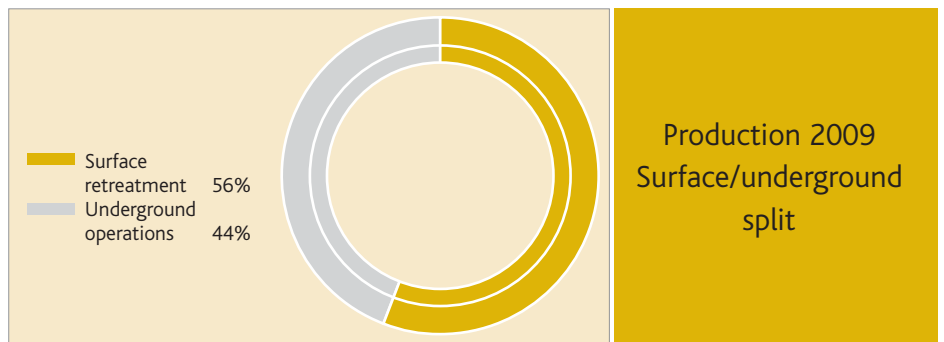
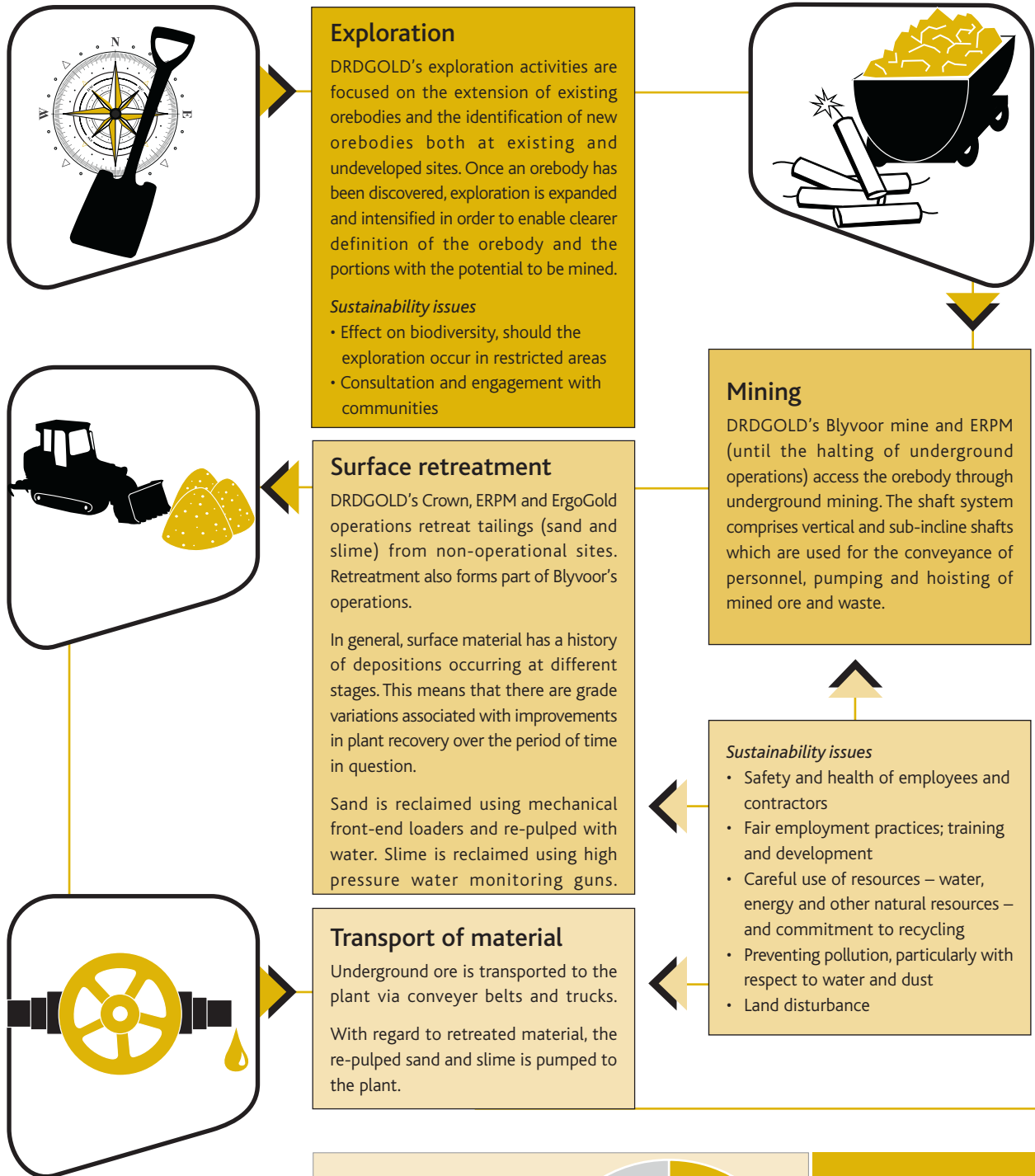


# Key aspects of DRDGOLD's business and implications for sustainable development



## Processing

Through a combination of multi-stage crushing and open-circuit, primary and closed-circuit, secondary milling, ore from underground is broken up into small particles (comminution) so that the mineral is exposed. The recovery of gold is the next stage.

The gold extraction technique used is known as the carbon-in-pulp (CIP) process which involves hydro cyclones, thickening and cyanide leaching. Granular activated carbon particles, which are much larger than the ground ore particles, are added to the cyanidation pulp when the gold is in solution. The activated carbon and pulp are agitated together to enable the gold to become adsorbed onto the activated carbon. The loaded activated carbon is mechanically screened to separate it from the barren ore pulp.

With the carbon-in-leach (CIL) process, which is used at Crown's three plants and ErgoGold's plant, gold ore, carbon granules and cyanide are mixed together to form a slurry. The cyanide dissolves the gold content and the gold is adsorbed on the carbon: the carbon is subsequently separated from the slurry for further gold removal.

After the CIP or CIL process, the gold is recovered through electro-winning. It is then smelted into doré bars.

### *Sustainability issues*

- Lessening emissions; preventing pollution
- Careful use of resources – water, energy and other natural resources – and commitment to recycling
- Managing and handling cyanide
- Lightening carbon footprint



## Refining

The gold bars produced consist of approximately 85% gold and 7%-8% silver, with the balance comprising copper and other common elements. The gold bars are transported to Rand Refinery Limited in Germiston, Gauteng, for assaying and final refining. The gold is purified to 99.9%, thus meeting the standards of the London Bullion Market Association, and cast into troy ounce bars of varying weights. On the same day as the delivery takes place, Rand Refinery sells the gold on DRDGOLD's behalf at the London afternoon fixed dollar price.

### *Sustainability issues*

- Reducing emissions; preventing pollution



## Rehabilitation

When mining is over, operations are closed and rehabilitated which means that the land is ultimately returned to a productive state. All of DRDGOLD's continuing operations have updated closure plans and closure liabilities associated with environmental issues for each operation are reassessed on an annual basis.

### *Sustainability issues*

- Attaining closure with required regulatory approvals
- Consultation and engagement with communities
- Monitoring sites after closure