanzania	6.8	11.9
United Kingdom	0.3	0.3



1. Percentages may not total 100 due to rounding.

The Company did not make any political donations during FY 2018 and received no financial assistance from Governments. Petra made certain charitable donations in FY 2018 but not of a material financial size.

## Generating Economic Benefits *continued*

### 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 2018.

Petra implemented a supply chain management platform in FY 2018, enabling suppliers to register to do business with the Company via our online eProcure Portal. This ensures that the suppliers are made aware of new opportunities as they arise and also allows us to expand our list of contractors and make our procurement system more transparent and effective.

In excess of 2,000 suppliers have registered on the eProcure Portal, which consists of both current and new suppliers. The system has already impacted on some Group tenders, where the amount of potential suppliers has increased significantly compared to past tenders.

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

As a result of the stringent vetting requirements, Petra ensures that all suppliers, providing services or consumables, meet minimum requirements with regards to Company documentation and tax clearances from the South African Revenue Services, as well as relevant registration with the South African Department of Labour. In the past we relied on the face value of documents, whereas in future the documents will be electronically inspected by the relevant authorities.

### Supplier environmental assessment

100%

OF SUPPLIERS ARE SCREENED USING ENVIRONMENTAL CRITERIA

Petra uses pre-qualification questionnaires and site inspections (under special circumstances) to vet 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 as per the international accepted principle of 'the polluter pays'. The mechanisms 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 bad practice and no significant impact actuated as a result of supplier action.

### Local procurement

Petra sources the majority of the goods and services for its South African, Tanzanian and Botswanan operations from the countries in which they are located; even those goods supplied by international companies are purchased through the suppliers' operating entities in that 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. By increasing the total potential number of suppliers (including local ones), the eProcure Portal has already assisted local procurement opportunities.

### Our supply chain in figures

ca. 3,000

SUPPLIERS

2

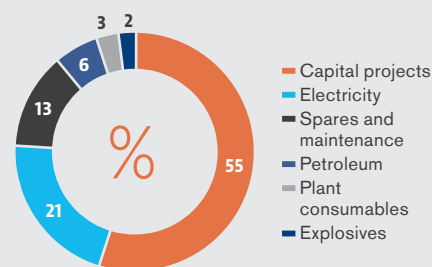
COUNTRIES

78%

OF DISCRETIONARY SPEND IN SOUTH AFRICA WITH BEE VENDORS

Country	Procurement spend (US\$m)	Percentage spent with local <sup>2</sup> suppliers
South Africa <sup>1</sup>	351.0	58%
Tanzania <sup>1</sup>	57.2	91%

### Commodity breakdown (excluding services)



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.





## Community Development and Engagement

### 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 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 corporate 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.

### Expenditure in FY 2018

Our Group social spend decreased to circa US\$1.0 million in FY 2018 (FY 2017: US\$3.4 million), further to the inability to agree LED projects with external stakeholders. Cullinan, Koffiefontein and KEM JV are still engaging with stakeholders to identify projects for inclusion into SLPs and this has also affected expenditure for the Year. Only circa 23% of budgeted spend was committed in South Africa in FY 2018 and Tanzania community spend was also moderate, on the basis of political uncertainty.

### Expenditure by country (US\$ million)<sup>1</sup>

	FY 2018 US\$million	FY 2017 US\$million
South Africa	0.9	2.8
Tanzania	0.1	0.5
<b>Group total spend</b>	<b>1.0</b>	<b>3.4</b>

1. Individual numbers may not add to total due to rounding.

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

- ▶ **Sponsorships** are one-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 Financial Statements for FY 2016 and FY 2017 were presented to the Board, with both being approved and signed. The Board also ensured that all resolutions were concluded and signed off, thereby ensuring compliance with all governance requirements.

During a Board meeting, new projects for Cullinan were approved, including the Lethabong day care centre, a mobile clinic and the 'Vision is Vital' Project. All these approved projects will be implemented in consultation with the relevant Government departments such as the Department of Health and Department of Education to ensure all stakeholders are engaged and projects make a meaningful contribution towards community development.



## Community Development and Engagement continued

### Social investment continued

#### 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 2018:

- ▶ hospital supplies;
- ▶ local education;
- ▶ local environmental considerations;
- ▶ health screening; and
- ▶ local sports facilities.

Williamson also owns and runs the Mwadui Primary School, providing subsidised English education for 504 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.



#### Williamson CSI

Williamson's Environmental Co-ordinator shaking hands with the Minister of Tourism and Natural Resources during the Kishapu District's inaugural national tree planting event, supported by Petra.



#### Koffiefontein marks Mandela Day

Our Koffiefontein mine managers and their families were honoured to take part in the renovation of the local New Beginnings Crèche to mark Mandela Day, spending 67 minutes of their time – one for every year of Mandela's public service.



## Community Development and Engagement *continued*

### Community training and development

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

In order to address the scarcity of skills in our local communities, our mines' involvement starts at a grassroots 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.

**US\$0.93 million**

**SPENT ON COMMUNITY TRAINING AND EDUCATION PROGRAMMES**

The main areas of expenditure for the community training and education programmes were the bursary scheme and school support projects. Williamson's spend was focused on supporting students and universities and colleges.

### 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.

**33**

**FULL-TIME BURSARS WERE SUPPORTED BY PETRA IN FY 2018**

Petra sponsored 23 full-time bursars and three part-time bursars in the 2017 academic year. 27 full-time bursars and six part-time bursars are currently being supported during the 2018 academic year. The tuition fees of the part-time bursars who are carrying out postgraduate studies are sponsored by the Julian Baring Scholarship Fund.

The group of full-time bursars is suitably diverse, consisting of 24 African students, one Indian student, two coloured students and six white students, meaning that it is comprised of 83% historically disadvantaged South Africans ("HDSAs") and 39% 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

Youth unemployment is a significant challenge in South Africa, with graduates often not getting the opportunity to enter the labour market due to a lack of experience. As part of Petra's ambition to contribute to addressing this national problem, a programme was implemented to employ young graduates for a period of six to 12 months to participate in project-based work at our operations. Since inception of the programme in FY 2015, 46 young graduates have been employed, 18 of whom were offered further employment opportunities in the Company. In FY 2018 there were 17 active young graduates in service, of whom 88% are HDSA.

### 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. Portable skills training includes computer literacy training, technical training, plumbing, basic building techniques and carpentry, driver's licence training and agricultural training, as well as other opportunities related to local economic activity.

**467**

**COMMUNITY MEMBERS WERE ENROLLED FOR PORTABLE SKILLS TRAINING IN FY 2018**

### School support project

The school support project is currently implemented at nine 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 at developing both teacher and learner competence and targets learners and teachers from Grade 8 to Grade 12.

Advocacy campaigns to involve parents in their children's education and to assist learners in making career choices were also included during the Year as well as Grade 12 motivation workshops. Four additional schools were supported by providing them with the 'My Maths Buddy' dictionary, which aims to assist teachers and learners in mastering the language of mathematics.



## Community Development and Engagement *continued*

### Scholarships

Scholarships are awarded to deserving learners from schools in our communities. The purpose of the scholarship is to alleviate the pressure that financial burden can place on both the learner and parent. 69 learners were supported in this manner during FY 2018.

### Supporting the Minerals Education Trust Fund ("METF")

The METF is a body which provides a means to pool resources in South Africa's minerals industry to address and resolve some of the many challenges facing tertiary education. Petra provides annual contributions and committed circa US\$77,000 in FY 2018.

### 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:

- ▶ business advisory services;
- ▶ readiness assessments – business and technical;
- ▶ generic business training;
- ▶ technical training;
- ▶ access to market – information on possible tender opportunities at the mine;
- ▶ access to funding through low-interest funding for qualifying SMMEs;
- ▶ formal business mentoring;
- ▶ computer and printing facilities; and
- ▶ boardroom facilities.

Having focused primarily on ED in FY 2018, we are moving towards a structured SD in FY 2019, with those businesses which have developed through our ED programmes having now graduated and entered into our supply chain.

A summary of Petra's ED spend in FY 2018 is provided on page 60.

**Petra's ED programme since inception**

**US\$1.6 million**

**APPROVED LOANS FOR 139 LOCAL SMMEs**



**Petra Diamonds**

*extends support to local businesses through the*

**Enterprise Development ("ED") Fund**

**R20 489 014 approved loans for 139 local SMMEs**

**111 women and 70 youth entrepreneurs supported**

**Created 754 temporary project-related jobs and manage to sustain 316 jobs**

## FREQUENTLY ASKED QUESTIONS

### WHAT IS THE PETRA ED FUND?

Established in 2015, Petra Enterprise Development Fund is an in-house development fund administered by Phakamani Capital Impact on behalf of Petra Group. Our ED Fund is one of our initiatives to support and grow local businesses in our mining communities through access to loan funding. Petra Group initially set aside and contributed R5 million to the Fund as a catalyst for small businesses' economic participation. The Fund has increased due to repayments to the Fund and expands access to other SMMEs. This Fund is accessible through our one-stop shop Enterprise Resource Centres in our operations nationwide.

### WHAT DOES THE FUND OFFER?

The Fund provides project (one-off) loans and term loans, business capital resources (vehicles, equipment, machinery, etc.) as well as working capital (salaries, rent, stock, etc.).

### WHAT SIZE OF LOANS DOES THE FUNDING PROVIDE?

The loans range from R5,000 to R1 million for six to 36-month repayment periods. (This will be based on the available funds.)

### IS THE FUND COMPLIANT WITH RELEVANT LEGISLATION?

The Fund subscribes to the National Credit Regulator requirements and Petra corporate governance principles.

### IS THIS FUND A GRANT FUND?

No.

### WHAT IS THE TURNAROUND FOR THE FUND APPLICATIONS?

Minimum five days for urgent applications and two weeks for a normal application (depending on required documentation).

### AT WHAT RATE IS IT CHARGED?

At the moment, RSA's prime lending rate is at 10.25%. The Petra ED Fund offers an interest rate of 8% (Prime less 2.25%).

### CAN PETRA OR RELATED BUSINESS EMPLOYEES BE FUNDED THROUGH THE FUND?

No.

### WHAT DETERMINES THE FUNDING FOR THE APPLICATION?

The ability to repay (affordability), management risk and viability.

### FOR MORE INFORMATION CONTACT:

Petra Cullinan Diamond Mine Resource Centre:	Seringa Road, Cullinan	012 305 2279
Kimberley Ekapa Mining Joint Venture Resource Centre:	75A Barkly Road, Kimberley	053 802 0700
Petra Koffiefontein Diamond Mine Resource Centre:	1 Du Preez Street, Koffiefontein	053 205 5085
Petra Finsch Diamond Mine Kgatelopele Small Business Hub:	222 Barker Street, Danielskuil	053 384 0043





## Community Development and Engagement continued

### Enterprise and supplier development

#### Five SMMEs participate in the Enterprise and Supplier Development Exhibition

As part of its commitment to assisting and developing local businesses, Petra aims to afford SMMEs access to the Group's supply chain as well as other markets. Cullinan took the initiative in 2017 to facilitate exposure to an Enterprise and Supplier Development Expo in Johannesburg by enabling five local enterprises to attend. This provided the opportunity to network, engage and facilitate trade relations with potential clients and other enterprises. Over 3,500 people attended the exhibition, where 320 enterprises were exhibiting.

The five businesses were assisted with marketing materials and exhibition stalls to showcase their products and services.



**Petra's ED programme  
in FY 2018**

**78**  
LOANS APPROVED

**Ca. US\$0.7m**  
VALUE OF LOANS APPROVED

**461**  
EMPLOYMENT OPPORTUNITIES

**42**  
LOCAL SMALL BUSINESSES SUPPORTED



## Community Development and Engagement continued

### 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 few 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.

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 has, since FY 2014, been gradually introducing a best practice approach towards stakeholder engagement and management ("SEM"). This included the exposure to, and training of, officials in SEM by a leading SEM practitioner in partnership with the Public Relations Institute of South Africa ("PRISA"). However, a shortcoming of the approach introduced has been the availability of SEM software that would support these processes and provide a management system to plan, capture and track all stakeholder engagement, and manage relationships according to recognised principles.

Following a lengthy search for such a software platform, the decision was taken to introduce the IsoMetrix SEM module that is designed to support best practice and process. This software provides the functionality to capture the details of stakeholder individuals and stakeholder entities and evaluate their materiality to the business, create links between these and therefore map a matrix of relationships. This intelligence is then used to design and implement Stakeholder Engagement Plans based on the influence and interest of stakeholders, as well as to schedule and track engagements scheduled to ensure that planning is executed. All stakeholder complaints and queries are also captured on the system to ensure that these are assigned to actions, and that these are resolved.

Customisation and user testing of this system was conducted during the second half of FY 2018, with training of users and implementation of the system starting during the first half of FY 2019. Given the quantity of historical information that needs to be captured on the system to provide a reliable and complete view of stakeholder relations, it is expected that the first quantifiable information from the system will become available during the second quarter of FY 2019.

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**EXTERNAL STAKEHOLDER ENGAGEMENT MEETINGS HELD IN FY 2018 REGARDING COMMUNITY AND SOCIAL DEVELOPMENT**

Petra also held 88 internal stakeholder engagement meetings regarding community and social development in FY 2018.

A proactive approach to stakeholder engagement is critical in building relationships and upholding our social licence to operate. We engage continually with the Government, and in particular the Department of Mineral Resources ("DMR"), local Government (municipality), communities and organised labour on matters of mutual benefit and interest. The most tangible benefits of our proactive approach are:

- Collaboration with stakeholders (including the municipality) on key issues such as Integrated Development Plans (including their development and implementation), the roll-out and alignment of projects with the needs of the community and collaboration with the Government on funding developmental opportunities.

- Enabling and exploring possible synergies in community development initiatives and co-funding of projects with other mining houses and/or Government departments.
- We belong to community forums, aiming to address and manage the risk of mistrust and lack of clear communication, which have provided a catalyst for many social incidents. The following issues are discussed: local procurement and enterprise development, environmental impacts of mining, employment opportunities, illegal mining and skills development (bursaries, internships and learnerships).
- We engage with organised labour on differing issues at various levels such as: accommodation and living conditions, skills development, skills retention, health and safety, operational performance and achievement of targets relating to sustainability of business, labour unrest and productivity.
- Issues relating to the environmental impact of mining remain the concern of all our local communities; synergies are required between the environmental liability and the needs of the community.
- We maintain regular, transparent engagements at all levels with authorities and regulators, especially concerning compliance with SLP commitments and Mining Charter requirements and targets (including, amongst others, transformation, mine community development, housing and living conditions and procurement).





## Community Development and Engagement continued

### 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. Generally, instances of such illegal mining are sporadic at our operations and 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 Department of Mineral Resources, the Mineral Council of South Africa 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. At KEM JV, Petra was instrumental in facilitating the historical agreement in which parts of the mining rights area in Kimberley were made available to formerly illegal miners to conduct legalised artisanal mining, demonstrating successful multi-stakeholder dialogue and co-operation.

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.



### The handover of mining rights to the artisanal miners in Kimberley

As the result of a multi-stakeholder process aimed at establishing a regulated artisanal mining sector, KEM JV made land in Kimberley available in June 2018, on which the DMR granted mining permits to former illegal miners, thereby enabling them to become legal artisanal miners.

The Deputy Minister of the Department of Mineral Resources handed over mining permits on property to the artisanal miners at the Mayibuye Community Centre, Kimberley. This unprecedented ceremony was also attended by representatives from other authorities that played a pivotal role in the process of making this agreement possible. A large number of the new legal artisanal miners, as well as the organisations supporting them, also attended to celebrate at this event.

Kimberley is the only diamond mining site in the world today that has unique remnants of historical flooring systems, which left very thin layers of original kimberlite residues, lending themselves directly to artisanal mining methods. Just over 500 ha of tailings minerals resources and floors, and an additional 100 ha of tailings (previously committed), were identified and transferred by Deed of Delivery to the Batho Pele Primary Mining Co-operative.

Legalised and regulated artisanal mining should not only make a positive contribution to society through job creation and stimulation of the local economy but this unprecedented example of co-operation and dialogue could also set a new standard for all future engagement between mining companies and their very diverse stakeholders.



## Community Development and Engagement continued



### Petra's Intern Forum – supporting the community

Interns from all of Petra's operations congregated in Kimberley on 15 June 2018 to conduct community work at the Helen Bishop Orthopaedic After-Care Home. The group of interns painted the fence of the centre and donations were made as part of the Company's CSI efforts. Donations included wheelchairs, cleaning materials, first aid supplies, diapers, toiletries and trees (on behalf of the

Environmental Department at KEM JV). Addressing the interns, Gert Klopper (Communication Manager Operations – Petra Diamonds) emphasised the importance of continued support to NGOs and contributing in a manner that will benefit these organisations long after such an event has passed.





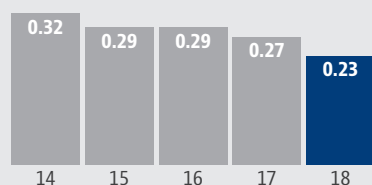
## Key Performance Indicators

The following non-financial KPIs are considered by management to be the most appropriate in terms of tracking Petra's sustainability performance year on year.

### SAFETY

(Group LTIFR)

0.23 -15%



#### STRATEGY



#### PERFORMANCE AND TARGETS

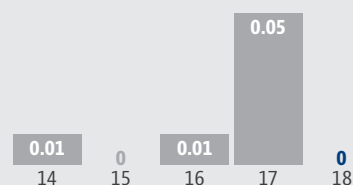
Group LTIFR improved by 15% to 0.23, which is a strong achievement and in excess of our KPI target to achieve a minimum 10% improvement in LTIFR annually. Whilst the Company saw a reduction in risk working hours by 3.7 million due to the advanced stages of the expansion programmes, there was also a clear improvement in overall safety standards. Petra's overriding aim is to achieve a zero harm workplace.

#### 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

0.00 -100%



#### STRATEGY



#### PERFORMANCE AND TARGETS

The Group recorded a fatality-free year. Fatalities are unacceptable and we target a FIFR of zero. Whilst Petra's mining methods are inherently safe, accidents can happen and therefore this remains a constant area of focus.

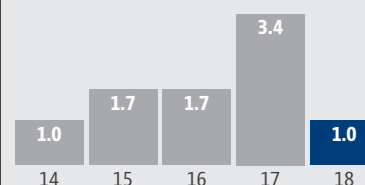
#### RISK MANAGEMENT

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.

### SOCIAL SPEND

(US\$ million)

1.0 -71%



#### STRATEGY



#### PERFORMANCE AND TARGETS

Social spend decreased 71% due to the inability to agree on LED projects with external stakeholders. Certain operations are still engaging with stakeholders to identify projects for inclusion into the SLP and this has also affected expenditure for the Year. Petra targets base case spend of 1% of NPAT; however, this calculation was not possible for FY 2018 given the negative NPAT recorded.

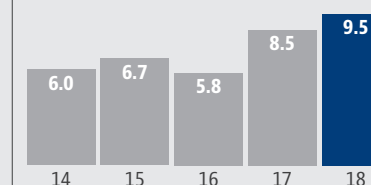
#### RISK MANAGEMENT

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

### TRAINING SPEND

(US\$ million)

9.5 +12%



#### STRATEGY



#### PERFORMANCE AND TARGETS

Training spend increased 12% due to an increase in the number of full-time trainees as well as the implementation of the 'True Blue' course, focusing on the engagement of employees in order to unlock their 'True Blue Value'. Petra endeavours for training spend to consistently exceed 5.5% of operations payroll per annum and FY 2017's spend represented 6.8% of payroll.

#### RISK MANAGEMENT

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

#### STRATEGIC OBJECTIVES



Work responsibly



Business rationalisation



Optimise recoveries



Drive efficiencies

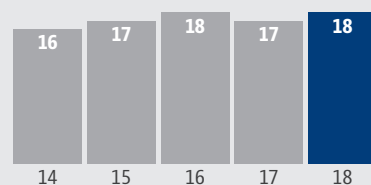


## Key Performance Indicators continued

### WOMEN IN THE WORKFORCE

(%)

18 +6%



#### STRATEGY



#### PERFORMANCE AND TARGETS

The percentage of women in Petra's workforce increased to 18% and 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 the long-term objective of the workforce in South Africa representing the overall demographic.

#### RISK MANAGEMENT

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

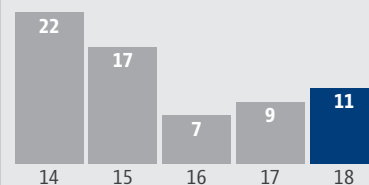
1. Source: South African Chamber of Mines.

2. 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.

### STAFF TURNOVER

(%)

11 +22%



#### STRATEGY



#### PERFORMANCE AND TARGETS

Staff turnover increased to 11% due to retrenchments at Helam, terminations of fixed-term contracts of employment at KEM JV and several retirements during the Year. 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.

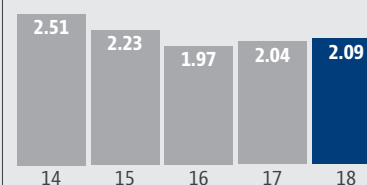
#### RISK MANAGEMENT

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<sup>2</sup>

(m<sup>3</sup>/t)

2.09 +2%



#### STRATEGY



#### PERFORMANCE AND TARGETS

Petra's water usage per tonne increased 2% due to the increased requirements as a result of higher tonnage throughput for the Year. The Company has a medium-term objective of improving water use efficiency by 1% year on year until FY 2020.

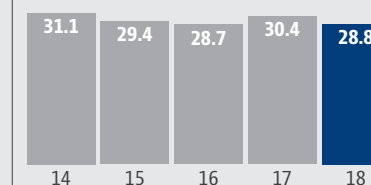
#### RISK MANAGEMENT

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

### ENERGY USAGE

(kWh/t)

28.8 -5%



#### STRATEGY



#### PERFORMANCE AND TARGETS

Petra's energy usage per tonne decreased by 5% in FY 2018 due to more efficient processes, specifically at Cullinan, where the new plant was fully commissioned at the beginning of FY 2018. Energy efficiency initiatives helped to contain increases in consumption related to higher production rates.

#### RISK MANAGEMENT

Continuous development, implementation and improvement of energy efficiency measures.

#### STRATEGIC OBJECTIVES



Work responsibly



Business rationalisation



Optimise recoveries

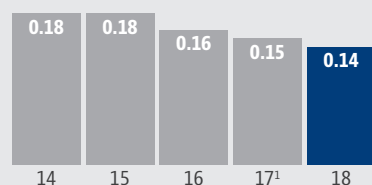


Drive efficiencies

## Key Performance Indicators continued

### CARBON EMISSIONS<sup>1</sup> (tCO<sub>2</sub>-e/ct)

0.14 -7%



STRATEGY    

#### PERFORMANCE AND TARGETS

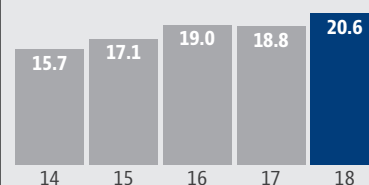
Carbon emitted per carat continued its decreasing trend, down 7%, due to the higher number of carats produced for the Year, as well as the Company's focus on driving energy efficiency. Petra is targeting a 1% reduction in tCO<sub>2</sub>-e/ct per annum over five years (2015 to 2020, with FY 2016 being the restated base year) and this target was achieved for the 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)<sup>2</sup> (Mt)

20.6 +10%



STRATEGY    

#### PERFORMANCE AND TARGETS

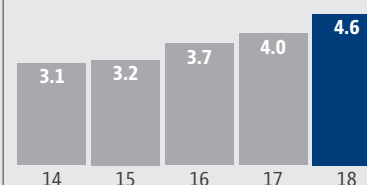
Petra's ore tonnage throughput (including KEM JV) increased 10% to 20.6 Mt, as a result of the Group's expansion programmes. Excluding KEM JV, total tonnes treated increased 4% to 13.7 Mt (FY 2017: 12.0 Mt).

#### RISK MANAGEMENT

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

### ROUGH DIAMOND PRODUCTION<sup>2</sup> (Carats)

4.6 +15%



STRATEGY    

#### PERFORMANCE AND TARGETS

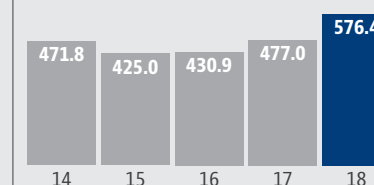
Production increased 15% to a record level of 4.6 Mcts, in line with revised guidance; excluding KEM JV, production increased 19% to 3.8 Mcts. FY 2019 production is expected to be 3.8–4.0 Mcts (excluding KEM JV), consistent with the Company's focus of value over volume.

#### RISK MANAGEMENT

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

### REVENUE<sup>2</sup> (US\$ million)

576.4 +21%



STRATEGY    

#### PERFORMANCE AND TARGETS

Revenue increased 21% to a record level of US\$576.4 million, due to the increase in carats sold and an improving average product mix due to the higher proportion of ROM versus tailings carats. Adjusted for the sale of KEM JV, revenue was up 25% to US\$495.3 million.

#### RISK MANAGEMENT

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

1. Updated emissions reporting methodology implemented during FY 2017 means that historical figures are not directly comparable.

2. Whilst the Annual Report financial and production figures are predominantly stated excluding KEM JV, the above includes KEM JV due to the fact that all sustainability information includes the operation.

### STRATEGIC OBJECTIVES



Work responsibly



Business rationalisation



Optimise recoveries



Drive efficiencies



## Back-up Data

### Generating economic benefit

#### Value added statement

For the year ended 30 June 2018

	30 June 2018 US\$ million <sup>1</sup>	30 June 2017 US\$ million	30 June 2016 US\$ million
Revenue	576.9	477.0	430.9
Paid to suppliers for material and services	(196.7)	(167.3)	(136.6)
<b>Value added</b>	<b>380.2</b>	<b>309.7</b>	<b>294.3</b>
Income from investments	4.7	3.6	1.7
<b>Wealth created</b>	<b>384.9</b>	<b>313.3</b>	<b>296.0</b>

#### Wealth distribution

	30 June 2018 US\$ million <sup>1</sup>	30 June 2017 US\$ million	30 June 2016 US\$ million
<b>Employees</b>	<b>139.1</b>	<b>145.8</b>	<b>125.8</b>
Net salaries, wages and benefits	103.7	110.5	98.9
Salary-related taxes	35.4	35.3	26.9
<b>Providers of capital</b>	<b>79.2</b>	<b>48.0</b>	<b>44.5</b>
Finance cost	79.2	48.0	29.1
Dividends paid	—	—	15.4
<b>Governments</b>			
Tax paid	15.5	11.9	22.7
<b>Reinvested in the Group</b>	<b>151.1</b>	<b>107.6</b>	<b>103.0</b>
Depreciation and capital items	311.1	364.5	379.7
Retained earnings	(160.0)	(256.9)	(276.7)
	<b>384.9</b>	<b>313.3</b>	<b>296.0</b>

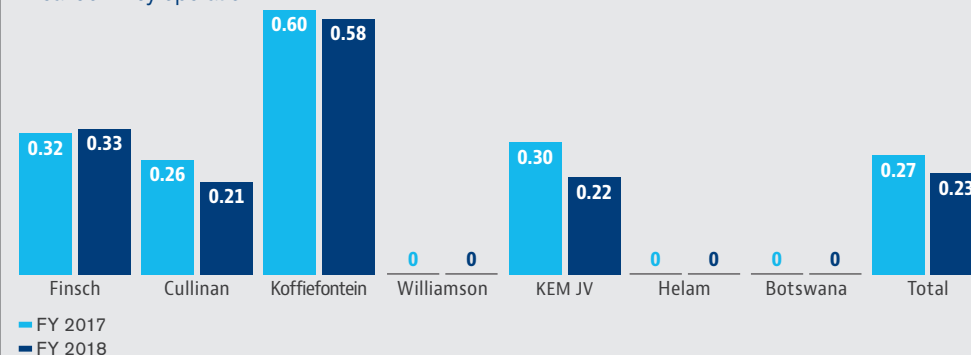
1. Includes KEM JV for comparative purposes.

### Occupational health and safety

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
<b>LTIFR</b>						
Rate per 200,000 hours	0.67	0.32	0.29	0.29	0.27	<b>0.23</b>
Rate per million hours	3.35	1.60	1.45	1.45	1.35	<b>1.15</b>
<b>FIFR</b>						
Rate per 200,000 hours	—	0.01	—	0.01	0.05	—
Rate per million hours	—	0.05	—	0.05	0.25	—

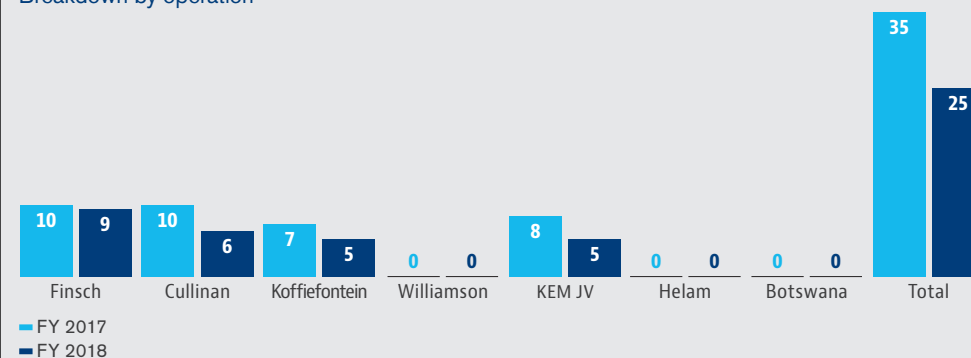
#### LTIFR

##### Breakdown by operation



#### LTIs

##### Breakdown by operation



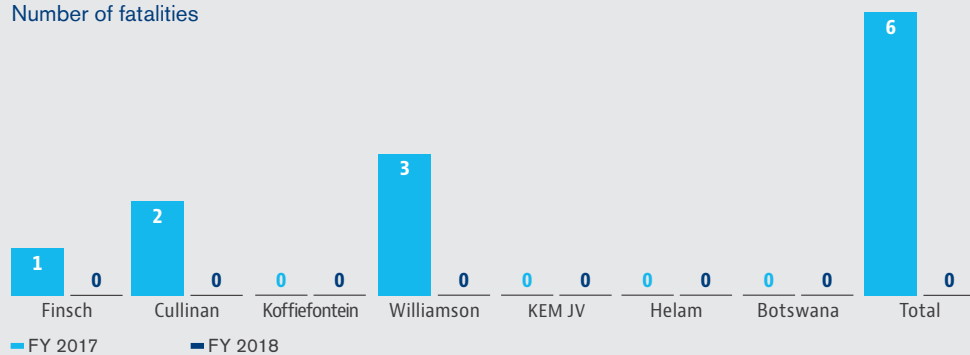


## Back-up Data continued

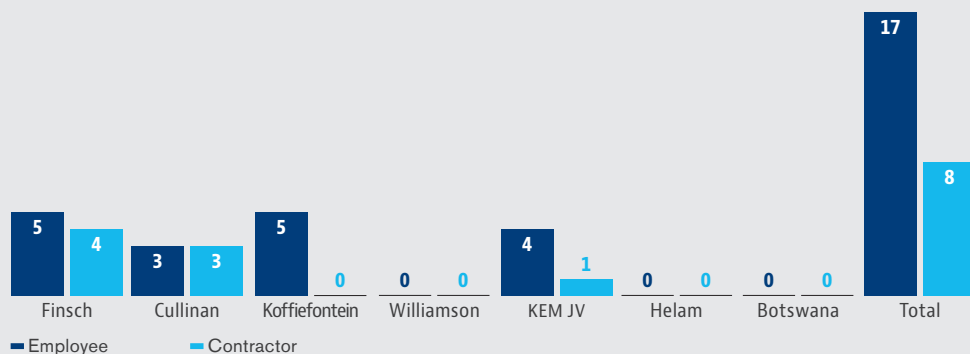
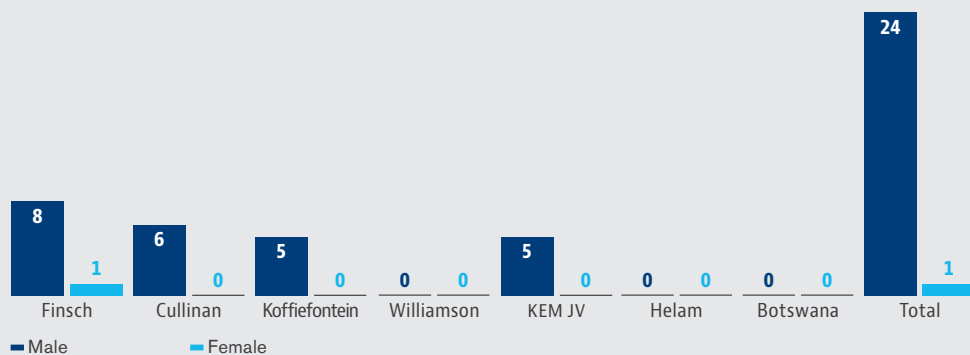
### Occupational health and safety continued

#### Fatalities

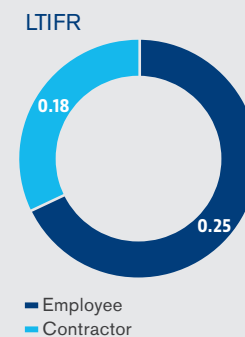
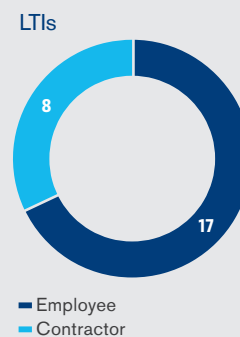
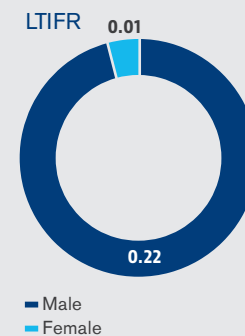
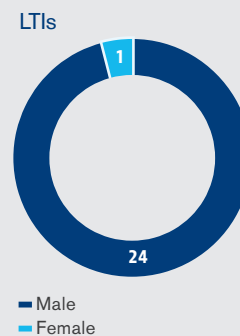
Number of fatalities



#### FY 2018 LTIs – male/female and employee/contractor breakdown by operation



#### FY 2018 LTIs and LTIFR – breakdown by male/female and employee/contractor





## Back-up Data continued

### People

#### Employee and contractor breakdown FY 2018

Operation	Permanent and part-time employees	Contractors	Total
Finsch	1,157	1,530	2,687
Cullinan	1,288	1,028	2,316
Koffiefontein	624	148	772
Williamson	574	871	1,445
KEM JV	1,619	393	2,012
Helam	31	7	38
Helam projects	1	—	1
Botswana	6	7	13
Head office	191	—	191
Board	8	—	8
London office	3	—	3
<b>Total</b>	<b>5,502</b>	<b>3,984</b>	<b>9,486</b>

#### Employee breakdown by age group FY 2018

	18–29		30–50		51+		Total	
Board	—	—	3	0.05%	5	0.09%	8	0.15%
Senior Management	—	—	30	0.1%	8	0.2%	38	0.1%
Management	10	0.2%	163	3%	80	1%	253	5%
Employees	924	17%	3,275	60%	1,004	18%	5,203	95%
<b>Total</b>	<b>934</b>	<b>17%</b>	<b>3,471</b>	<b>63%</b>	<b>1,097</b>	<b>20%</b>	<b>5,502</b>	<b>100%</b>

N.B. Due to rounding errors there are differences in the sum of the percentages presented in the table above.



## Back-up Data continued

## People continued

## Recruitment by gender FY 2018

Operation	Recruitment	Gender		Province based in			
		Male	Female	Gauteng	Northern Cape	Free State	North West
Finsch	78	61	17	—	78	—	—
Cullinan	163	139	24	163	—	—	—
Koffiefontein	90	78	12	—	—	90	—
Williamson	30	26	4	—	—	—	—
KEM JV	129	116	13	—	129	—	—
Helam	3	2	1	—	—	—	3
Helam projects	—	—	—	—	—	—	—
Head office	21	12	9	6	13	2	—
Botswana	—	—	—	—	—	—	—
<b>Total</b>	<b>514</b>	<b>434</b>	<b>80</b>	<b>169</b>	<b>220</b>	<b>92</b>	<b>3</b>

## Recruitment by age group FY 2018

Age group	Finsch	Cullinan	Koffiefontein	Williamson	KEM JV	Helam	Helam projects	Head office	Botswana	Total	%
18–29	39	78	52	6	32	—	—	9	—	216	42.02%
30–50	38	77	36	24	86	1	—	12	—	274	53.31%
51+	1	8	2	—	11	2	—	—	—	24	4.67%
<b>Total</b>	<b>78</b>	<b>163</b>	<b>90</b>	<b>30</b>	<b>129</b>	<b>3</b>	<b>—</b>	<b>21</b>	<b>—</b>	<b>514</b>	<b>100.00%</b>

## Rate of employee recruitment FY 2018

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## Back-up Data continued

### People continued

#### Group turnover by type and gender FY 2018

Operation	Voluntary turnover	Terminations	Total turnover	Gender	
				Male	Female
Finsch	37	45	82	69	13
Cullinan	35	80	115	92	23
Koffiefontein	17	40	57	52	5
Williamson	7	17	24	18	6
KEM JV	35	221	256	226	30
Helam	—	2	2	2	—
Helam projects	3	62	65	61	4
Head office	8	18	26	19	7
Botswana	—	1	1	1	—
<b>Total</b>	<b>142</b>	<b>486</b>	<b>628</b>	<b>540</b>	<b>88</b>

#### Group turnover by age group FY 2018

Age group	Finsch	Cullinan	Koffiefontein	Williamson	KEM JV	Helam	Helam projects	Head office	Botswana	Total	%
18–29	26	11	7	6	71	—	18	9	—	148	23.57%
30–50	36	53	24	4	141	2	36	9	—	305	48.57%
51+	20	51	26	14	44	—	11	8	1	175	27.87%
<b>Total</b>	<b>82</b>	<b>115</b>	<b>57</b>	<b>24</b>	<b>256</b>	<b>2</b>	<b>65</b>	<b>26</b>	<b>1</b>	<b>628</b>	<b>100.00%</b>

#### Rate of employee turnover FY 2018

	%
Total rate of employee turnover	11.3
Rate of employee turnover by gender	
	Female 1.6
	Male 9.8





## Back-up Data continued

### People continued

#### Employee training and development in FY 2018

##### Shifts by South African operation

Operation	Number of training shifts recorded	Employees as at 30 June 2018	Number of training shifts per employee
Finsch	18,086	1,157	15.63
Cullinan	25,648	1,288	19.91
Koffiefontein	4,495	624	7.20
KEM JV	11,313	1,619	6.99
Total	59,542	4,688	12.43

### Environmental management

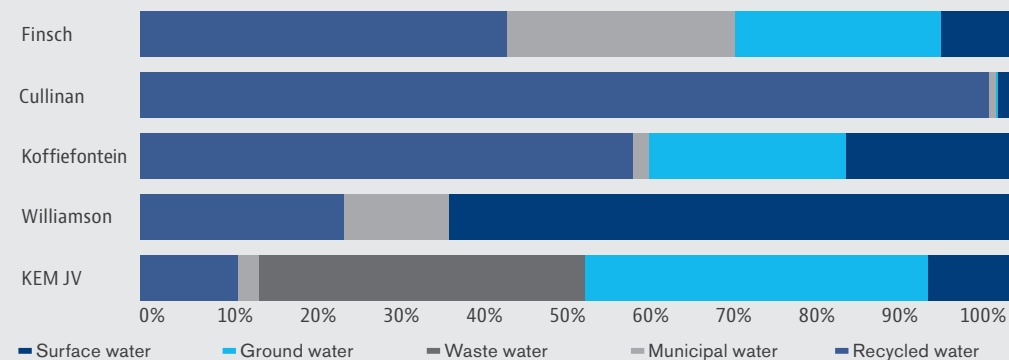
#### Significant environmental incidents in FY 2018

Operation	Severity	Description
KEM JV	Medium	Dust released by mining and hauling activities resulted in a complaint by the Hull Street residents.
KEM JV	Medium	Engineering department constructed a temporary causeway in Kamfersdam prior to receiving final authorisation and it was subsequently removed.
KEM JV	Medium	Four valves from the Superstone plant slimes line were opened, resulting in the spillage of about 5,000 m <sup>3</sup> of slimes and the contamination of approximately 1.5 ha of land.
Cullinan	Medium	A return water dam overflowed due to heavy rains.
Finsch	Medium	A UV operator bumped against the main valve of a dust suppressant holding tank, breaking it and resulting in a contained spill.
Koffiefontein	Medium	A rain event washed away an untreated oil spill to outside of the containment area.
Finsch	Medium	A diesel tank over filled due to a faulty communication to valve. Some diesel was collected in the bund wall but 740 litres were spilled.
Koffiefontein	Medium	During normal operation conditions the pumping system of the thickener dam failed. The failure resulted in the discharge of approximately 3,000 m <sup>3</sup> plant process water from the thickener. All the water was contained, preventing any water to leave the operational areas of the mine and contaminating the environment.
KEM JV	Medium	Two slimes spill incidents caused by illegal mining operations were reported to the relevant authorities.
KEM JV	Medium	A mud rush occurred on 845m level at Bultfontein Mine, covering ten vehicles with an approximate capacity of 4,676 L of hydrocarbons.

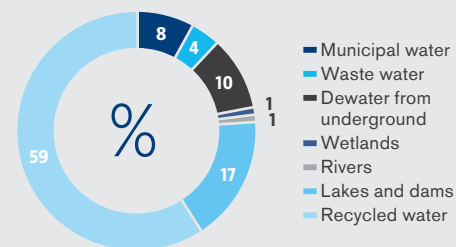
## Back-up Data continued

### Environmental management continued

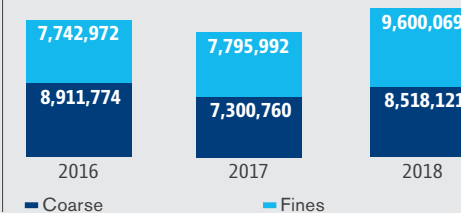
#### Operational water consumption by source (%) FY 2018



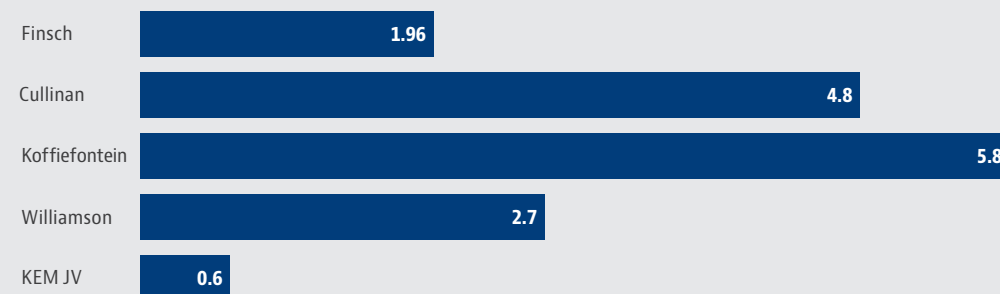
#### Petra water consumption by source FY 2018



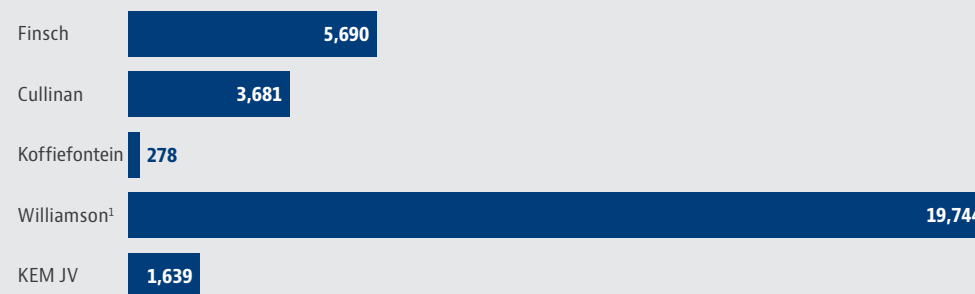
#### Petra volumes of mine waste generated (tonnes year on year) FY 2016 to FY 2018



#### Water efficiency per operation FY 2018 (m³/t)



#### Volumes of business waste generated per operation (tonnes) 2018



1. See page 42 – waste generated at Williamson in FY 2018 included the clean-up of 18,586 tonnes of scrap metal.



## Back-up Data continued

### Environmental management continued

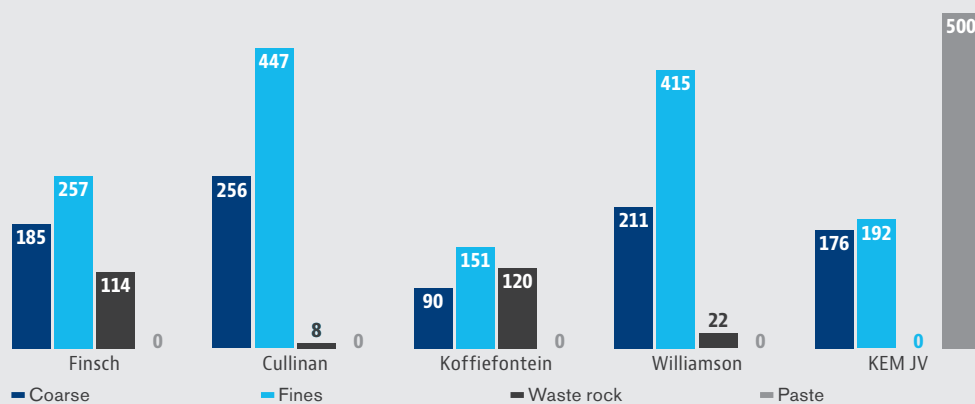
#### Total business waste and recycling

Petra Diamonds waste	Unit	FY 2017	FY 2018
Hazardous waste disposed	tonnes	354.96	<b>279.23</b>
Domestic waste disposed	tonnes	9,503.92	<b>6,278.39</b>
Total waste to landfill	tonnes	9,858.88	<b>6,557.62</b>
Total waste recycled	tonnes	4,527.19	<b>24,460.55</b>
Total waste incinerated	tonnes	21.01	<b>13.70</b>
Total waste generated	tonnes	14,407.09	<b>31,031.87</b>
Recycled waste as a percentage of total waste	%	31	<b>79</b>

#### Rehabilitation and mine closure fund as at 30 June 2018

Mine	Total calculated liability (USD)
Finsch	28,204,387.64
Cullinan	20,349,294.82
Koffiefontein	8,576,335.22
Williamson	5,060,792.00
KEM JV	16,660,504.85
Helam	2,017,792.58
Crown Resources	8,870,204.35

#### Surface area occupied by mining waste per operation (ha) FY 2018





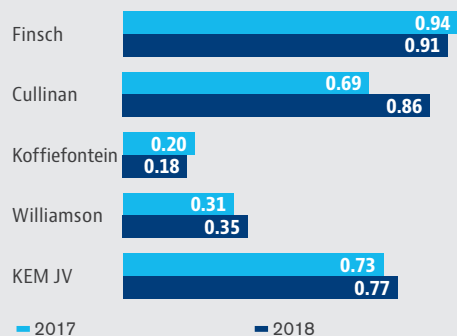
## Back-up Data continued

### Environmental management continued

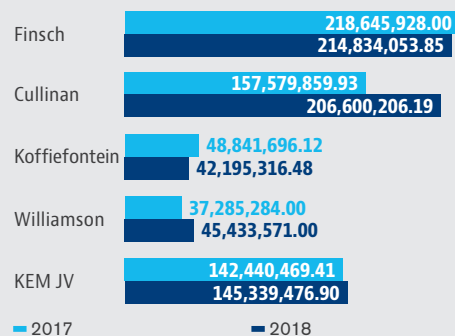
#### Energy consumption<sup>1</sup> – FY 2017 to FY 2018

Element	Unit	FY 2017	FY 2018
Total diesel consumption	L	17,700,405.26	<b>18,417,919.13</b>
Total electricity consumption	kWh	604,793,237.46	<b>654,402,624.42</b>
Total diesel consumption	GJ	674,385	<b>701,723</b>
Total electricity consumption	GJ	2,177,250	<b>2,355,848</b>
Total energy consumption	GJ	2,862,791	<b>3,065,234</b>

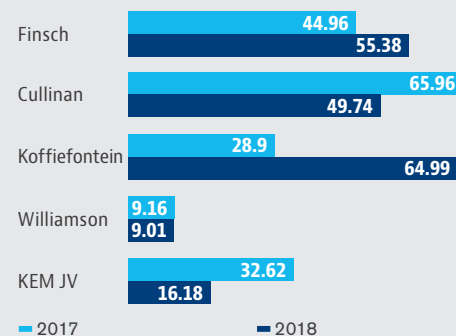
#### Total energy consumption per operation (Mil GJ) FY 2017 to FY 2018



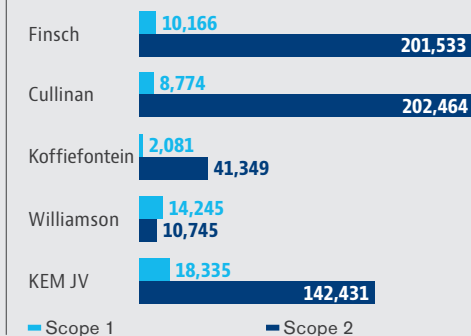
#### Electricity consumption per operation (kWh) FY 2017 to FY 2018



#### Electricity efficiency per operation (kWh/t) FY 2017 to FY 2018



#### Carbon emissions per operation (tCO<sub>2</sub>-e) 2018



1. Note that 'heating, cooling and steam consumption' are not applicable to Petra's business.





## Back-up Data continued

### Environmental management continued

#### Petra carbon footprint

Element	Unit	FY 2017	FY 2018
Scope 1	tCO <sub>2</sub> -e	52,580.22	<b>53,601.05</b>
Scope 2	tCO <sub>2</sub> -e	576,326.95	<b>607,523.77</b>
Total tCO <sub>2</sub> -e (Scopes 1 and 2)	tCO <sub>2</sub> -e	628,907.18	<b>661,124.82</b>
Intensity indicator 1	tCO <sub>2</sub> -e/ct	0.15	<b>0.14</b>
Intensity indicator 2	tCO <sub>2</sub> -e/t	0.03	<b>0.03</b>
Scope 3	tCO <sub>2</sub> -e	8,250.54	<b>6,322.39</b>
<b>Total tCO<sub>2</sub>-e (Scopes 1, 2 and 3)</b>	tCO <sub>2</sub> -e	637,157.76	<b>667,447.21</b>

#### Ozone-depleting substances

Element	Unit	FY 2017	FY 2018
1,1,1- trichloroethane ("TCA")	kg	—	—
Carbon tetrachloride ("CTC")	kg	—	—
Halon	kg	5.0	—
Methyl bromide	kg	—	—
R134a	kg	757.0	<b>24.0</b>
R22	kg	147.8	<b>146.9</b>
R-410	kg	38.5	<b>115.9</b>
R507	kg	—	<b>17.0</b>
<b>Total ozone depleting substances</b>	kg	948.3	<b>303.8</b>

Depending on the type of mining there are five main sources of hazardous gas in mining.

#### a) Gases from blasting:

Gases resulting from blasting are principally carbon dioxide, nitrogen and steam. However, toxic gases including carbon monoxide and nitrogen dioxide also result. As oxygen is consumed in any such blast, oxygen deficiency may also be a result. For safety purposes all employees are evacuated from the underground workings prior to every significant blast and only allowed re-entry after a specific time period to allow for the dispersion of the toxic fumes. Special detection apparatus are used to measure the levels of primarily carbon monoxide (CO) to declare an area safe for re-entry. From an environmental point of view these gases cannot be accurately monitored in this scenario as the working areas are too diverse. Real-time monitoring of gas emissions through the extraction fans are not practical as the concentration of NOx and SOx are constantly below detectable levels.

#### b) Methane from orebody:

Highly combustible methane (CH<sub>4</sub>) or firedamp, as it is called in many coalfields, is formed in the latter stages of coal formation, and because of the depths and pressures, it becomes embedded in the coal. This is insignificant to Petra as only Koffiefontein has detected low concentrations in testing holes (cover drilling) and never in the general atmosphere.

#### c) Vehicle exhaust:

As with any other vehicle exhaust application, toxic fumes are a result of the operation of internal combustion engines. In mining diesel vehicles are used primarily, and carbon monoxide and nitrogen dioxide, as well as oxygen deficiency, are of concern. A 10% sample of all underground vehicles are monitored on an annual basis to ensure compliance with local legislation. These vehicles are routinely maintained to reduce excessive air emissions. Special catalytic converters are also installed as Petra standard to reduce the volumes of carbon monoxide (CO) released to the atmosphere.

#### d) Underground explosions and fires:

Even small, smouldering fires can create toxic gases including carbon monoxide (CO) and nitrogen dioxide (N<sub>2</sub>O) and also consume enough oxygen to cause asphyxiation. Petra did not have any such events in FY 2018 and thus nothing to report under this section.

#### e) Liberation of gases due to acidic water:

Low concentrations of sulphur dioxide (SO<sub>2</sub>) could be present at Koffiefontein but to date has not been detected. This is as a result of the high pH of the ground water in the area.

#### f) Volatile organic compounds:

At Petra, non-methane volatile organic compounds ("NMVOCs") have been detected and are monitored during belt splicing operations only (trichloroethylene). Environmentally these levels of emissions are insignificant as this activity is done infrequently. Occupational hygiene exposures are monitored.

#### g) Ammonia gases:

Petra's standard is to use emulsion-based explosives in lieu of higher ammonium-based explosives. This implies that high ammonium-based products have been phased out and the detection of NH<sub>3</sub> is insignificant to Petra operations.



## Back-up Data continued

### Environmental management continued

#### Land disturbed vs protected

Operation	Unit	FY 2017			FY 2018		
		Area disturbed	Area protected	Requiring rehab	Area disturbed	Area protected	Requiring rehab
Finsch	ha	1,406	1,388	1,171	1,406	1,388	1,008
Cullinan	ha	1,642	2,673	1,634	1,642	2,673	1,631
Koffiefontein	ha	1,642	2,014	1,636	1,642	2,014	1,636
Williamson	ha	671	906	311	675	906	303
KEM JV	ha	4,377	3,274	4,322	4,377	3,600	4,369
<b>Total</b>	ha	9,739	10,255	9,074	9,742	10,255	8,948

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



## Back-up Data continued

### Environmental management continued

#### Land disturbed vs. protected continued

The table below summarises the total mining impact in the South African context ([source: www.dea.gov](http://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 KEM JV	Lower Vaal	672	6	1
Cullinan	Crocodile West	1,245	140	11
	Olifants	1,265	86	6
Koffiefontein	Upper Orange	4,449	2	<1



## Glossary

<b>AET</b>	Adult education and training
<b>AIDS</b>	Acquired Immune Deficiency Syndrome, a disease of the immune system caused by the HIV infection. HIV/AIDS pose serious challenges; South Africa is one of the countries worst affected by the pandemic
<b>ART</b>	anti-retroviral treatment for HIV/AIDS
<b>BBBEE</b>	Broad-Based Black Economic Empowerment
<b>BEE</b>	Black Economic Empowerment is a programme launched by the South African Government to redress the inequalities of apartheid by giving previously disadvantaged groups of South African citizens economic privileges previously not available to them
<b>Beneficiation</b>	the refining of a commodity; in the case of diamonds, refers to the cutting and polishing of a rough stone
<b>BSI</b>	the British Standards Institution
<b>Business waste</b>	Definition as per the National Environmental Management: Waste Act No. 59 of 2008 – means waste that emanates from premises that are used wholly or mainly for commercial, retail, wholesale, entertainment or government administration purposes. Petra differentiates between non-hazardous and recyclable business waste
<b>CCMA</b>	the Commission for Conciliation, Mediation and Arbitration Charter
<b>CO<sub>2</sub>-e</b>	carbon dioxide equivalent
<b>DMR</b>	Department of Mineral Resources, South Africa
<b>DMS</b>	dense media separation
<b>DPA</b>	the Diamond Producers Association
<b>Effluent</b>	mine effluent is a regulated discharge from a point source like a treatment plant or dam spillway
<b>EIA</b>	Environmental Impact Assessment
<b>EITI</b>	Extractive Industries Transparency Initiative
<b>EMP</b>	Environmental Management Programme
<b>EMS</b>	Environmental Management System
<b>ESG</b>	environmental, social, governance
<b>FIFR</b>	Fatal Injury Frequency Rate: the number of fatal injuries per million hours worked

<b>Freeboard</b>	vertical distance from the normal water surface to the top of a confining wall
<b>GRI</b>	Global Reporting Initiative, a multi-stakeholder process and independent institution, the mission of which is to develop and disseminate globally applicable sustainability reporting guidelines. These standards set out principles and indicators that organisations can use to measure and report their economic, environmental and social performance
<b>GM</b>	General Manager
<b>ha</b>	hectares
<b>Hazardous waste</b>	Definition as per the National Environmental Management: Waste Act No. 59 of 2008 – means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment
<b>HDSAs</b>	Historically Disadvantaged South Africans refers to all persons and groups who have been historically discriminated against on the basis of race, gender and disability
<b>HIRA</b>	Hazard identification and risk assessment
<b>HIV</b>	Human Immunodeficiency Virus which causes AIDS by infecting the helper T cells of the immune system. This virus is transmitted through blood or bodily secretions
<b>HR</b>	human resources
<b>HSE</b>	Health, Safety, Environment
<b>HSEC</b>	Health, Safety, Environment, Community
<b>HSSE</b>	Health, Safety, Social and Environment
<b>ILO</b>	International Labour Organization
<b>ISO 14001</b>	an international standard on environmental management; it specifies a framework of control for an Environmental Management System against which an organisation can be certified by a third party
<b>kg</b>	kilogram
<b>Kimberley Process</b>	a joint Governments, industry and civil society initiative to stem the flow of conflict diamonds (i.e. rough diamonds used by rebel movements to finance wars against legitimate Governments)
<b>KPIs</b>	key performance indicators
<b>kWh</b>	kilowatt hour





## Glossary continued

<b>L</b>	litres
<b>LDP</b>	Leadership Development Programme, a Petra initiative to assist in the identification and development of future leaders within the Group
<b>LED</b>	local economic development (when used in reference to socio-economic development)
<b>LFA</b>	land function analysis
<b>LHD</b>	load haul dumper
<b>LTI</b>	lost time injury. An LTI is a work-related injury resulting in the employee/contractor being unable to attend work and perform all of the tasks for which he/she was appointed on the next calendar day after the day of the injury; note: fatalities are recorded as LTIs
<b>LTIFR</b>	lost time injury frequency rate is calculated as the number of LTIs multiplied by 200,000 and divided by the number of hours worked
<b>Material Topic</b>	an ESG issue that is of critical importance to both its stakeholders and to its long-term success as a business
<b>MCTS</b>	million carats
<b>Mining Charter</b>	the Broad-Based Socio-Economic Empowerment 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
<b>Mining waste</b>	Waste deposited as part of the ore processing activities. Split between coarse residue deposits (particle size between 12 mm and 1 mm) and fine residue deposits (particle size smaller than 1 mm)
<b>MPRDA</b>	Mineral and Petroleum Resources Development Act, which came into effect in South Africa on 1 May 2004 and regulates the granting of mining rights and prospecting rights
<b>NGOs</b>	non-governmental organisations
<b>NIHL</b>	noise induced hearing loss
<b>NOx</b>	mono-nitrogen oxide
<b>NPAT</b>	net profit after tax
<b>NPO</b>	non-profit organisation
<b>NUMET</b>	National Union of Mines and Energy Workers of Tanzania

<b>NUMSA</b>	National Union of Mineworkers of South Africa
<b>OD-ETDP</b>	the OD-ETDP qualification is for those who want to build on a Further Education and Training Certificate from another field to enter the field of OD-ETD as a potential career, and have little or no previous exposure to education, training and development
<b>OHSAS 18000</b>	an international Occupational Health and safety management system specification
<b>PAIA Manual</b>	Promotion of Access to Information
<b>PPE</b>	personal protective equipment
<b>PWYP</b>	publish what you pay
<b>rehabilitation</b>	the process of restoring mined land to a condition approximating to a greater or lesser degree its original state
<b>ROM</b>	run-of-mine, i.e. relating to production from the primary orebody
<b>Risk work hours</b>	the actual amount of hours worked by employees and contractors while exposed to controlled material risk
<b>Section 21</b>	Schedule 1 of the Companies Act 71 of 2008 (previously Section 21 of the Companies Act 61 of 1973) allows for a 'non-profit company'. These companies must have a public benefit object and must apply all its assets and income towards advancing such object
<b>Section 54</b>	Section 54 of the Mine Health and Safety Act No. 29 of 1996 ("MHSA") sets out the powers of Inspectors to address any occurrence, practice or condition at a mine, which in the view of the Inspector, endangers or may endanger the health and safety of any person at the mine
<b>Section 93</b>	Refers to an order, suspension or instruction issued by the Department of Mineral Resources in terms of Section 93 of the Mineral and Petroleum Resources Development Act, 28 of 2002, as amended ("MPRDA") for alleged non-compliance with the MPRDA or conditions of a right
<b>SEP</b>	Stakeholder Engagement Plan
<b>Severity rate</b>	Severity rate indicates the severity of work-related injuries (number of days lost due to injuries) where individuals were booked off from work impacting on workforce effectiveness. The rate calculus is as follows: number of days off from work due to injury x 200,000 ÷ total man-hours worked.
<b>SHE</b>	safety, health, environment



## Glossary continued

<b>SI</b>	social investment
<b>Significant spillage</b>	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)
<b>SLC</b>	sub level cave
<b>SLP</b>	social and labour plan stipulated in the MPRDA and aimed at promoting the employment and advancement of the social and economic welfare of all South Africans whilst ensuring economic growth and socio-economic development
<b>SMEP</b>	Stakeholder Management and Engagement Plan
<b>SMME</b>	Small, Medium and Micro Enterprises
<b>t</b>	tonne
<b>tailings</b>	the waste products of the processing circuit which may still contain quantities of the economic mineral
<b>TAMICO</b>	Tanzania Mines, Energy, Construction and Allied Workers Union
<b>tCO<sub>2</sub>-e/Ct</b>	total CO <sub>2</sub> -e per carat produced
<b>TMM</b>	trackless mobile machinery
<b>UASA</b>	United Association of South Africa, a South African trade union
<b>VCT</b>	voluntary counselling and testing, a programme aimed at encouraging voluntary HIV testing in order for individuals to know their status



## GRI Content Index

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI 101: Foundation</b>			
<b>GRI General Disclosures</b>			
<b>Organisation profile</b>			
GRI 102: General Disclosures	GRI 102-1	Name of organisation	Cover
	GRI 102-2	Activities, brands, products and services	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.1, 2, 12 and 13)
	GRI 102-3	Location of headquarters	Back cover
	GRI 102-4	Location of operations	p.5
	GRI 102-5	Ownership and legal form	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.169 and 170)
	GRI 102-6	Markets served	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.12, 13 and 17 to 21)
	GRI 102-7	Scale of the organisation	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.2 to 5)
	GRI 102-8	Information on employees and other workers	pp.4, 11, 30 to 38, 69 to 72
	GRI 102-9	Supply chain	p.55
	GRI 102-10	Significant changes to the organisation and its supply chain	p.55
	GRI 102-11	Precautionary principle or approach	
	GRI 102-12	External initiatives	
	GRI 102-13	Membership associations	pp.19 to 22, 25 and 36
<b>Strategy</b>			
GRI 102: General Disclosures	GRI 102-14	Statement from senior decision maker	p.3
	GRI 102-15	Key impacts, risks and opportunities	pp.11 to 13
<b>Ethics</b>			
GRI 102: General Disclosures	GRI 102-16	Values, principles, standards and norms of behaviour	pp.16 to 18
	GRI 102-17	Mechanisms for advice and concerns about ethics	pp.17 and 18, <a href="http://www.petradiamonds.com/about-us/corporate-governance/business-ethics">www.petradiamonds.com/about-us/corporate-governance/business-ethics</a>



## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI General Disclosures</b> continued			
<b>Corporate governance</b>			
GRI 102: General Disclosures	GRI 102-18	Governance structure	p.15
	GRI 102-19	Delegating authority	pp.15 to 18
	GRI 102-20	Executive-level responsibility for economic, environmental and social topics	pp.3, 15 and 24
	GRI 102-21	Consulting stakeholders on economic, environmental and social topics	pp.8 to 10
	GRI 102-22	Composition of the highest governance body and its committees	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.59 and 61)
	GRI 102-23	Chair of the highest governing body	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (p.60)
	GRI 102-24	Nominating and selecting the highest governance body	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.88 and 89)
	GRI 102-25	Conflicts of interest	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (p.66)
	GRI 102-26	Role of highest governance body in setting purpose, values and strategy	p.15, 2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.59 and 63)
	GRI 102-27	Collective knowledge of highest governance body	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.62 and 66)
	GRI 102-28	Evaluating the highest governance body's performance	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.67 to 69)
	GRI 102-29	Identifying and managing economic, environmental and social impacts	pp.8 to 13
	GRI 102-30	Effectiveness of risk management processes	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.74 to 77)
	GRI 102-31	Review of economic, environmental and social topics	pp.11 and 12
	GRI 102-32	Highest governance body's role in sustainability reporting	p.16, 2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.90 and 91)
	GRI 102-33	Communicating critical concerns	pp.14 to 22
	GRI 102-34	Nature and total number of critical concerns	p.15 and 21
	GRI 102-35	Remuneration policies	p.17, 2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.92 to 103)
	GRI 102-36	Process for determining remuneration	p.17, 2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.92 to 103)
	GRI 102-37	Stakeholders' involvement in remuneration	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (pp.92 to 103)





## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI General Disclosures</b> continued			
<b>Stakeholder engagement</b>			
GRI 102: General Disclosures	GRI 102-40	List of stakeholder groups	pp.9 and 10
	GRI 102-41	Collective bargaining agreements	pp.36 and 37
	GRI 102-42	Identifying and selecting stakeholders	pp.56 and 61
	GRI 102-43	Approach to stakeholder engagement	pp.9, 10, 42, 56, 57 and 61
	GRI 102-44	Key topics and concerns raised	pp.9, 10 and 61
<b>Identified material topics</b>			
GRI 102: General Disclosures	GRI 102-45	Entities included in the consolidated financial statements	2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (p.150)
	GRI 102-46	Defining report content and topic boundaries	pp.1, 11 and 12
	GRI 102-47	List of material topics	pp.11 and 12
	GRI 102-48	Restatement of information	p.40
	GRI 102-49	Changes in reporting	No significant changes in reporting
<b>Report profile</b>			
GRI 102: General Disclosures	GRI 102-50	Reporting period	Year ended 30 June 2018
	GRI 102-51	Date of most recent report	27 October 2017
	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 GRI standards	p.2
	GRI 102-55	GRI content index	pp.82 to 91
	GRI 102-56	External assurance	p.2



## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics</b>			
<b>Economic performance</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.16 to 18
	GRI 103-3	Evaluation of the management approach	p.54
GRI 201: Economic Performance	GRI 201-1	Direct Economic value generated and distributed	p.67
	GRI 201-4	Financial assistance received from government	p.54
	MM	Report countries of operation that either candidate to or compliant with the EITI	Tanzania and the UK are members of the EITI – <a href="http://www.eiti.org/countries">www.eiti.org/countries</a>
<b>Procurement practices</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	p.55
	GRI 103-3	Evaluation of the management approach	p.55
GRI 204: Procurement Practices	GRI 204-1	Proportion of spending on local suppliers	p.55
<b>Environment</b>			
<b>Materials</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic	p.12
	GRI 103-2	The management approach and its components	pp.39 to 51
	GRI 103-3	Evaluation of the management approach	pp.39 to 51
GRI 301: Materials	GRI 301-1	Materials used by weight or volume	p.43
<b>Energy</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic	p.12
	GRI 103-2	The management approach and its components	pp.41 to 48
	GRI 103-3	Evaluation of the management approach	pp.41 to 48
GRI 302: Energy	GRI 302-1	Energy consumption within the organisation	pp. 47 and 75
	GRI 302-3	Energy intensity	pp. 47 and 75
<b>GRI Material Topics continued</b>			
<b>Environment continued</b>			



## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>Water</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.41 to 50
	GRI 103-3	Evaluation of the management approach	pp.41 to 50
GRI 204: Water	GRI 303-1	Water withdrawal by source	p.74
	GRI 303-3	Water recycled and reused	pp.50 and 74
<b>Biodiversity</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.41 to 50
	GRI 103-3	Evaluation of the management approach	pp.41 to 50
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.77
	GRI 304-2	Significant impacts of activities, products and services on biodiversity	pp.43 and 44
	GRI 304-3	Habitats protected or restored	pp.43 and 44
	GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	
	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.43 to 45
	MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	pp.77 and 78
	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	

## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics continued</b>			
<b>Environment continued</b>			
<b>Emissions</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.41 to 50
	GRI 103-3	Evaluation of the management approach	pp.41 to 50
GRI 305: Emissions	GRI 305-1	Direct (Scope 1) GHG emissions	pp.48 and 76
	GRI 305-2	Energy indirect (Scope 2) GHG emissions	pp.48 and 76
	GRI 305-3	Other indirect (Scope 3) GHG emissions	pp.48 and 76
	GRI 305-4	GHG emissions intensity	p.76
	GRI 305-5	Reduction of GHG emissions	p.48
	GRI 305-6	Emissions of ozone-depleting substances ("ODS")	p.76
	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.48
<b>Effluents and waste</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.49 to 50
	GRI 103-3	Evaluation of the management approach	pp.49 to 50
GRI 306: Effluents and Waste	GRI 306-1	Water discharge by quality and destination	p.73
	GRI 306-3	Significant spills	There were no significant spills in FY 2018
	MM	Indicator G4-EN23 refers to site waste, e.g. waste oils, spent cell lining, office, canteen and camp waste, scrap steel, tyres and construction waste. Large-volume mining and mineral processing waste should be reported under MM3	pp.42, 43, 73 and 74
	MM	Includes spillage of tailings, slimes or other significant process materials	p.74





## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics</b> continued			
<b>Environment</b> continued			
<b>Environmental compliance</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.20 and 21
	GRI 103-3	Evaluation of the management approach	pp.20 and 21
GRI 307: Environmental Compliance	GRI 307-1	Non-compliance with environmental laws and regulations	pp.15 and 21
<b>Supplier environmental assessment</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.20, 21, 41 and 55
	GRI 103-3	Evaluation of the management approach	pp.20, 21, 41 and 55
GRI 308: Supplier Environmental Assessment	GRI 308-1	New suppliers that were screened using environmental criteria	p.55
<b>Labour practices</b>			
<b>Employment</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.12
	GRI 103-2	The management approach and its components	pp.36 to 38
	GRI 103-3	Evaluation of the management approach	pp.36 to 38
GRI 401: Employment	GRI 401-1	New employee hires and employee turnover	pp.70 and 71
	MM	Employment: report how all policies, standards and practices are applied to contractors	p.55
<b>Labour/management relations</b>			
	MM4	Number of strikes and lock-outs exceeding one week's duration, by country	p.36



## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics</b> continued			
<b>Labour practices</b> continued			
<b>Occupational health and safety</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.23 to 29
	GRI 103-3	Evaluation of the management approach	pp.23 to 26, 68 and 69
	GRI 403-1	Workers' representation in formal joint management-worker health and safety committees	p.26, 2018 Annual Report, <a href="http://www.petradiamonds.com/investors/results-reports">www.petradiamonds.com/investors/results-reports</a> (p.90)
	GRI 403-4	Health and safety topics covered in formal agreements with trade unions	p.26
GRI 403: Occupational Health and Safety	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	No incidents recorded in FY 2018
<b>Training and education</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.30 to 33
	GRI 103-3	Evaluation of the management approach	pp.30 to 33
GRI 404: Training and Education	GRI 404-2	Programmes for upgrading employee skills and transition assistance programmes	pp.32 to 33
<b>Diversity and equal opportunity</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.30 to 35
	GRI 103-3	Evaluation of the management approach	pp.32 to 38
GRI 405: Diversity and Equal Opportunity	GRI 405-1	Diversity in governance bodies and employees	pp.34 to 35 and 69 to 72



## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics continued</b>			
<b>Human rights</b>			
(Note: human rights management is included in corporate 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 this is considered a material topic for companies working in the extractive industries generally.)			
<b>Non-discrimination</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.15 to 18
	GRI 103-3	Evaluation of the management approach	pp.15 to 18
GRI 406: Non-discrimination	GRI 406-1	Incidents of discrimination and corrective actions taken	p.34
<b>Child labour</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.15 to 18
	GRI 103-3	Evaluation of the management approach	pp.15 to 18
GRI 408: Child Labour	GRI 408-1	Operations and suppliers at significant risk for incidents of child labour	pp.18, 19, 36 and 55
<b>Forced or compulsory labour</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	pp.15 to 18
	GRI 103-3	Evaluation of the management approach	pp.15 to 18
GRI 409: Forced or Compulsory Labour	GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	p.36
<b>Rights of indigenous people</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	p.11
	GRI 103-2	The management approach and its components	p.18
	GRI 103-3	Evaluation of the management approach	p.18
GRI 411: Rights of indigenous people	GRI 411-1	Incidents of violations involving rights of indigenous peoples	There were no such incidents in FY 2018
	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.18
	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.18
	MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples	p.18



## GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page/notes
<b>GRI Material Topics</b> continued			
<b>Society</b>			
<b>Local communities</b>			
GRI 103: Management Approach	GRI 103-1	Explanation of the material topic and its boundary	pp.10 to 12
	GRI 103-2	The management approach and its components	pp.32, 42 and 56 to 63
	GRI 103-3	Evaluation of the management approach	pp.56 to 63
GRI 413: Local Communities	GRI 413-1	Operations with local community engagement, impact assessments and development programmes	p.56
	MM	Lengthy guidance on reporting re. local communities	pp.56 to 61
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