

SHAPING THE MINING INDUSTRY FOR THE NEXT GENERATION

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FUTURESMART MINING™

- What does mining in the future look like?



MINING IS ON THE CUSP OF GAME-CHANGING INNOVATION

Unprecedented opportunity for those prepared to take a fresh approach to purposeful innovation



Anglo American has a portfolio of world-class competitive mining operations and undeveloped resources, combined with a rich heritage of technology and innovation that spans 100 years.

Mining innovation is driven by increasingly critical challenges

- **safety**
- **sustainability**
- **productivity**



MINING WITHOUT FRESH WATER

Technological innovation to eliminate fresh water from our mining processes

Challenge

Around 75% of our current portfolio is located in high-water-risk regions

Approach

- Dry processing
- Rapid dewatering
- Data-rich technologies
e.g. pervasive sensors
- Evaporation control

Vision: Eliminate fresh water from our mining processes





MINING WITHOUT TAILINGS DAMS

Technological innovation to eliminate the need for tailing dams

Challenge

Water sent to the tailings pond often represents the largest water loss at a mine

Approach

- **Coarse particle flotation** to concentrate the mineral
- **(Low-cost) dry stacking technologies** to dewater the residual waste

Vision: Dry tailings stacks





MINING WITH A MINIMAL CARBON FOOTPRINT

Technological innovation to reduce our carbon footprint

Challenge

Our energy use dramatically affects our carbon footprint

Approach

- \$201 million investment in low-carbon technologies including approximately \$10 million in clean-coal technology
- Low-emission technologies using PGMs (platinum-based hydrogen fuel-cell technology)
- Mineral carbonation technologies for carbon storage (DeBeers)
- Investment in new comminution technology (#1 consumer of energy at our sites)

Vision: Carbon-neutral mining



EXAMPLE: SHOCK BREAK – CHANGING THE WAY WE BREAK ROCK

Technological innovation to reduce our carbon footprint

Innovation

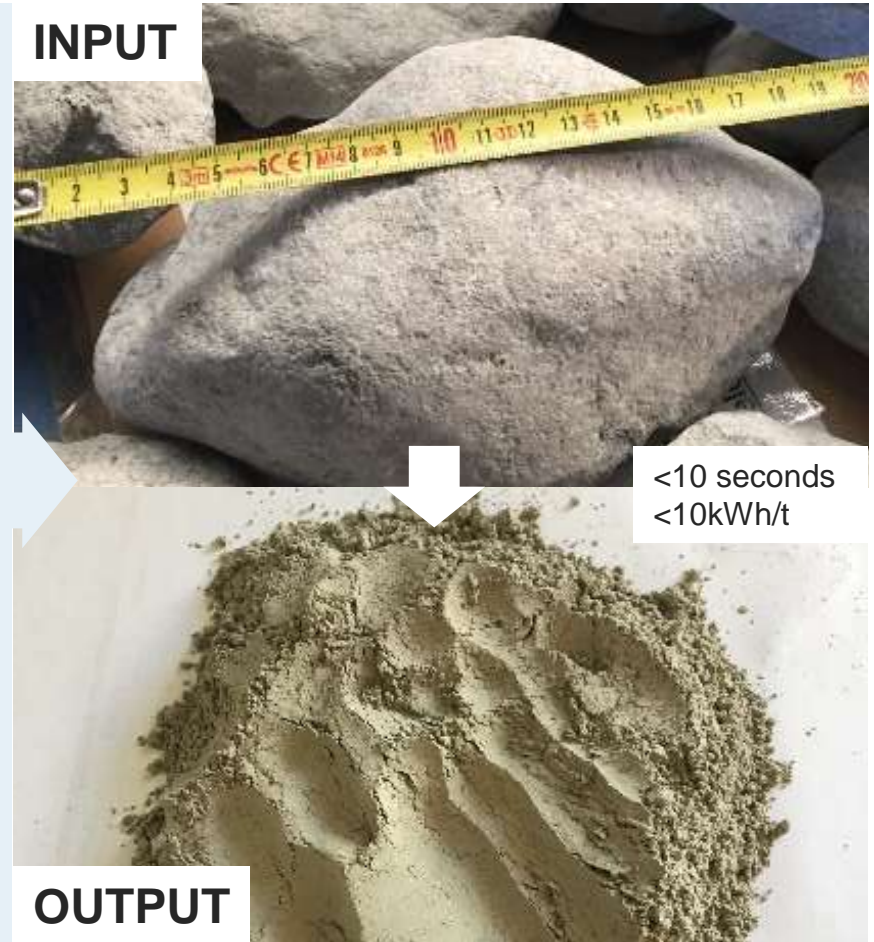
Shock Break has the potential to radically reduce our energy consumption.

Comminution accounts for over half of the total energy consumed at an average mine site. Tests on Mogalakwena pebbles indicate >50% saving in power consumption. Pilot plant trials, leveraging Element 6 wear resistant tools, start in April 2018

Outcome

The potential to eliminate SAG mills

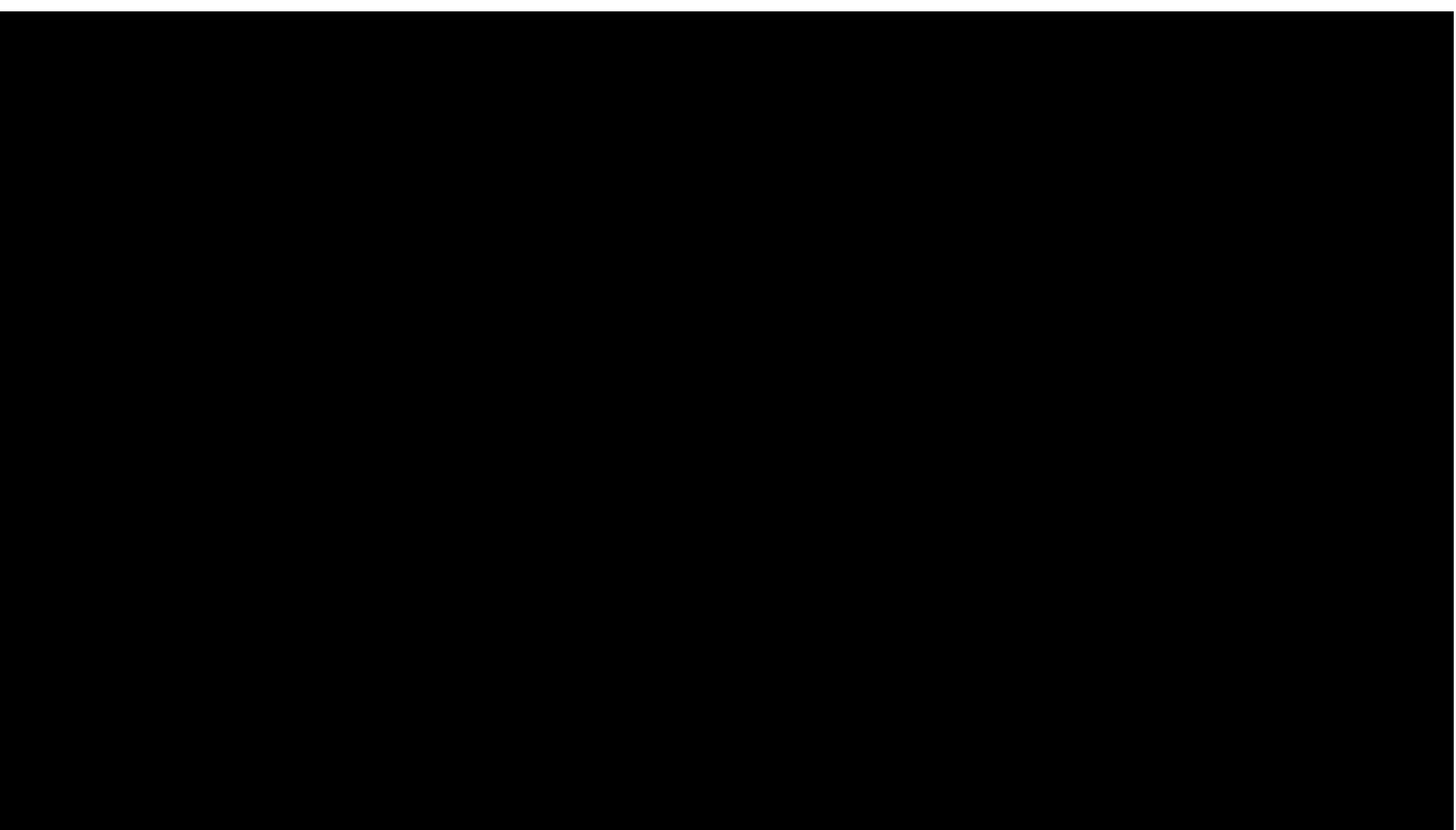
Vision: Carbon-neutral mining



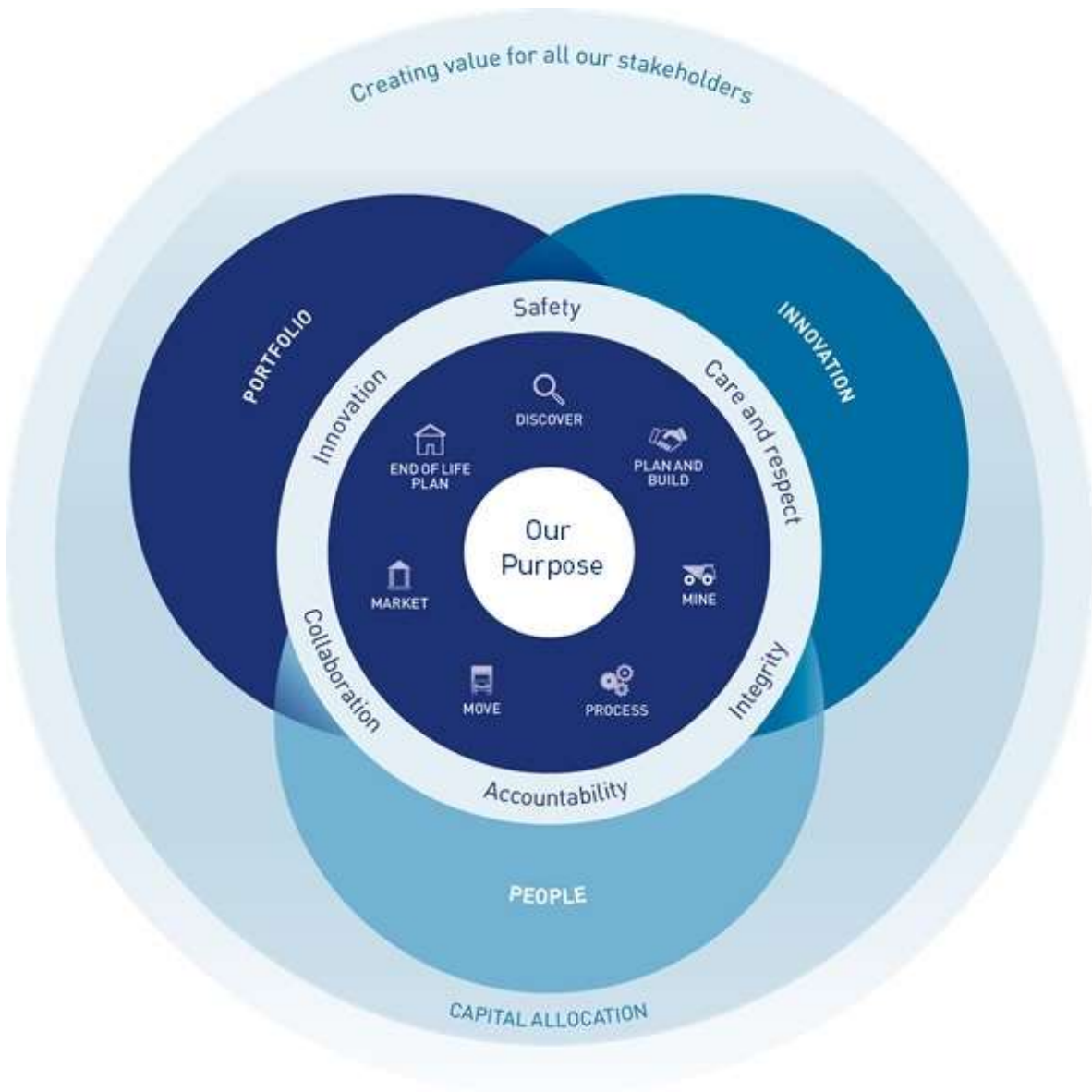
WHAT NEXT?

- **Preparing for a new workforce**
- **Redefine shared value**
- **Future business models**





WHAT IS PURPOSE?



PURPOSE

Anglo American's purpose is to:

Re-imagine mining

What mining could be and how we envisage mining in the future. How we think differently and innovatively about mining and our entire value chain.

to improve people's lives

A Purpose is about more than just the work we do and the profits we make, it's about the **impact we have on everything we touch.**



SUSTAINABILITY STRATEGY

“To deliver a transformational strategy to create long-term value for Anglo American and our stakeholders, intended to be a source of organisational identity, employee pride, and competitive differentiation.”



WHY?

Failure to manage sustainability issues has decreased trust and increased capex, opex and risk

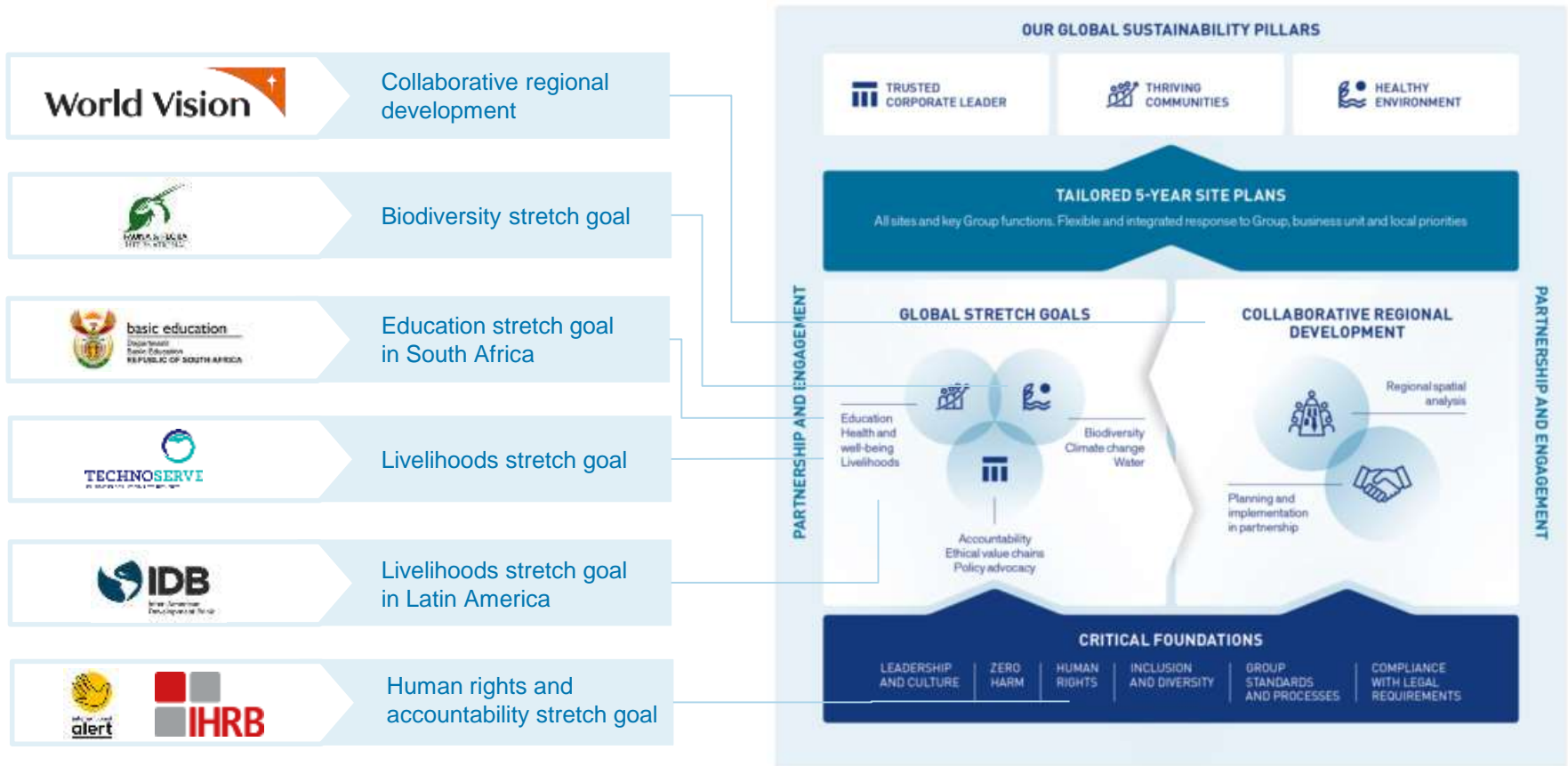
Shareholder value	Managing risk	Building trust
Community disruptions – risk of operating interruption.	Mining is still operating under a legacy of weak environmental practices, fractious community relations , and a historic lack of workforce diversity . (Deloitte 2018)	Business must show commitment to the long term. (Edelman Trust Barometer, 2018)
Safety and environmental incidents – liabilities increasing.		56% of companies that only think about themselves and their profits are bound to fail. (Edelman Trust Barometer, 2018)
Licensing issues – projects delayed and value left in the ground.	A company’s ability to manage ESG matters demonstrates the leadership and good governance that is so essential to sustainable growth. (Lawrence Fink, 2018)	Business and NGOs are viewed equally as the institutions holding the most hope for the future. (Edelman Trust Barometer, 2018)
Risk to securing access – new resources and markets.		

SUSTAINABILITY STRATEGY FRAMEWORK



PARTNERSHIPS ARE AT THE HEART OF OUR STRATEGY

Partnerships will underpin how we deliver on the stretch goals.
Existing partnerships include:



Other partnerships in development, including potential impact investing fund.

LAST THOUGHTS...

- Change is the new normal
- Need to open our eyes and ears to look and listen
- Nurture and expand our imagination



THANK YOU

APPENDIX

- Global Stretch Goals
- Footnotes

Accountability

Vision: To transform the relationship between mines, communities and wider society.



Policy Advocacy

Vision: To take a lead on issues that affect our business in a way that is collaborative and aimed at society's wider goals.



Ethical Value Chains

Vision: To be a part of a value chain that supports and reinforces positive human rights and sustainability outcomes.



Accountability

Our vision is to transform the relationship between mines, communities, and wider society

2020:

- Establish, or support the functioning of existing, local stakeholder accountability forums and national multi-stakeholder dialogue groups by 2020
- Engage in strategic international partnerships to support sustainability imperatives

Ethical Value Chains

Our vision is to be a part of a value chain that supports and reinforces positive human rights and sustainability outcomes

Milestones

- Half of Anglo American operations to be certified to agreed responsible mine certification standards by 2020
- A common responsible sourcing standard for the mining industry to be agreed by 2020

2025 target

- All Anglo American operations certified to relevant mine certification standards
- Responsible sourcing standard implemented across Anglo American

Policy Advocacy

Our vision is to take a lead on issues that affect our business in a way that is collaborative and aimed at society's wider goals

Milestones

- Finalise Group and business unit/country policy advocacy action plans in support of key sustainability issues by 2020
- Provide scholarship and training opportunities for policy-makers in regions with capacity constraints by 2020
- Significant programmes and partnerships in place to support priority policy and governance issues by 2025

2030 target

- External recognition of our leadership on policy and advocacy

THRIVING COMMUNITIES

Livelihoods

Vision: Shared, sustainable prosperity in our host communities.



Education

Vision: For all children in host communities to have access to excellent education and training.



Health and well-being

Vision: For the SDG targets for health to be achieved in all our host communities.





GLOBAL STRETCH GOALS

Thriving Communities – Milestone targets

Education

Our vision is for all children in host communities to have access to excellent education and training

Milestones

- Baselines and strategies to achieve the target in place by 2020
- Schools in host communities to perform within the top 30% of state schools nationally by 2025

2030 target

- Schools in host communities to perform within the top 20% of state schools nationally
-

Health & Wellbeing

Our vision is for the SDG targets for health to be achieved in all our host communities

Milestones

- Baseline established and strategies in place at every site to achieve the SDG3 health targets by 2020
- Operations to be halfway towards closing the gap between baselines and 2030 targets by 2025

2030 target

- SDG3 targets for health in host communities met
-

Livelihoods

Our vision is shared, sustainable prosperity in our host communities

Milestones

- Baselines and strategies to achieve targets in place at every site
- Three jobs created/supported off-site for every job on-site by 2025

2030 target

- Five jobs created/supported off-site for every job on-site

Climate change

Vision: To operate carbon-neutral mines.



Biodiversity

Vision. To deliver net positive impact (NPI) across Anglo American through implementing the mitigation hierarchy and investment in biodiversity stewardship.



Water

Vision. To operate waterless mines in water scarce regions.



Biodiversity

Our vision is to deliver net positive impact (NPI) across Anglo American through implementing the mitigation hierarchy and investment in biodiversity stewardship

Milestones

- Net-positive impact (NPI) methodology, biodiversity value assessments and site-specific indicators in place at all high-risk sites by 2020
- Formalise partnerships to support NPI, which are aligned with existing regional and national biodiversity stewardship initiatives by 2020

2030 target

- Deliver net-positive impact on biodiversity across Anglo American
-

Climate Change

Our vision is to operate carbon neutral mines

Milestones

- Reduce greenhouse gas (GHG) emissions by 22% relative to the Business-As-Usual projection by 2020
- Reduce energy consumption by 8% relative to the business as usual (BAU) projection by 2020
- Implementation of four priority projects to meet 2030 to commence by 2020

2030 target

- Reduce net GHG emissions by 30%
 - Improve energy efficiency by 30%
-

Water

Our vision is to operate waterless mines in water scarce regions

Milestones

- Reduce the abstraction of freshwater in water-scarce regions by 20% by 2020
- Increase water-recycling levels to 75% by 2020

2030 target

- Reduce the abstraction of freshwater in water-scarce regions by 50%

TRANSITION TO LOW CARBON FUTURE

Anglo American recognises its responsibility to contribute towards addressing climate change – a critical issue facing all of us.



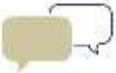




- **The opportunities** = Copper, nickel, iron ore, PGMs
- **The impact** = FutureSmart Mining™ will execute our vision of carbon neutral and waterless mines
- **Transparency** = Continue to strengthen disclosure through Aiming for A, TCFD, and the TPI
- **Thermal coal** = We have reduced our thermal coal production by 50% since 2012

An energy transition will take time. Thermal coal remains a material part of the global energy mix until at least 2040, especially in developing countries. We are proud that we can mine it responsibly and according to our values.

Anglo American will support a responsible transition away from coal – both for broader society and to support our employees and local communities.



HOW WE MEASURE OUR BUSINESS PERFORMANCE

Pillars of value	Description
 Safety and health	Do no harm to our workforce
 Environment	Minimise our impact on the environment
 Socio-political	Partner in the benefits of mining with local communities and government
 People	Create a sustainable competitive advantage through capable people and an effective, performance-driven organisation
 Production	Sustainably produce valuable product
 Cost	Be competitive by operating as efficiently as possible
 Financial	Deliver sustainable returns to our shareholders