



**MINERALS COUNCIL**  
SOUTH AFRICA



**Khumbul'ekhaya**



National Day of Health & Safety In Mining 2021

**RENEWED  
FOCUS**

for our New Normal



# NATIONAL DAY OF HEALTH AND SAFETY 2021

**Themba Mkhwanazi**  
Chair of CEO Zero Harm Forum

**8 July 2021**

# Our commitment to Zero Harm

We remain unwaveringly committed to Zero Harm

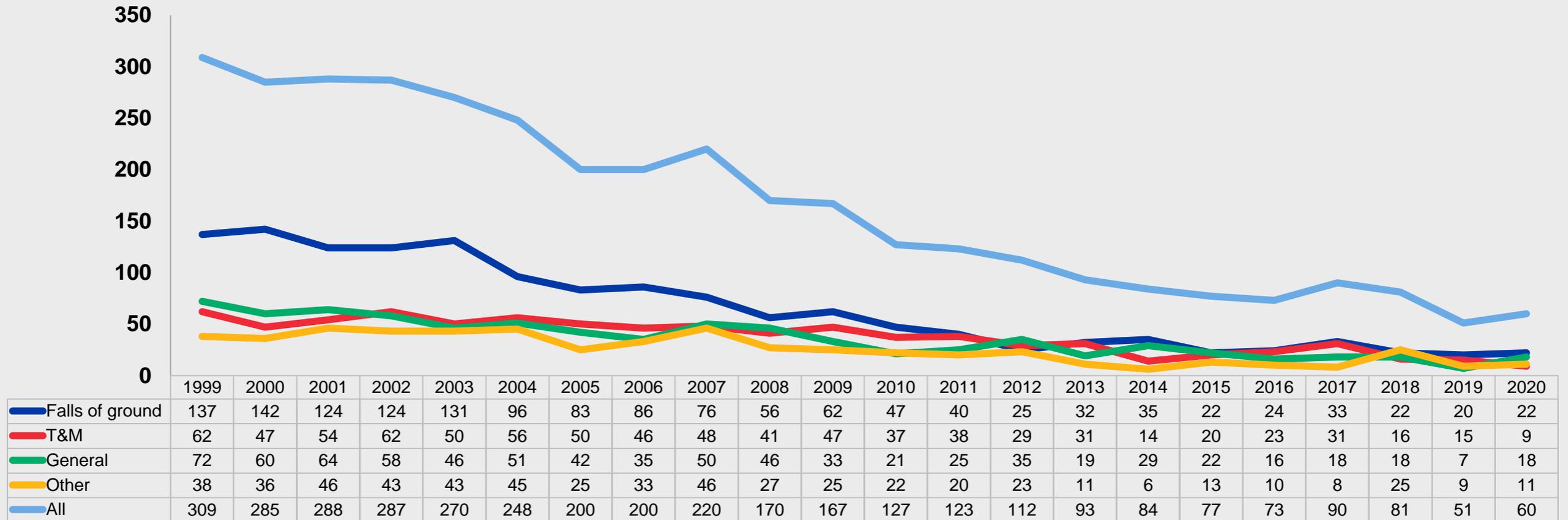
Our absolute and foremost priority as an industry is, and must be, the health and safety of our employees

- It is with great regret that we experienced a mis-step on our journey to Zero Harm in 2020/21
- Industry's safety performance in 2019, and years leading up to it, a tribute to deep and intensive collaboration between role players, companies, unions and the DMRE
- In 2020, we continued with our Khumbul'ekhaya strategy – which means **remembering home** – with a focus on holistic approach to eliminating fatalities as a result of safety and health incidents
- Khumbul'ekhaya programme broadened to encompass COVID-19, including what we need to do to keep employees and their families and communities safe



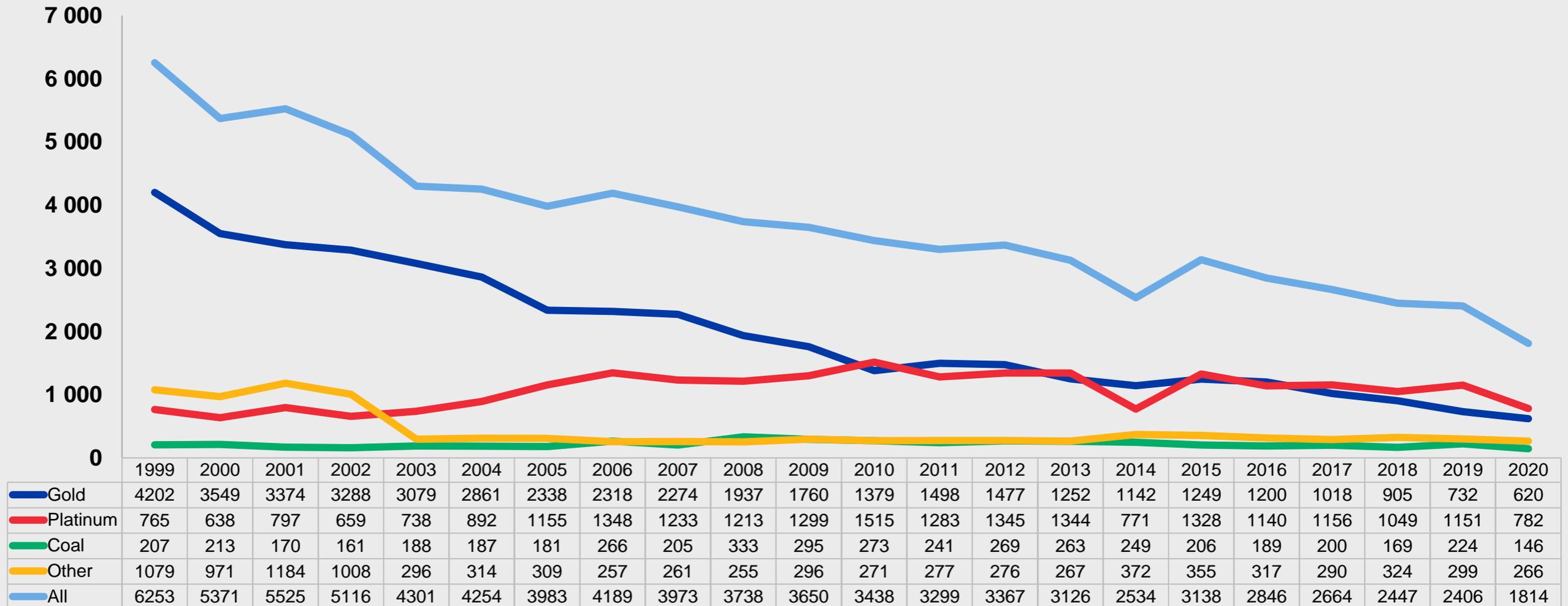


# A journey of collaboration in eliminating fatalities



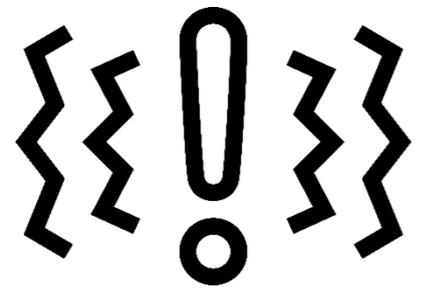
— Falls of ground     
 — T&M     
 — General     
 — Other     
 — All

# A journey of collaboration in preventing injuries



— Gold — Platinum — Coal — Other — All

# Key areas of concern



## Falls of ground

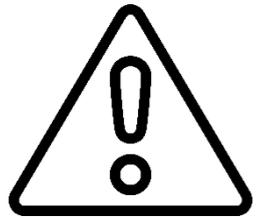
(11 fatalities in 2021)  
- significant challenge in platinum and gold sectors

## Transport-related accidents

(4 fatalities in 2021)  
- mostly coal and platinum sectors

## General types of accidents

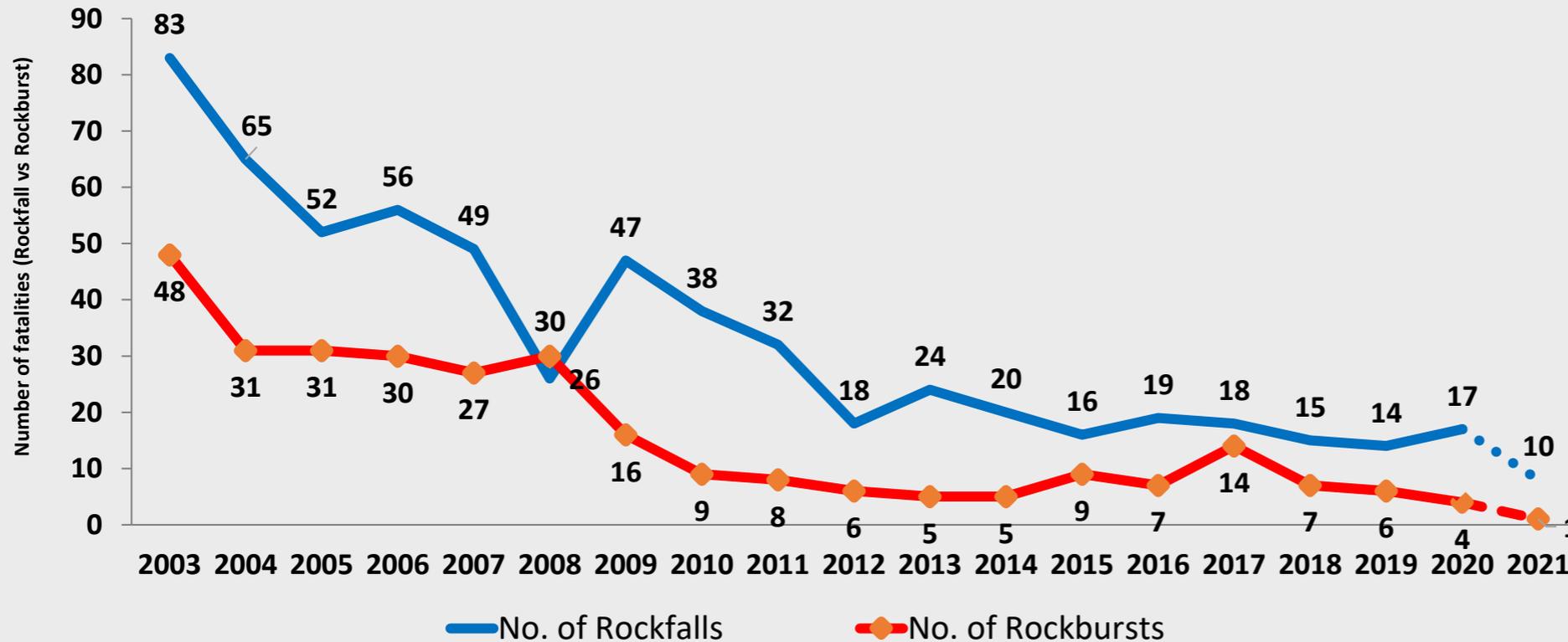
(11 fatalities in 2021)



***We cannot ignore the impact of COVID-19 on our safety performance – especially at frontline supervision and mining teams levels***

# Focus on falls of ground

## Rockfall vs rockburst fatalities (2003-2021)



### ELIMINATION OF FOG FATALITIES ACTION PLAN

**30% of fatalities in 2020 were a result on FoG related incidents**

**ANALYSIS SHOWED:**

- Steep decline in FoG fatalities between 2003 and 2011, followed by plateauing period from 2012 to 2020
- Barring practice identified as one of the high-risk activities, accounting for almost 60% of FoG incidents

**CHALLENGES CONSIDERED:**

- Little to no progress on execution of rock-related projects currently in Mine Health and Safety Council (MHSC) research programme and projects
- Exodus of experienced rock engineers from South Africa and most experienced reaching retirement age
- Behavioural challenges related to accidents – not deliberate or malicious, rather as a result of “getting the job done”

**Consultative process involved:** Minerals Council members; RETC; SANIRE; Association of Mine Managers of South Africa (AMMSA); and South African Collieries Managers Association (SACMA)

**FoG workshops identified various issues to be considered, which were allocated into the various components of the Industry Ground Control Framework (IGCF)**

**RECOMMENDATIONS**

Following an extensive consultative process, six recommendations were developed with the aim of accelerating the industry’s journey to zero harm

- 1 ADOPT LEADING PRACTICES**
  - Minimize overhead design
  - Mastering drilling quality with technology
  - Use jigs/trigs for drilling accuracy
  - Use appropriate steel round designs and explosives (e.g. on-site-type)
  - Minimize risk of entering under-anchored rock
  - Rebore and reline drilling with locking using HSCC, avoid tool
  - Permitted area coverage in widths < 1.2m
  - Minimize underground accesses to 500 ft
- 2 RED**
  - Invest R10n in 5 years on e.g. Barring technology
  - Science-based rates
  - Rig-time monitoring of instability
  - Support design
  - Challenges with implementation of barrier
- 3 SKILLS DEVELOPMENT**
  - Invest R5n in 3 years on e.g. Updating rock engineering learning material
  - Short courses
  - Support by mentors, etc.
  - Learning programmes for mining production leadership (e.g. front-line supervisory on FoG)
- 4 POLICY**
  - Engage Department of Mineral Resources and Energy
  - Fast-track guide for code of practice on geotechnical risk
  - Finalize legislation on responsibility, etc.
  - Adopt Mining Code of Practice Mine Responsible Accounts
  - Formative System force on FoG incidents
- 5 BEHAVIOUR, CULTURE, OPERATIONAL DISCIPLINE**
  - Implement measures to ensure mining cycle time and avoidable para-time production
  - Minimizing time from production
  - Ministry Present and others
  - FOG Risk-GRS
- 6 IMPLEMENTATION AND MONITORING**
  - Operational discipline
  - Learning implementation
  - Annual AMMSA-SACMA Inc Days of Learning with RETC/SANIRE and others, supplemented with regular sharing of leading practices in all meetings
  - Quarterly reporting on implementation by members and Minerals Council

**Key:**

- Short < 0-2 years
- Medium = 2-5 years
- Short to Medium = 0-5 years

#MakingMiningMatter

# Actions to reduce fatalities



**To change  
behaviour and  
transform  
safety culture:**

- In 2019, **Heartfelt Visible Leadership Commitment** through CEO-ship:
  - part of every CEO Zero Harm Forum meeting
  - CEOs driving health and safety improvements from the top by sharing successes and challenges
- **Multi-disciplinary Independent Peer Review Accident and Incident Investigation Systems and Analysis** project implemented to improve quality of investigations
  - Pilot session conducted with 16-member task team and other sessions scheduled for rest of year
- **Promote Just Culture Model and address Blame Culture in risk management, Just Culture Accountability Model Framework** is being developed for dissemination in industry
- **Learning from Incidents (LFI) Working Group** - accelerating learning from incidents to facilitate better and faster learning from each other and other industries

# Our commitment to Zero Harm



**We remain committed to Khumbul'ekhaya strategy, even though it has been challenged by COVID-19.**

Changing health and safety culture through industry's culture transformation framework is at its heart

- Renewed focus needed! Cannot ignore the impact of COVID-19 on safety performance, especially at frontline supervision/mining teams levels. Also mental health
- Collaboration with tripartite stakeholders in government and unions to eliminate fatalities and work towards Zero Harm
- Implement programme to achieve a step-change in FoGs
- Implement special project on trackless mobile machinery (TMMs)
- Women in mining programme an industry imperative
- Continue focus on health, particularly non-communicable diseases
- Work smarter, not harder – just transition



# Thank you

T +27 11 498 7100

E [info@mineralscouncil.org.za](mailto:info@mineralscouncil.org.za)

W [www.mineralscouncil.org.za](http://www.mineralscouncil.org.za)

5 Hollard Street, Johannesburg, 2001, PO Box 61809, Marshalltown 2107