

we are one

# Sibanye Stillwater

US PGM operations – Investor day (session 4)

23 September 2021

US PGM  
operations  
Investor day  
*(session 4)*

Tier 1 asset in a  
Tier 1 jurisdiction

23 September 2021



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**Sibanye  
Stillwater**

## Disclaimer

The information in this announcement may contain forward-looking statements within the meaning of the “safe harbour” provisions of the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements, including, among others, those relating to Sibanye Stillwater Limited’s (“Sibanye-Stillwater” or the “Group”) financial positions, business strategies, plans and objectives of management for future operations, are necessarily estimates reflecting the best judgment of the senior management and directors of Sibanye-Stillwater.

All statements other than statements of historical facts included in this announcement may be forward-looking statements. Forward-looking statements also often use words such as “will”, “forecast”, “potential”, “estimate”, “expect” and words of similar meaning. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances and should be considered in light of various important factors, including those set forth in this disclaimer. Readers are cautioned not to place undue reliance on such statements.

The important factors that could cause Sibanye-Stillwater’s actual results, performance or achievements to differ materially from those in the forward-looking statements include, among others, our future business prospects; financial positions; debt position and our ability to reduce debt leverage; business, political and social conditions in the United States, South Africa, Zimbabwe and elsewhere; plans and objectives of management for future operations; our ability to obtain the benefits of any streaming arrangements or pipeline financing; our ability to service our bond instruments; changes in assumptions underlying Sibanye-Stillwater’s estimation of their current mineral reserves and resources; the ability to achieve anticipated efficiencies and other cost savings in connection with past, ongoing and future acquisitions, as well as at existing operations; our ability to achieve steady state production at the Blitz project; the success of Sibanye-Stillwater’s business strategy; exploration and development activities; the ability of Sibanye-Stillwater to comply with requirements that they operate in a sustainable manner; changes in the market price of gold, PGMs and/or uranium; the occurrence of hazards associated with underground and surface gold, PGMs and uranium mining; the occurrence of labour disruptions and industrial action; the availability, terms and deployment of capital or credit; changes in relevant government regulations, particularly environmental, tax, health and safety regulations and new legislation affecting water, mining, mineral rights and business ownership, including any interpretations thereof which may be subject to dispute; the outcome and consequence of any potential or pending litigation or regulatory proceedings or other environmental, health and safety issues; power disruptions, constraints and cost increases; supply chain shortages and increases in the price of production inputs; fluctuations in exchange rates, currency devaluations, inflation and other macro-economic monetary policies; the occurrence of temporary stoppages of mines for safety incidents and unplanned maintenance; the ability to hire and retain senior management or sufficient technically skilled employees, as well as their ability to achieve sufficient representation of historically disadvantaged South Africans in management positions; failure of information technology and communications systems; the adequacy of insurance coverage; any social unrest, sickness or natural or man-made disaster at informal settlements in the vicinity of some of Sibanye-Stillwater’s operations; and the impact of HIV, tuberculosis and the spread of other contagious diseases, such as coronavirus (“COVID-19”). Further details of potential risks and uncertainties affecting Sibanye-Stillwater are described in Sibanye-Stillwater’s filings with the Johannesburg Stock Exchange and the United States Securities and Exchange Commission, including the Integrated Annual Report and the Annual Report on Form 20-F.

These forward-looking statements speak only as of the date of the content. Sibanye-Stillwater expressly disclaims any obligation or undertaking to update or revise any forward-looking statement (except to the extent legally required).



# Introduction

Richard Stewart, Chief Operating Officer

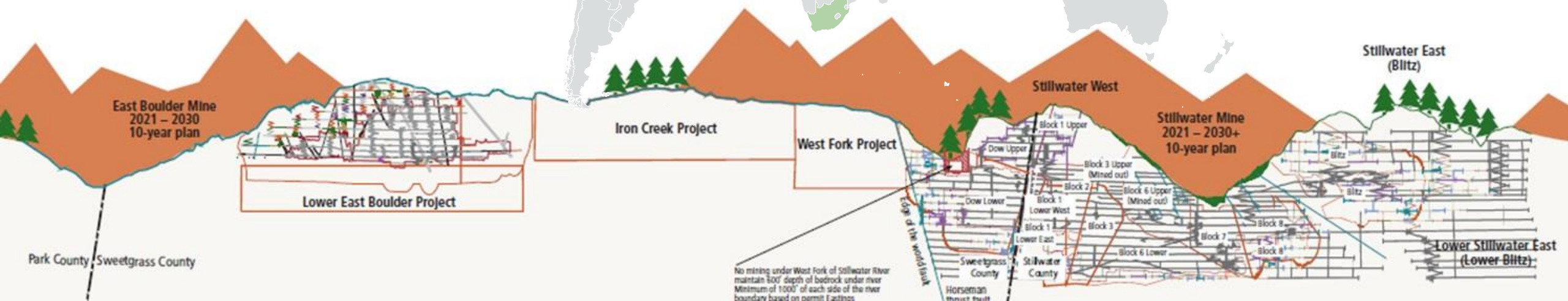


# US PGM operations - prime mining real estate



**Stillwater mine (100%)**  
Reserves: 15.9Moz 2E

**East Boulder mine (100%)**  
Reserves: 11.0Moz 2E



# A transformational acquisition – delivering diversification and value

Acquired in May 2017 for US\$2.2 billion

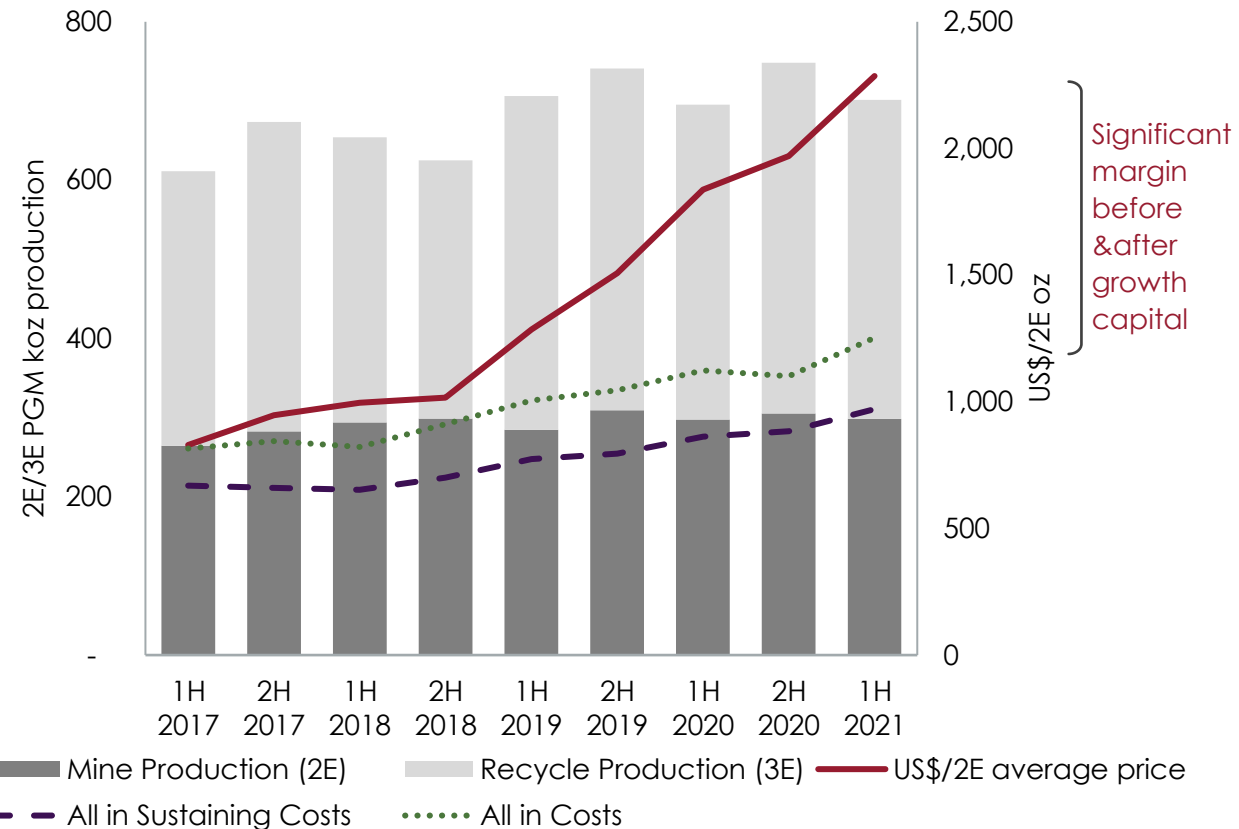
- 2E basket price was approx. US\$700/2E oz, now US\$1,900/2E oz
- Largest primary palladium producing mines globally, with the highest PGM grade in the world
- Supports a sustainable and long-life asset base
- One of the largest PGM recycling businesses in the world
- Stable, accommodating mining jurisdiction

First quartile industry costs by 2025

- US\$770\*/2Eoz AISC by 2025 once Stillwater East (Blitz) is fully ramped up

ESG excellence

- Underpinned by excellent ESG fundamentals - premium pricing for recycled PGMs (3E PGMs)
- Class leading ESG - operating in pristine Montana environment
  - underscored by unique stakeholder participation through Good Neighbour Agreement (GNA)



## Tier 1 asset in Tier 1 jurisdiction

Source: Company filings

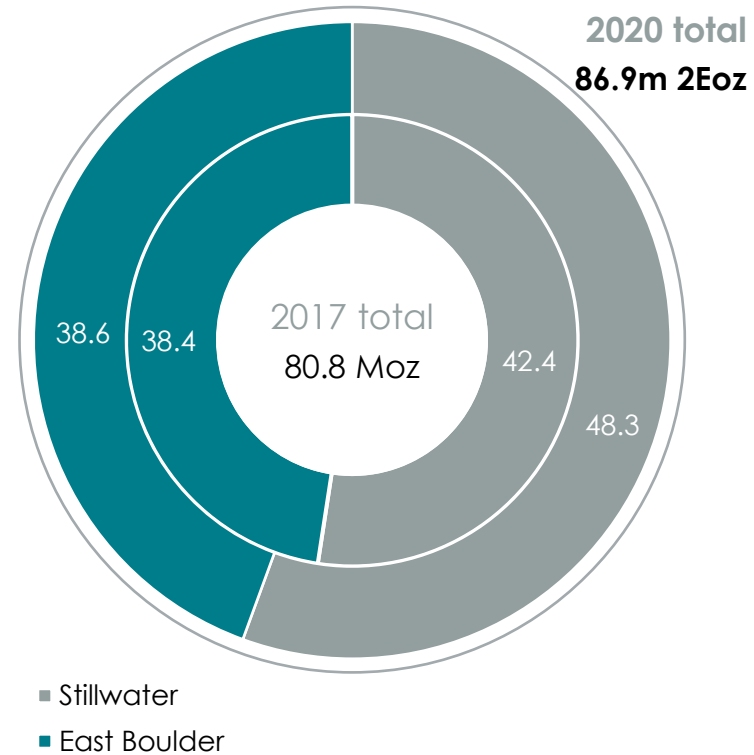
Notes: All-in sustaining cost (AISC) is calculated by including cost of sales before amortisation and depreciation, royalties, community costs, share-based payments, rehabilitation interest and amortisation, ore reserve development, sustaining capital expenditure and less by-product credits

\* Assumes a 2E basket price of US\$1,680/oz and steady state run rate of 850koz (2E)

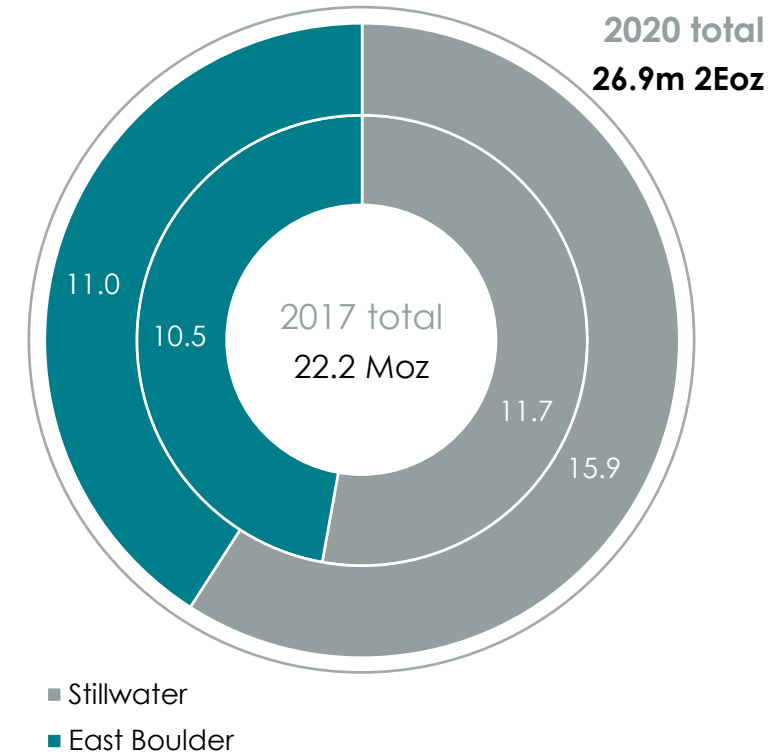
## Long-life, high-grade assets

US PGM OPERATIONS	
Current life of mine (LOM) (at 31 Dec 2020)	
<ul style="list-style-type: none"> <li>• Stillwater West 25 years</li> <li>• Stillwater East (Blitz) 25 years</li> <li>• East Boulder 39 years</li> </ul>	
Prill split	Total
Pt %	22.0
Pd %	78.0
Average reserve grade	
2E g/t	15.1

2E PGM Mineral resources (%)



2E PGM Mineral Reserves (%)



### Mineral Reserves and Resources increased despite ongoing depletion

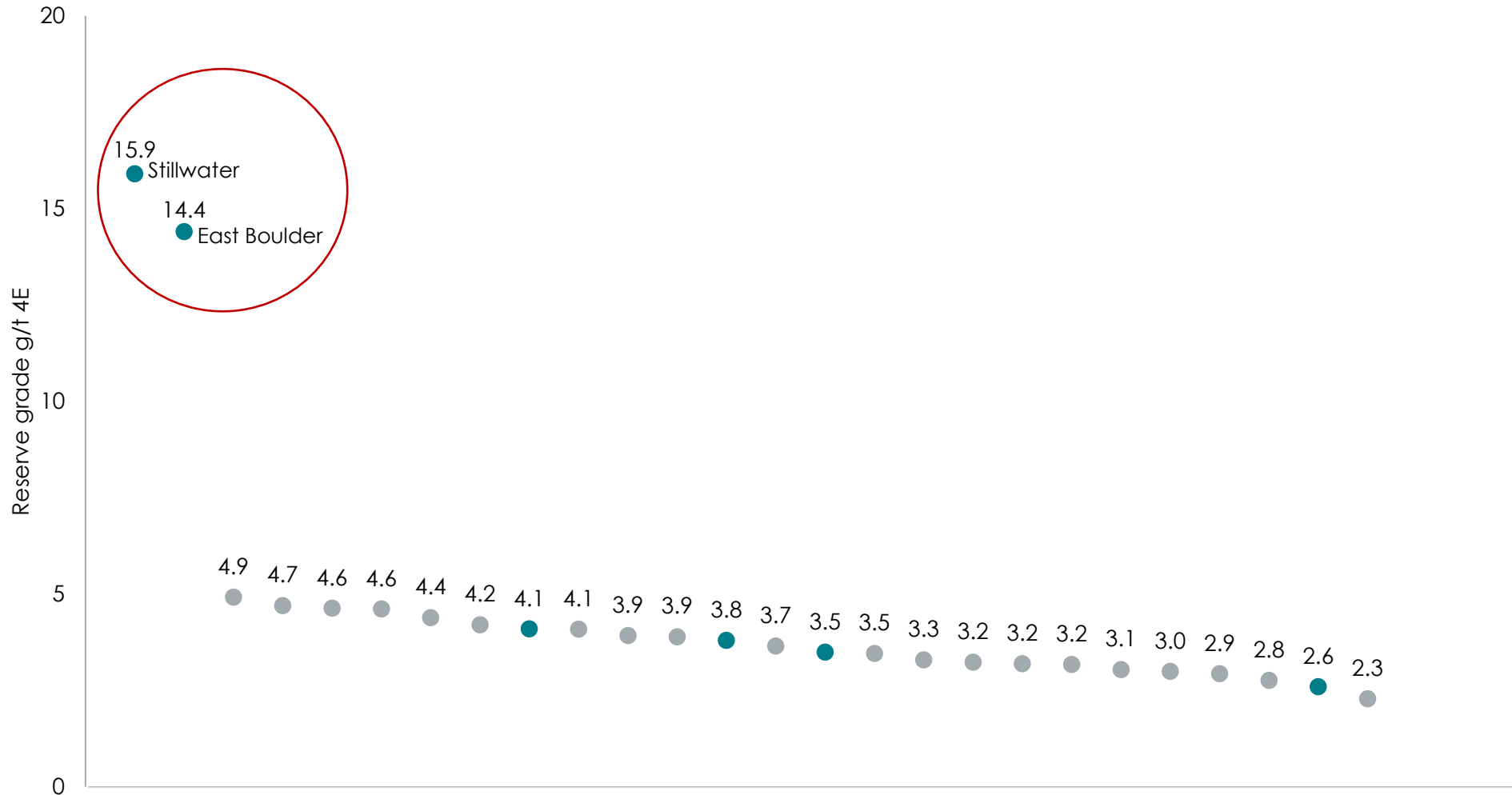
- Resources are inclusive of reserves
- Represents attributable figures from Stillwater and East Boulder

**Note:** Mineral resources and reserves are upgraded annually using drilling results obtained from underground drilling platforms established concurrent with underground development activities. The ore body characteristics and surface topography makes conventional surface drilling campaigns prohibitively expensive and ineffective



# Our US PGM operations are by far the highest grade in the industry

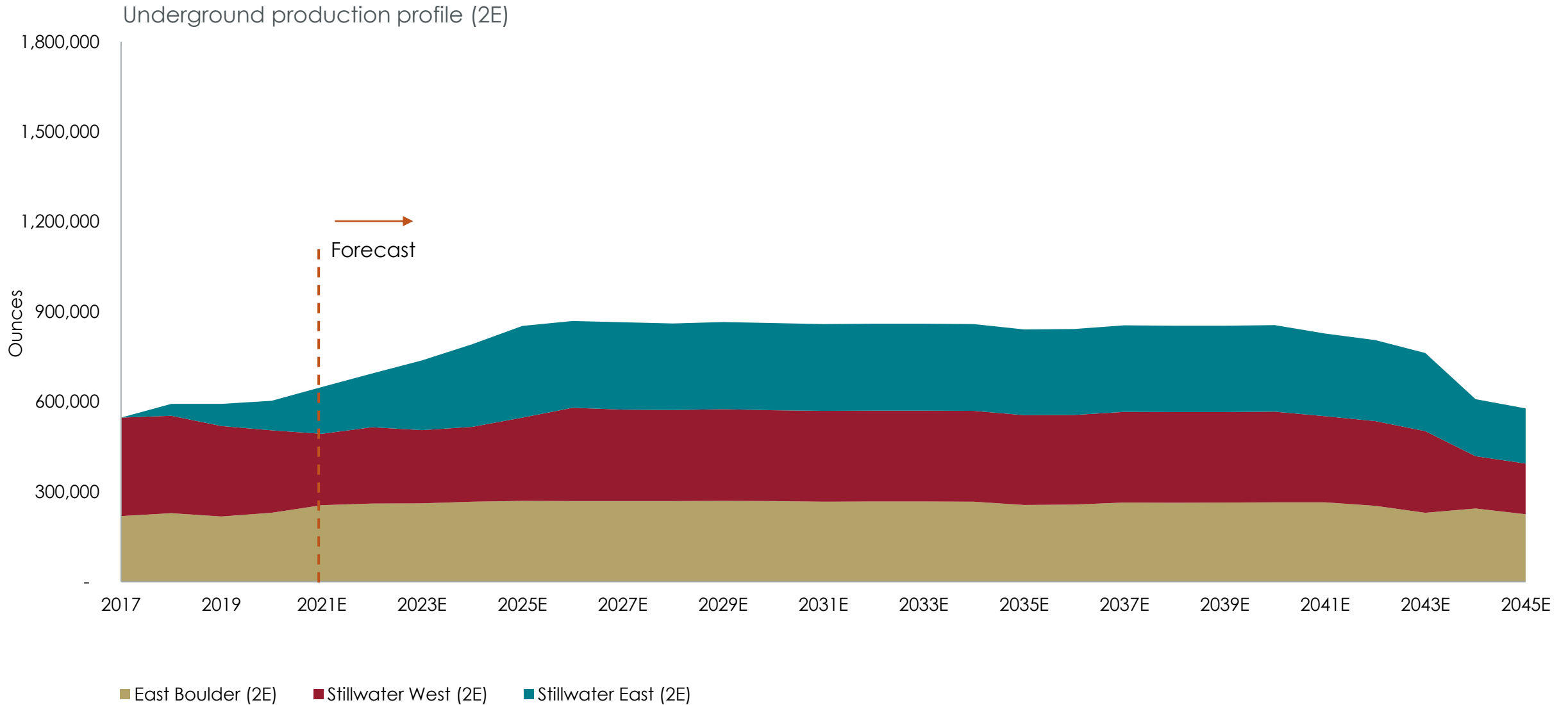
PGM assets by Reserve grade (based on published reserves)



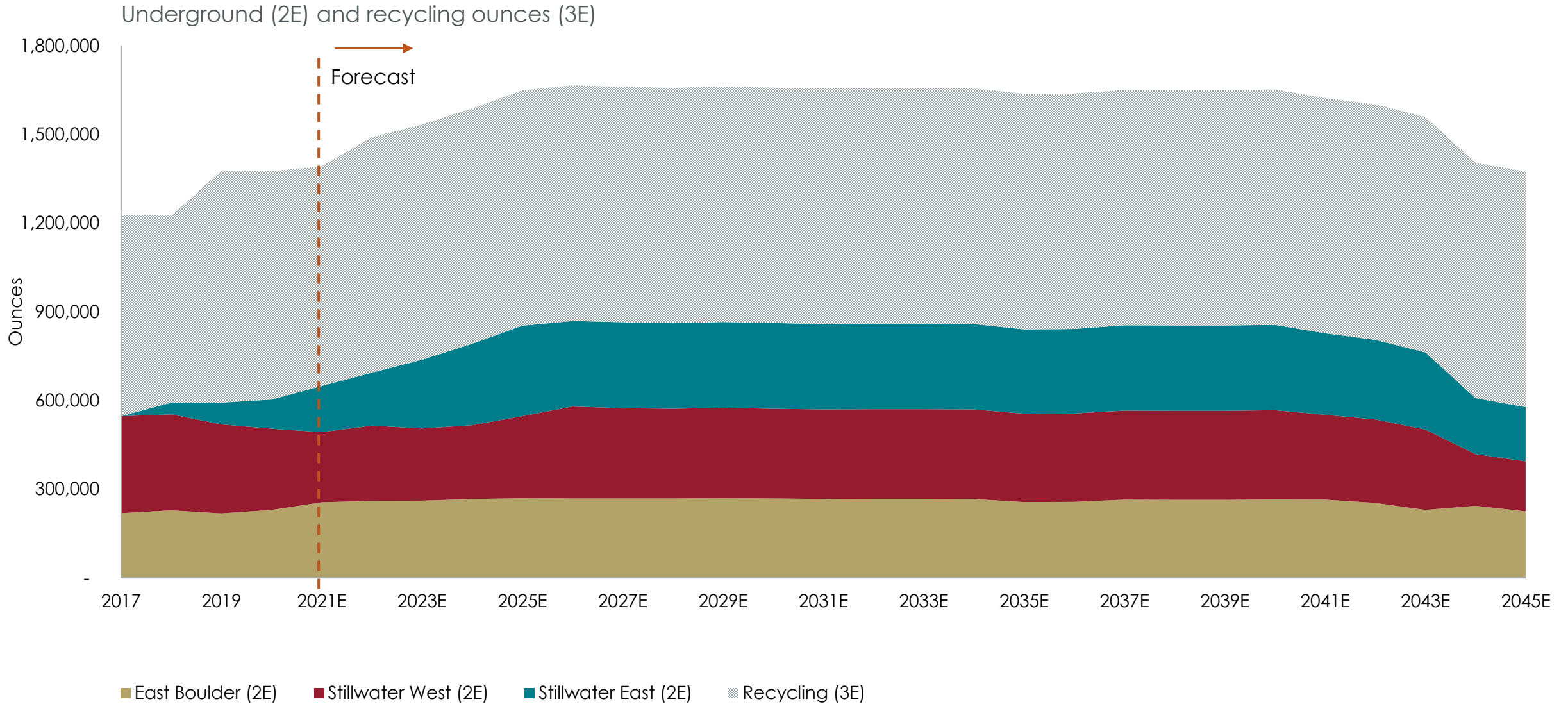
- Stillwater Mine
- East Boulder
- Norlisk
- Zondereinde
- Styldrift
- Tumela
- Platreef
- Modikwa
- Marikana
- Marula
- Bafokeng Rasimone
- Dishaba
- Rustenburg
- Impala lease
- Mimosa
- Mototolo
- Unki
- Waterberg
- Booyesdal S
- Zimplats
- Eland
- Booyesdal N
- Mogolakwena
- Two Rivers
- Kroondal
- Lac des Iles



## Underground mined life of mine profile - long life assets with near term growth

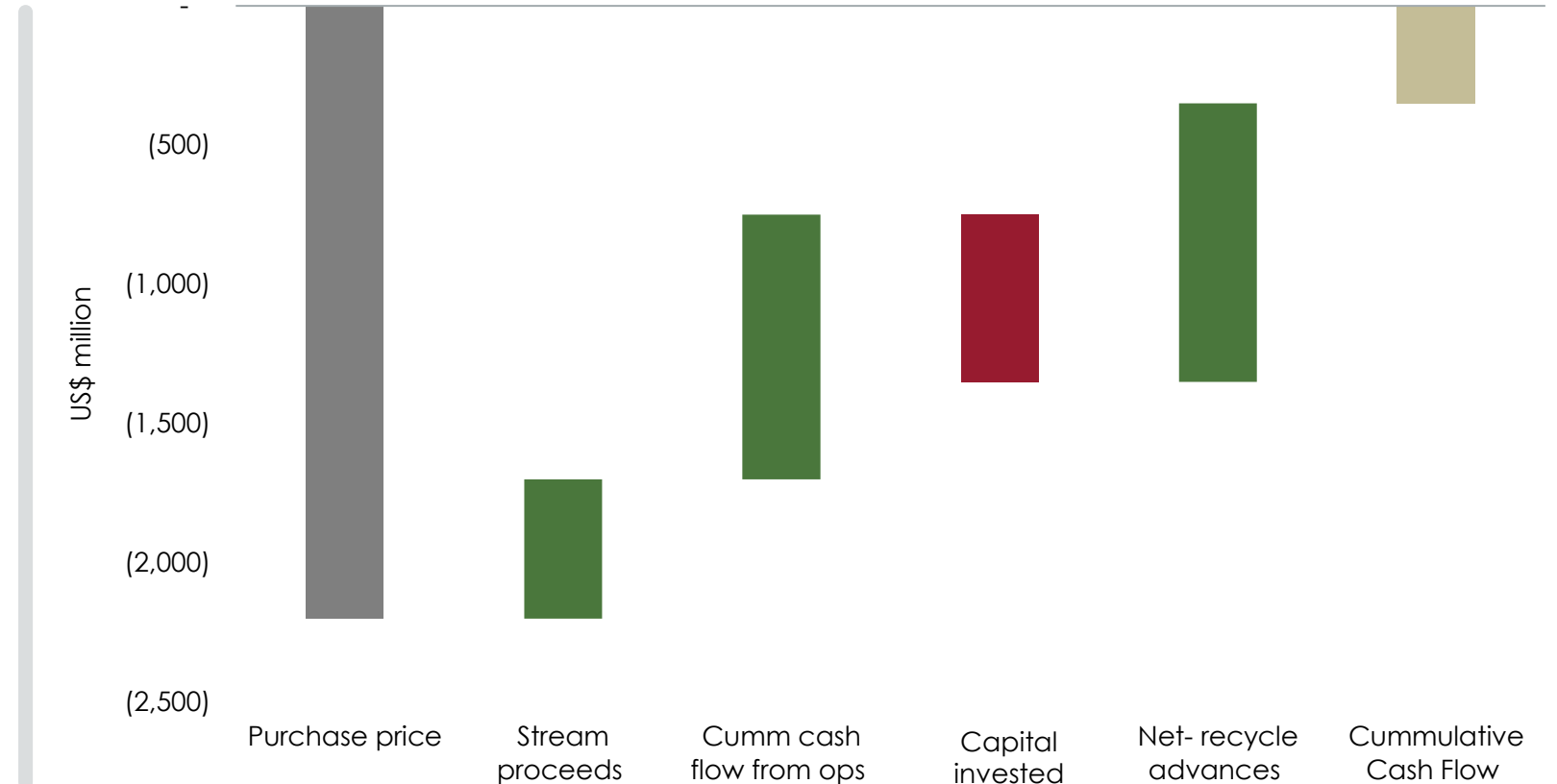


# US PGM life of mine profile including recycling- a significant producer of refined PGMs



## Investment paid back in 5 years – significant future upside

- Purchase price of US\$2.2bn in May 2017, funded by debt and rights offer
- Palladium and gold stream with Wheaton raised US\$500m
- US\$950m in cumulative cash flow from operations since acquisition
- US\$600m combined capital investment from May 2017
- Outstanding recycle advances of US\$820m at H1 2021 to be outturned in the short term and ordinary course of business
- Net US\$350m still to be recouped
- At spot PGM prices and EBITDA generation, the Stillwater acquisition should be fully recouped by Q4 2022



Note: Based on US\$1,680/oz (2E) basket price and AISC of US\$920/oz (2E)  
 The graph is a proxy for free cash flow since acquisition, with the addition of recycling advances and the stream proceeds

# US PGM operations - overview

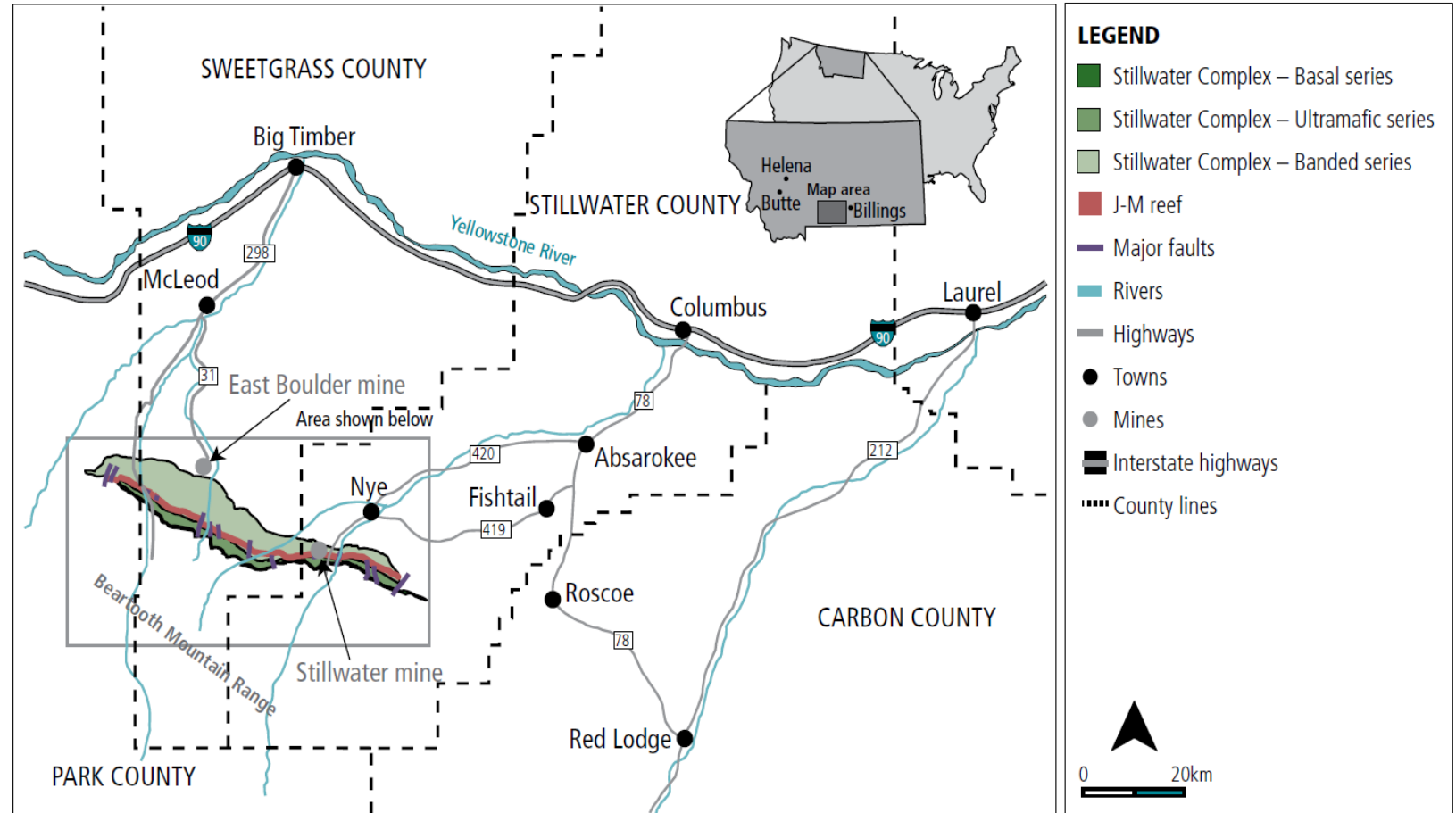
Wayne Robinson, EVP US PGM operations





# Overview of the US PGM operations

- Tier 1, long life PGM operations located in Montana, US
- Stillwater and East Boulder underground mines have been in production since 1986 and 2002 respectively
  - Stillwater East (Blitz) expansion project started in 2016
    - › increasing base 2E PGM production by c.50% to c. 850k 2Eoz pa by 2025
  - Additional growth potential from lower East Boulder and lower Stillwater East projects
- World class metallurgical complex located in Columbus MO, 69km from the Stillwater mine
- Leading global PGM auto catalyst recycling business
  - One of the largest in the world
    - › 3E PGM production of 850k 3Eoz pa – doubling 2025 underground production
    - › Low risk, steady margin, high return business
  - Low environmental footprint/impact operations delivering significant ESG benefit



High grade, low costs operations with downstream smelting, refining and the largest recycling business in a stable jurisdiction

## Experienced US PGM management team



**Wayne Robinson**  
EVP:  
US PGM operations



**Dee Bray**  
VP:  
Safety & Health



**Ryan Morris**  
VP:  
Human Resources



**Heather McDowell**  
VP:  
Legal Environmental  
& Government affairs



**Corne Strydom**  
SVP:  
Technical



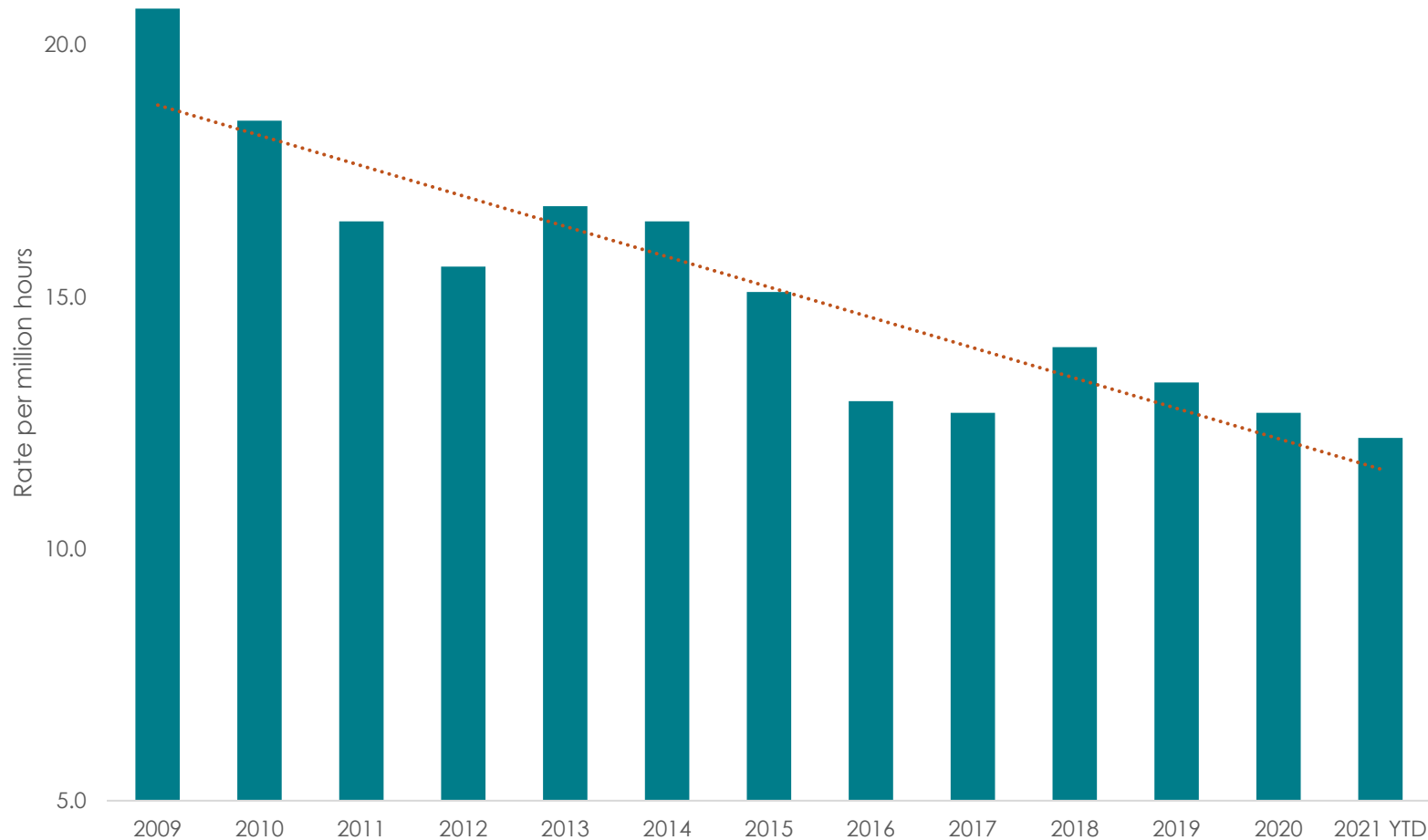
**Justin Froneman**  
SVP:  
Finance



**Ken Kluksdahl**  
SVP:  
Operations

# Safety performance

The total recordable injury frequency rate (TRIFR)



A proactive approach to safety driven by empowered people, an enabled environment and fit for purpose systems

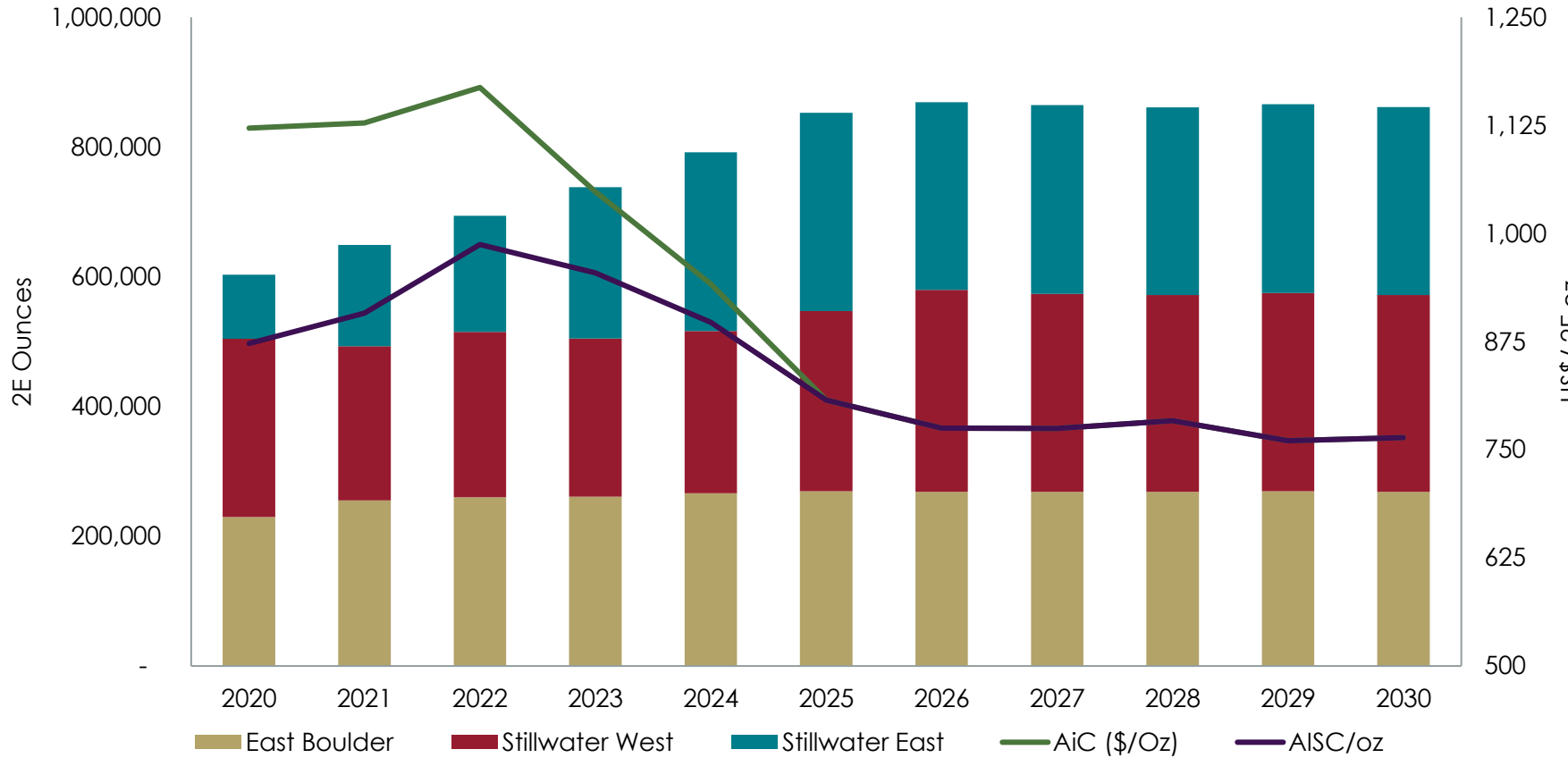
- After a decade of fatality free mining, suffered two fatalities in June 2021
- Operations halted for 10 days followed by gradual start-up of stoping under constrained rail working practices
  - Various interventions including best in class collision avoidance technology being evaluated

Additional safety considerations include

- Enhancements to the CMAC drill platform -
- Enhancing geological domain mapping (Maptek domain MCF) - AI interpretation of drill hole data leading to improved planning
- Utilisation of Pinsar air monitors for real-time monitoring of Diesel particulate matter (DPM) levels
- Ongoing development of battery operated 2-yard muckers to eliminate DPM

\*Sibanye-Stillwater acquired the US operations in May 2017 while previous years are only included for comparative purposes as it represents safety statistics under Stillwater Mining Company

# US PGM operations – 10 year production and AISC forecast



Buildup in 2E PGM underground mine production from 630k 2Eoz per annum(pa) in FY21 to 850koz pa by FY25

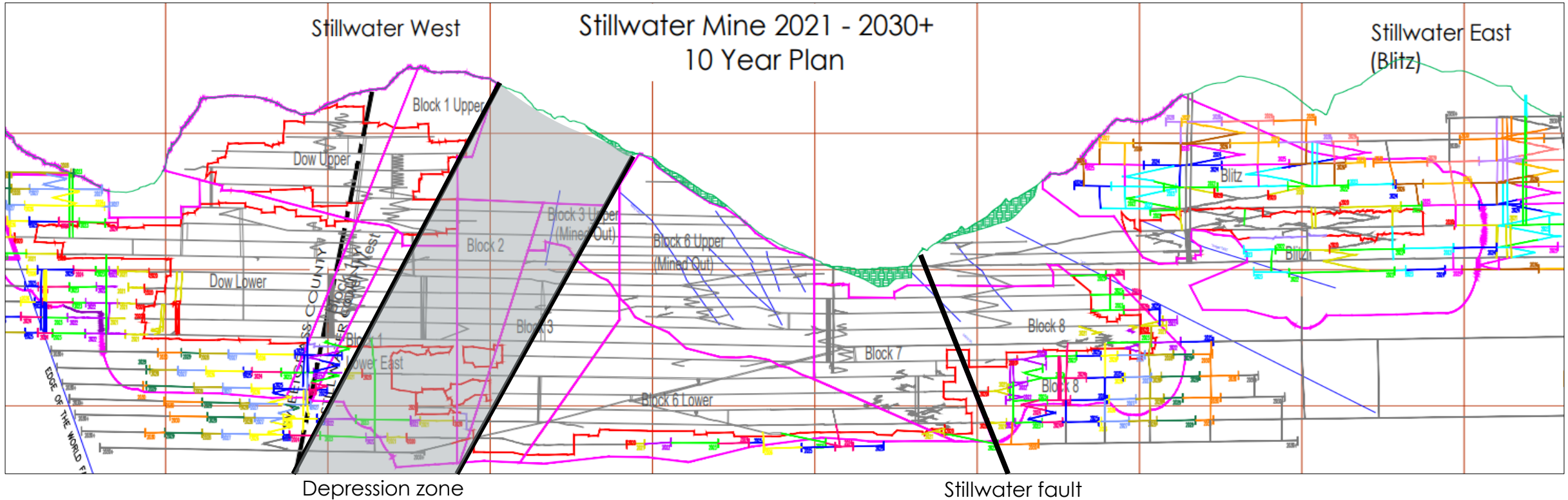
- East Boulder c.250k 2Eoz pa from 2021
- Stillwater West c.300k 2Eoz pa from FY23
  - Short term production and flexibility affected by safety incident
- Stillwater East steady state of 300k 2Eoz pa from FY25 onwards
- Stillwater East project capital forecast at US\$375m over next 3 years
  - AISC & AIC to converge to c. US\$770/2Eoz from 2025

## Increasing production with unit cost reducing as volumes increase

Note:

- Costs are represented in 2021 real terms
- PGM 2E basket price of US\$1,680/2E Ounce
- AISC: All-in sustaining cost; AIC: All-in cost





## Historic approach

- Production from Stillwater West stochastic in nature given historical approach to mining and ORD
- Mining fronts at Stillwater West reducing as depression zone and Stillwater fault intersected
- Exacerbated by impact of safety incident and subsequent revised rail standard operating procedures

## Present and future approach

- Increase in development capital investment - greater flexibility and more predictable and sustainable grade management
- Focus on re-establishing mining fronts beyond Depression zone and Stillwater fault – expected by 2024

## Stillwater East (Blitz)

Revised Stillwater East project plan (2020) on track. Reviewed due to flooding of Benbow decline in 2018, challenging ground conditions in 2019 and COVID-19 restrictions

- Annualised production run rate of 300k 2Eoz by end 2024

Project enhancements from the rebasing study included

- Increased orebody development
- Underground equipment
- Underground infrastructure
- Surface and concentrator upgrades
- Smelter upgrades

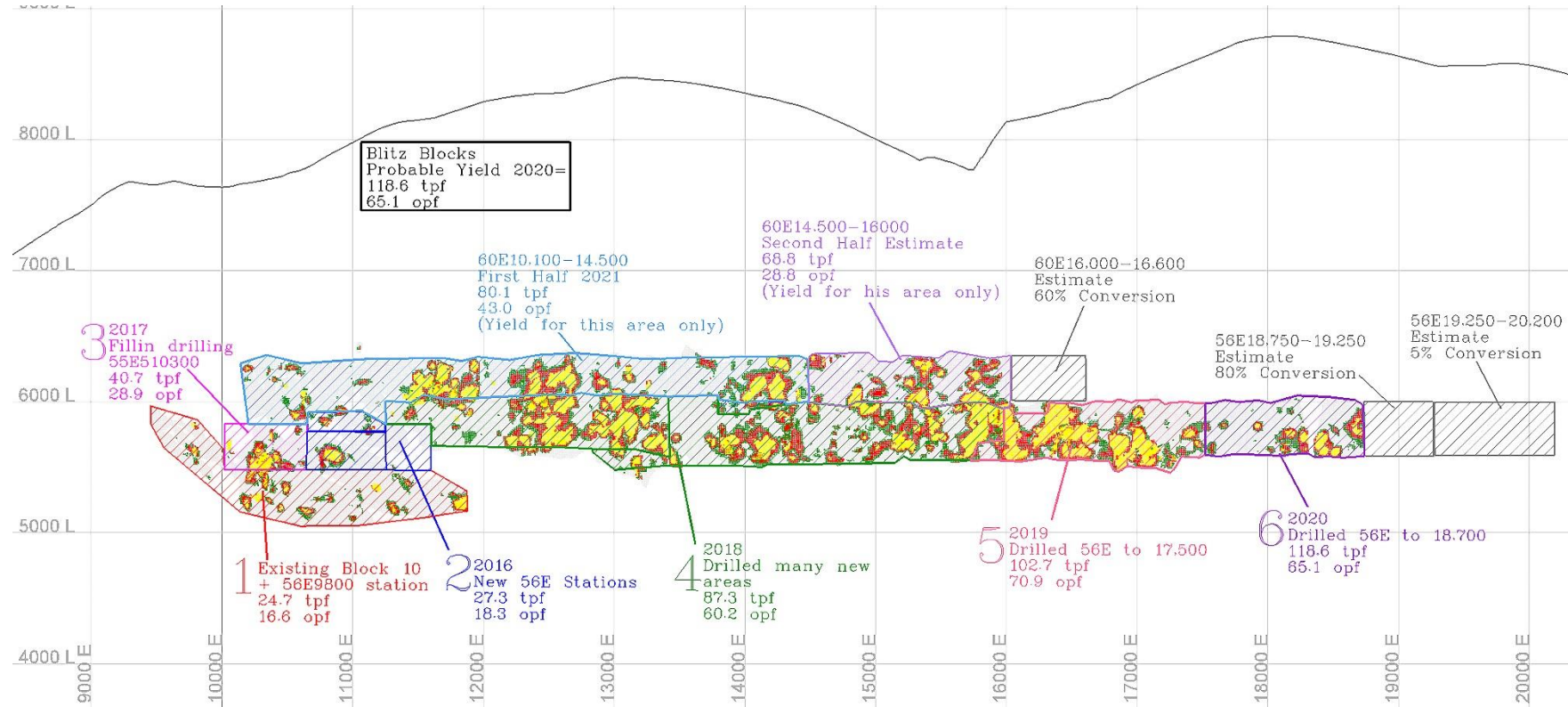
Short interval project management controls until completion

- Major project milestones for 2021 include
  - Benbow Decline to 5,600 level – completed
  - Planned completion of 24,000E raise to connect 5,600 and 5,000 levels to enhance project ventilation.
  - Initiation of 52E and 64E level ore reserve development



Stillwater East progress continues to add value with increasing production in line with 2020 rebased plan

# Stillwater East is delivering on revised 2020 plan

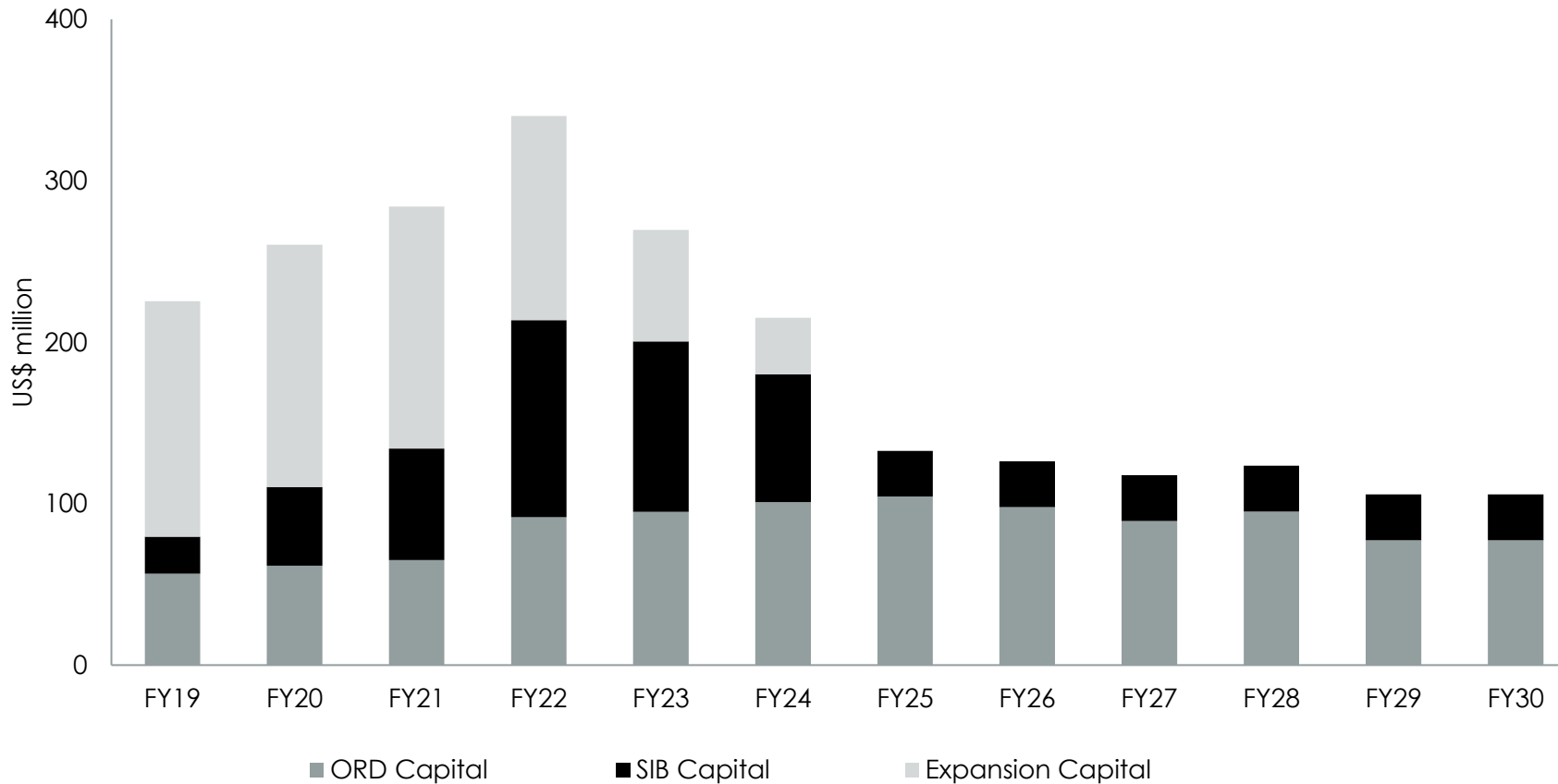


Area	Ore tons per foot yield	Ounce per foot yield	Grade(oz/t)	Grade(g/t)
Stillwater East (Blitz) yield	118.6	65.1	0.55	18.86
Stillwater East rebase study yield	90.9	45.5	0.50	17.14
Stillwater West yield	91.0	41.2	0.45	15.43

- Stillwater East remains world class with exceptional grade and ore quality
- Delivering on rebased 2020 schedule - operational challenges resolved
- Accelerated drill & drive strategy to improve orebody definition and bring orebody potential to account
- Orebody characteristics support more mechanised mining methods
  - Highly mechanised transverse stoping
- 300k 2Eoz pa run rate with AISC of c. US\$770/2Eoz by end 2024

High grade and ore width

## Forecast capital expenditure (US\$m) – including Stillwater East expansion



- Project capital of US\$375m to end 2024
- Increase in LOM development in order to ensure sufficient mining flexibility
  - US\$100/2Eoz of development capital spend in FY20, increased to sustained rate of US\$130/2Eoz
- Increased SIB capital of US\$140/2E oz planned until 2024 - support modernization efforts, fleet optimisation, environmental spend

### Long-life assets

Note:  
 Capital expenditure in 2021 real terms  
 ORD: Ore reserve development, SIB: Stay-in-business capital



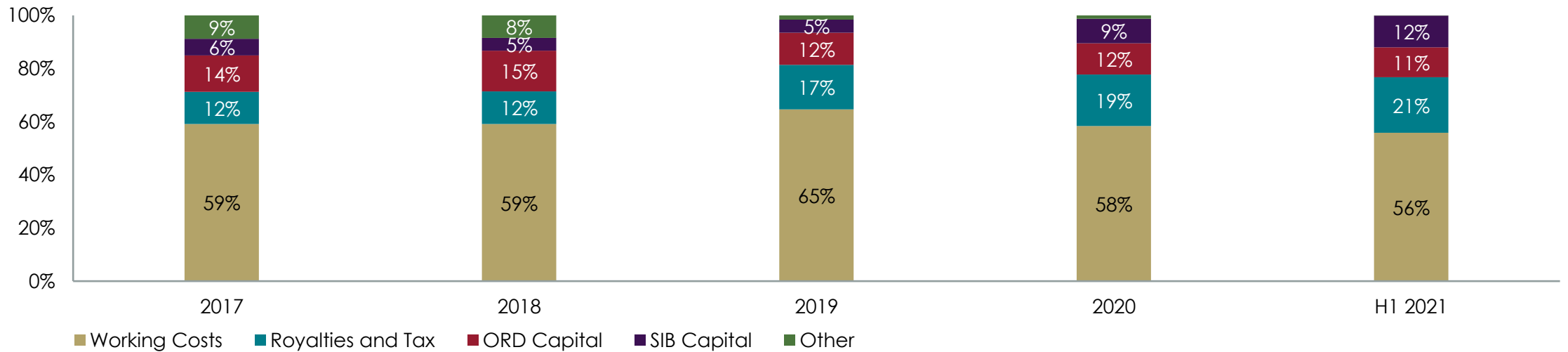
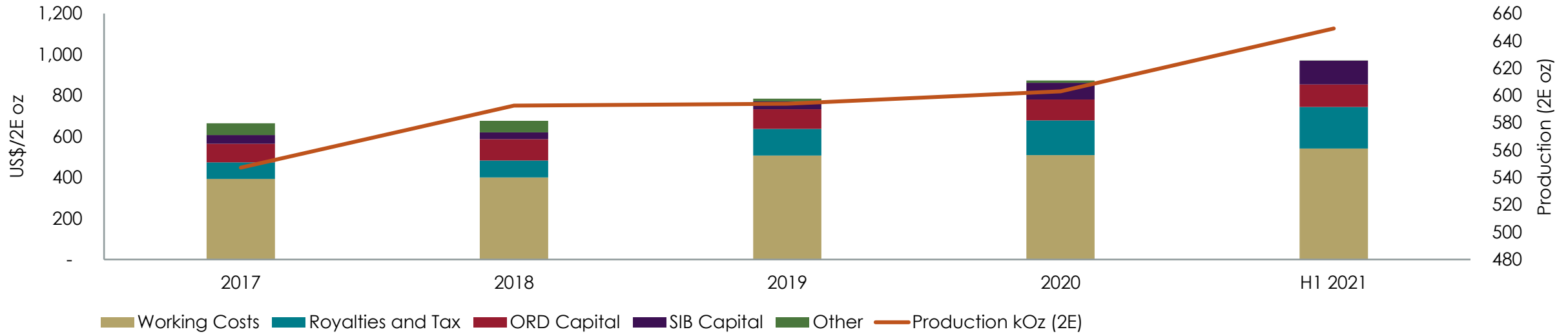
# Financial aspects

Justin Froneman, SVP: Finance

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**Stillwater**

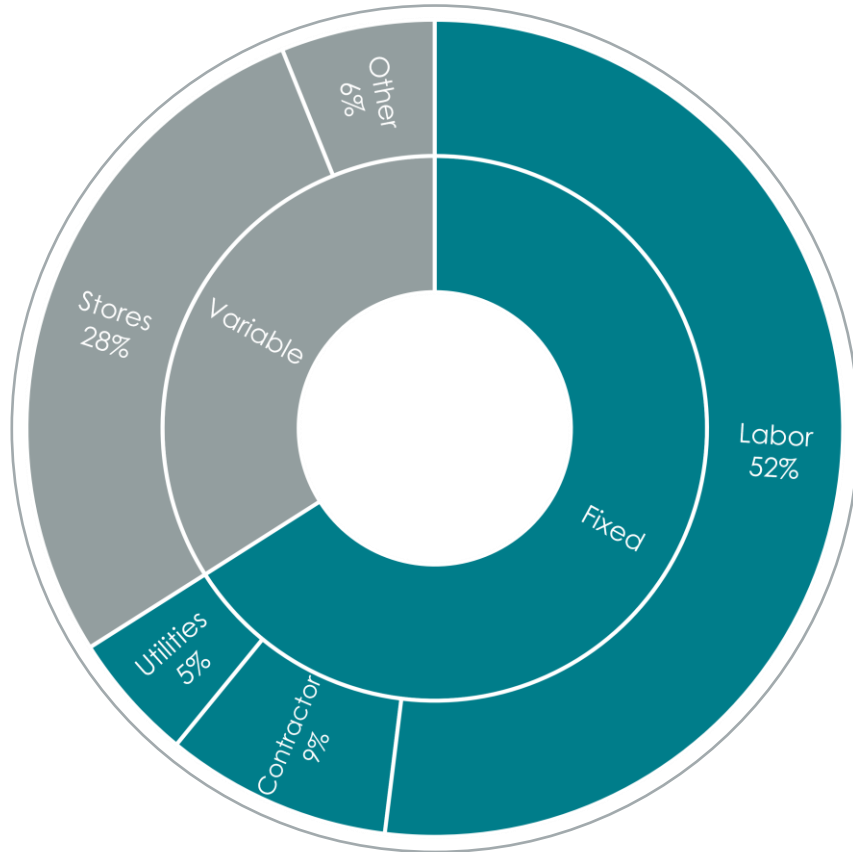


# AISC\* breakdown (US\$/oz 2E)



Note: Excludes recycling  
 ORD: Ore reserve development, SIB: Stay-in-business capital

## Operating cost breakdown\*



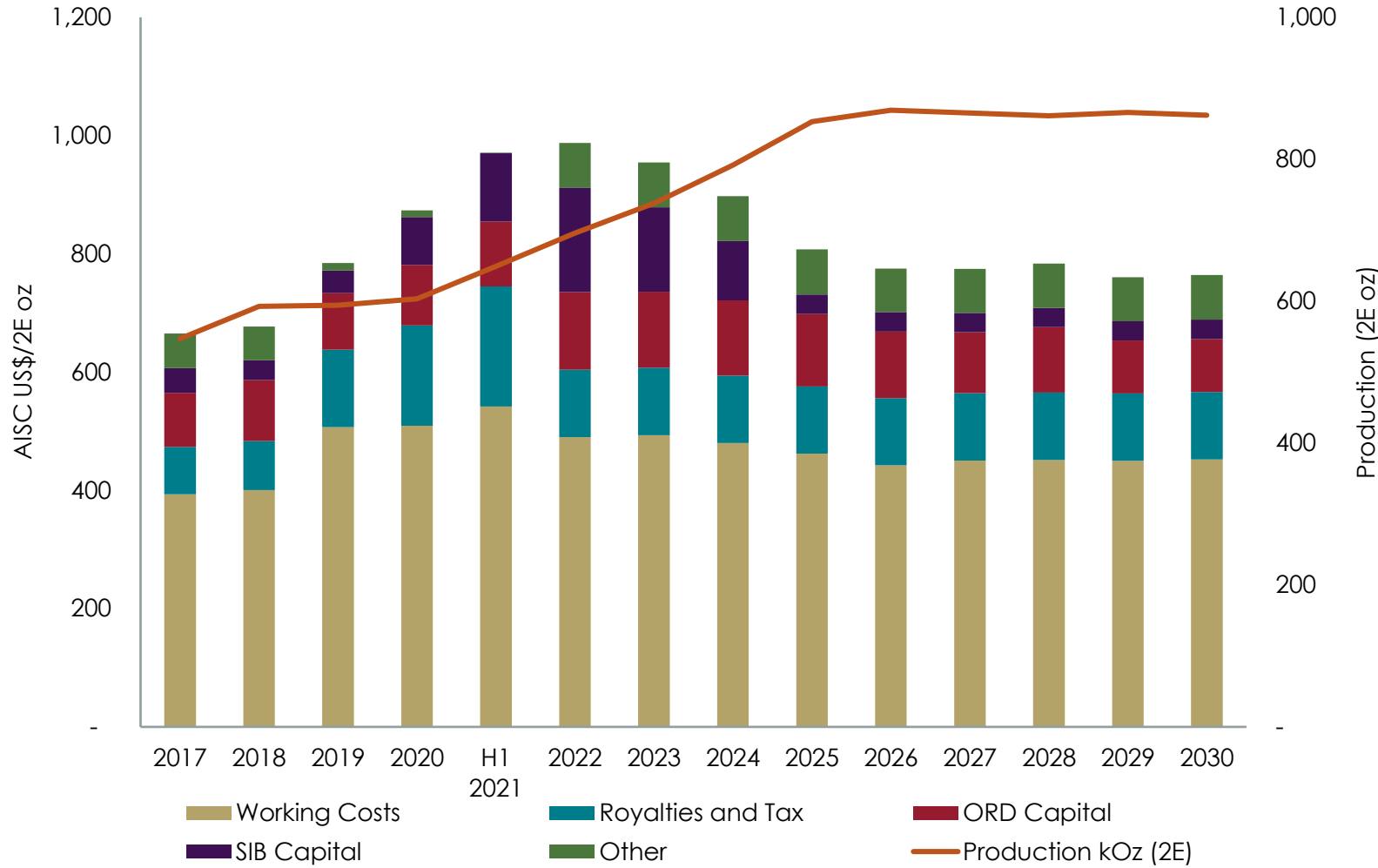
### Fixed cost (66% of total working cost)

- Payroll costs – Guaranteed wages and benefits
- Contractor costs – utilized for production and development efforts
- Utilities – Electricity requirements for ventilation, water management, hoisting, and processing

### Variable cost (34% of total working cost)

- Stores – Mine materials, supplies, maintenance parts and consumables
- Other – Employee transportation, on-boarding of new employees, training, etc

# AISC breakdown (US\$/oz 2E)



- AISC to stabilise at c. US\$770/2Eoz (real, 2021 terms) from end 2024 onwards
- Development capex revised to US\$130/2Eoz to support forecast production profile
  - Up from US\$100/2Eoz historically
- Ongoing SIB spend (non-dev capital) estimated at US\$140/2Eoz
  - Primarily fleet optimisation, modernisation and environmental sustainability
- Increased taxes and royalties due to higher US\$ 2E PGM prices
  - c. US\$8/2Eoz change in AISC/oz for every US\$100/2Eoz change in the basket price
  - Projected effective cash tax rate of 15%, dependent upon Federal government changes

Note:

- Outyear costs are represented in 2021 real terms
- PGM 2E basket price of US\$1,680/2E oz FY22 – FY30
- ORD: Ore reserve development, SIB: Stay-in-business capital



# PGM smelting, refining and recycling operation

Justin Froneman



# Columbus – A world class metallurgical complex

## Smelter

- Two electric furnaces (EF) – provides operational risk mitigation
- Recovery of Cu and Ni by-products provide credits and serve as PGM collectors for smelting catalyst
- 181 tonnes per day (tpd) EF capacity, per furnace
- 90% EF utilisation rates
- Currently 4:1 concentrate to recycle feed ratio
- SO<sub>2</sub> emissions of 4tpa well below emissions limit of 78tpa



## Base metal refinery

- Produces palladium, platinum, rhodium-rich filter cake
- Matte 2,268 tpa
- 99.8% recovery
- 80 hour per week operation, 97% current utilisation



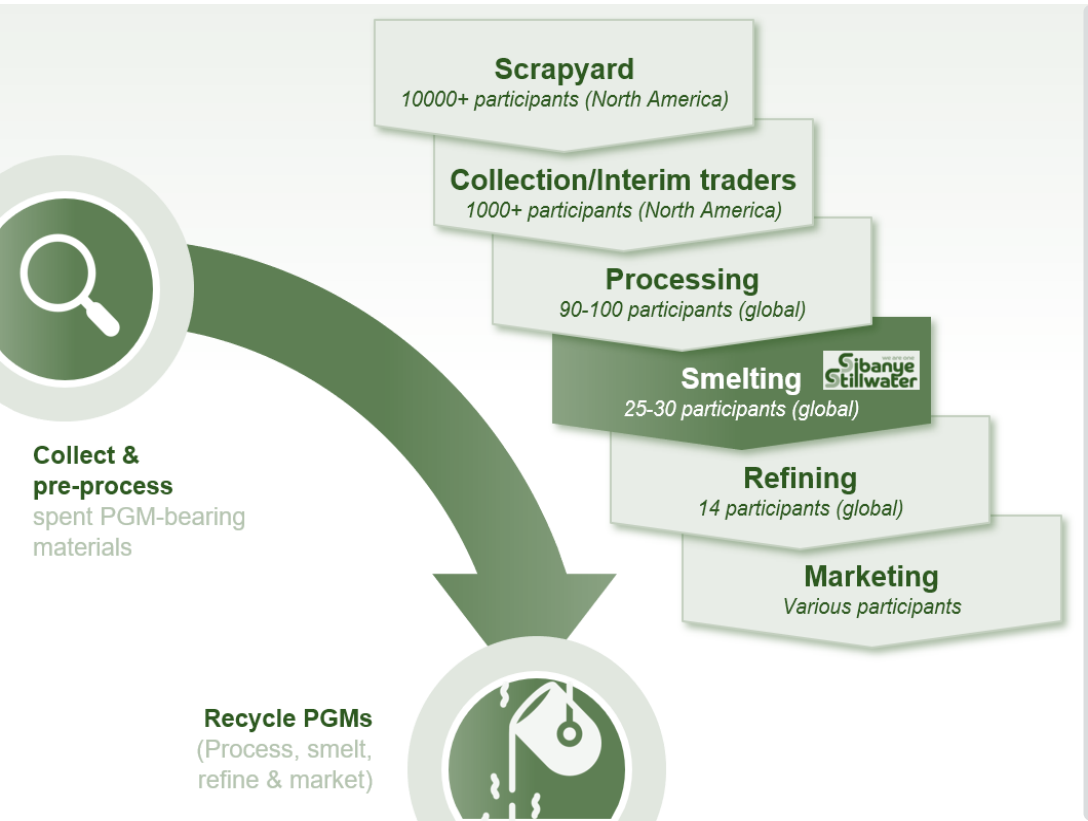
## PGM recycling

- Significant operating and financial leverage with minimal incremental capital
- State-of-the-art facility extracts PGMs from material (purchased or tolled) from third parties





# Recycling's growth and strategic underpin to a circular economy

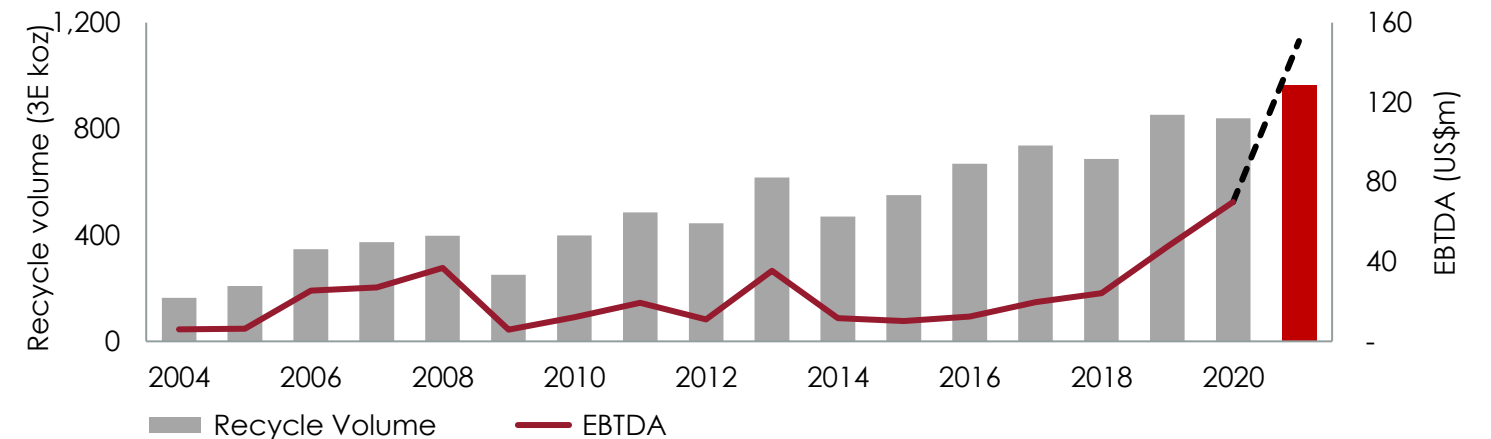
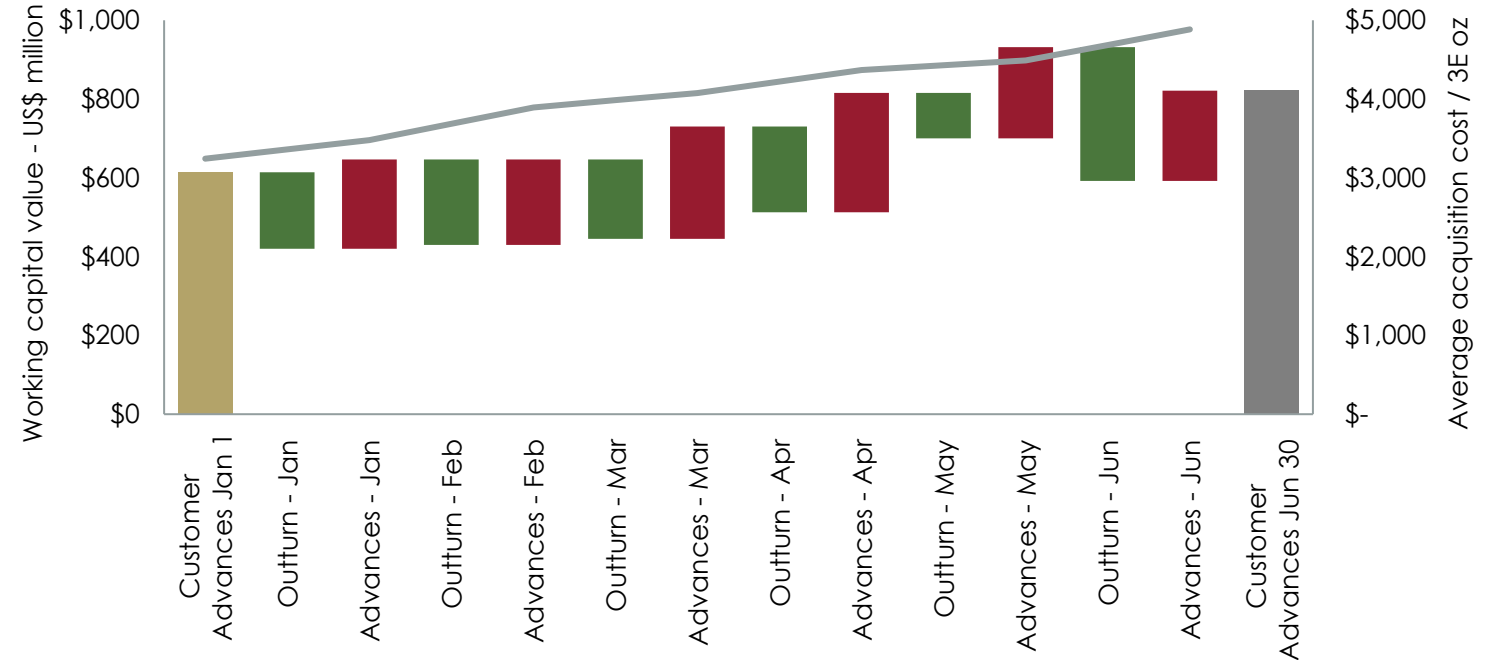


- Class leading, low emission processing operations
- One of the largest global recyclers of PGMs from auto catalysts
  - PGM recycling business has “green” credentials providing access to premium customer pricing and lower yield funding, when required
  - Recycling emits 6x less tonnes of CO<sub>2</sub>
  - 63x less water
  - Generates 90x less waste than underground mines
- Annual production of over 800,000 3Eoz
  - Low risk, steady margin operations (approx. 4% adjusted EBTDA margin)
  - Low financial risk -purchased metal is sold forward at the time of purchase
  - Inventory turnover delivers gross profit of 22% and ROCE of 11%
- At 28t/yr, recycling accounts for c.16% of smelter feed volume
  - Provides volume growth upside of 25% before new smelter capacity is required
- Improved capacity utilization, process enhancements and margin accretion are key focus areas for FY21 and beyond
  - Upstream value opportunities have been identified to address these focus areas

# Low risk, industry leading recycling business



Key Performance Indicators	H1 2020	FY20	H1 2021
Received (tpd)	25	27	25
Fed (tpd)	25	27	25
<b>Total 3E PGM ounces fed (koz)</b>	<b>397</b>	<b>840</b>	<b>403</b>
Inventory (tonnes)	124	358	432
Inventory (koz 3E)	10	26	26
<b>Gross profit (US\$m) (ex-interest income)</b>	<b>27</b>	<b>53</b>	<b>50</b>
Gross Profit Margin (ex-interest)	3%	4%	4%
<b>Net Income (US\$m)</b>	<b>34</b>	<b>70</b>	<b>65</b>
Interest income (US\$m) (inc in net income)	8	17	15
Interest expense (US\$m) (inc in net income)	0	0	0
<b>Bottom-line margin (inc net interest)</b>	<b>4%</b>	<b>5%</b>	<b>5%</b>





# ESG excellence

Heather McDowell, VP: Legal Environmental & Government Affairs



## US context —positive economic and social impact built in

### US Operations: Social Activities and Related Expenditure (US\$)

	2020	2019	2018
Community Project (49.5%)	198,050	154,945	162,600
Education ( 14.9%)	59,730	118,380	94,130
Emergency & Rural Healthcare Services (31.2%)	124,720	39,700	44,700
Environmental Stewardship (4.4%)	17,500	27,400	35,500

### Montana's Hard Rock Mining Impact Act:

- Requires large scale mineral developers to prepare an impact plan identifying local government services and facilities needed as a result of development
- Developer must commit to pay all increased local government costs of development
- Impact plan bonded and monitored annually
- Metal mines license and gross proceeds taxes support both the state general fund and local counties
- This regulatory scheme, combined with highly capitalized work and highly compensated jobs creates huge embedded impact
- US PGM Operations contribute \$3 billion in economic output, which is just over 3% of Montana's economy



One of the biggest employers in Montana – creating value for all stakeholders



## Environmental excellence

- Environmental collaboration through the Good Neighbor Agreement
- Utilizing a biological denitrification process to remove +90% of the nitrates in the water
- Consistently discharge less than 30% of permitted nitrogen levels
- 100 mil HDPE linings on new tailings cells, existing and new rock dumps
- Smelter SO<sub>2</sub> emissions consistently less than 5% of operating permit limits
- Nearly 40% of owned land under conservation easements
- Long-term tailings and waste management strategy which includes Global Tailings Standard compliance

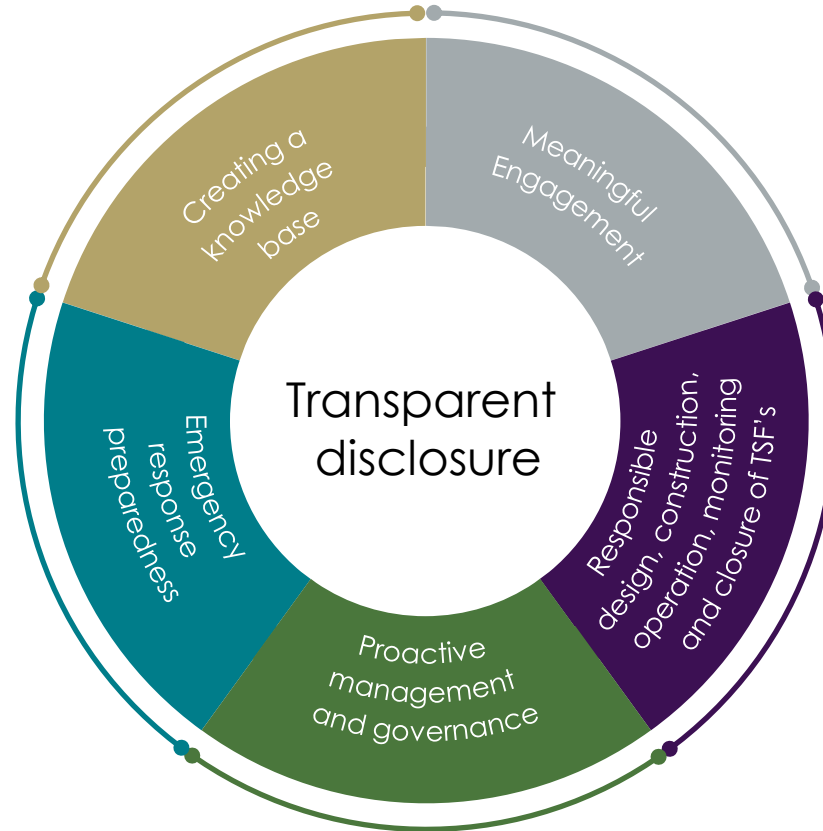


### Limiting our impact on the environment

For more information, please refer to Sibanye-Stillwater's detailed disclosures at [Reports and policies | Sibanye-Stillwater \(sibanyestillwater.com\)](#)

## Safe and transparent tailings management

Our ongoing journey to improve our tailings management



### Changes/expansions for TSFs

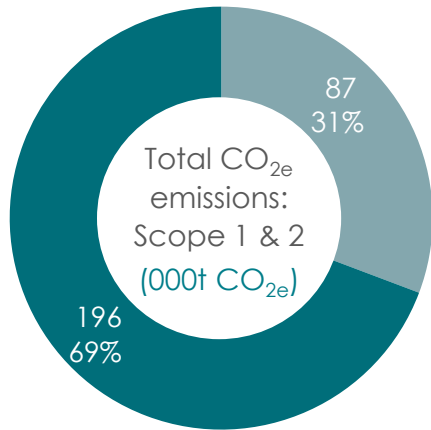
- Montana law requires Independent Review Panel design review
  - Likely only worldwide jurisdiction with this requirement
  - IRP has signed off on Hertzler expansion design and IRP process is underway for East Boulder Lewis Gulch expansion
  - Panel of three international tailings experts reviews and approves tailing design in addition to Engineer of Record review
- Compliance with Global Industry Standard on Tailings Management expected and attainable
- Robust, but collaborative permitting through both US Forest Service and Montana Department of Environmental Quality
- Ongoing community education seminars on tailings facilities in conjunction with local emergency preparedness officials

World-class design to prevent harm at all stages of tailings lifecycle



# US PGM operations' role in the Group journey to carbon neutrality

US PGM operations currently accounts for 4% of Group operational emissions



■ Scope 1   ■ Scope 2

## Our path to Carbon neutral

- World class ESG performance – contributing less than 4% of Group emissions
  - Solar array online serving Metallurgical Complex
- Recycled production emits six times less tons of CO<sub>2</sub> than primary production
- Several initiatives underway to achieve carbon neutrality
- Demand side energy management
- Full energy study underway to inform an updated US PGM demand side energy management strategy

## Strategic energy sourcing

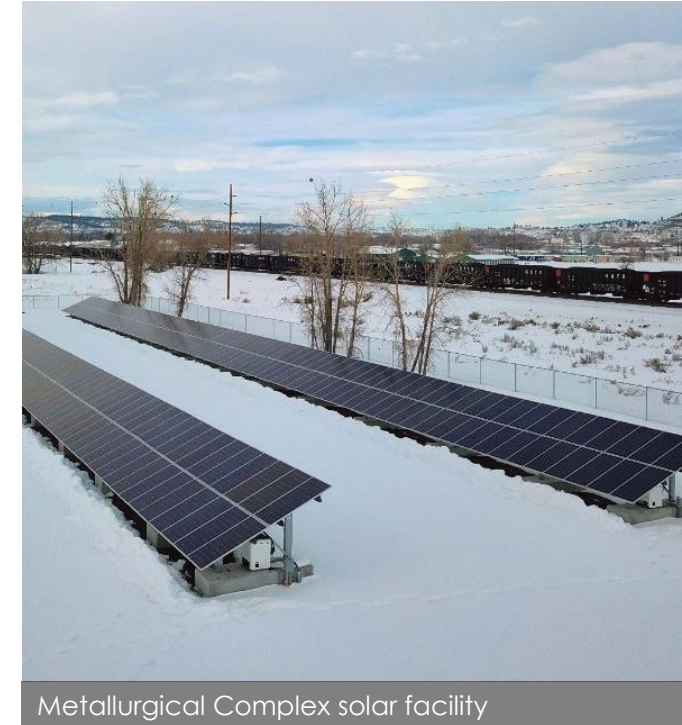
- Biofuels blend used to reduce emissions and diesel particulate matter
- US PGM Metallurgical Complex solar facility in operation – 79 tCO<sub>2</sub>e avoided per year
- Stillwater Mine and Metallurgical Complex are “choice” customers under Montana law
  - Ability to choose electric supplier
  - Currently preparing RFP for next energy supply contract cycle
- Exploring additional opportunities for self-generation

## Technology adoption

- Investigating conversion from diesel to battery electric vehicles to reduce both carbon emissions and diesel particulate matter

## Scope 3 and Carbon offsets

- Exploring nature-based carbon sequestration opportunities through land management and afforestation in Montana
- Investigating purchasing of renewable energy certificates and carbon credits



Metallurgical Complex solar facility

**US PGM operations achieve best in class carbon intensity per ounce production**

# Conclusion

Richard Stewart, Chief Operating Officer



## Key takeaways | US PGM operations

- 
- ✓ Largest primary palladium producer
    - Long life, high grade, growth asset in a stable jurisdiction
    - Significant optionality not incorporated in declared R&R

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  - ✓ Rapid payback
    - US\$2.2bn acquisition cost has largely been paid back in under 5 years
    - Significant future delivery of value over >30-year LOM

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  - ✓ Appropriate capital investment
    - Capital invested ensures sustainability and cost competitiveness

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  - ✓ Leading industry cost position
    - Unit costs (AIC and AISC) to converge to lowest quartile industry position from 2025

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  - ✓ Recycling – producing green metals
    - Recycling to deliver > US\$100m bottom line profit in FY21, with further growth over the medium-term
    - Minimal operating footprint underpins ESG credentials

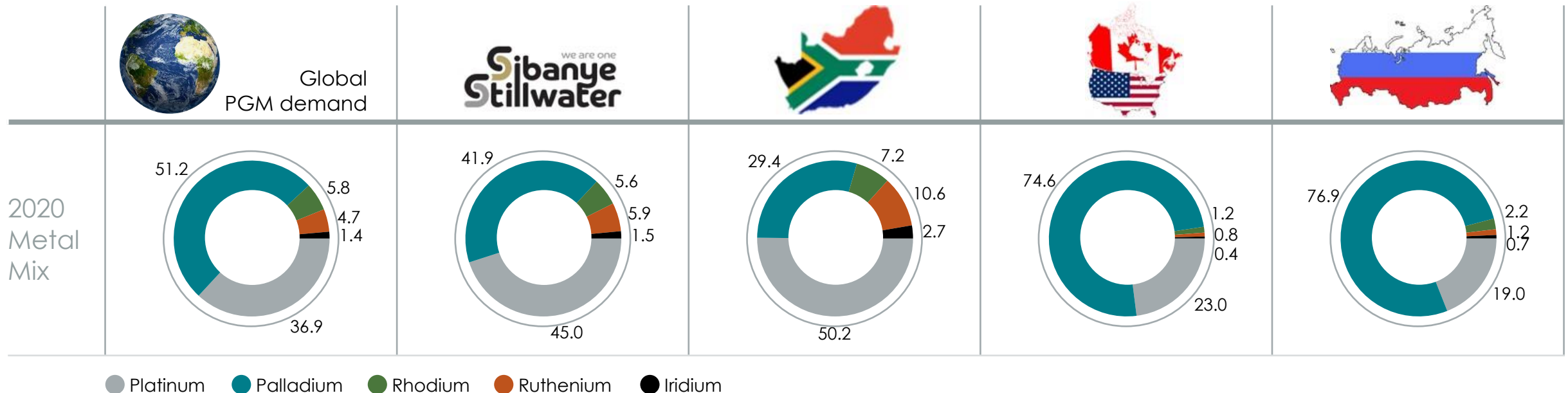
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  - ✓ Benchmark ESG credentials
    - World class ESG track record and unique GNA provides a benchmark for the Group

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# The business we have built...

- Integrated 4 companies into a **world class PGM business**
- Positioned to deliver into a **market underpinned by solid fundamentals**
- **Long life assets**
  - Brownfield expansions with existing processing capacity
- Competitive position on the **cost curve**
  - Further improvements anticipated as capital spend is completed
- **Unique geographical diversification**
- **Unique mix of Primary and Recycled Production** supporting circular economies and sustainable supply
- **Unique metal split** aligned with Global Demand



Platinum
  Palladium
  Rhodium
  Ruthenium
  Iridium





we are one

# Sibanye Stillwater

US PGM operations Investor day



# Appendices



## Price assumptions on reserves and resources

The Group complies with both the JSE and the US Securities and Exchange Commission (SEC) guidelines on commodity prices used in the estimation of Mineral Reserves at all managed operations and projects. An average exchange rate of R15.00/US\$ (2019: R14.50/US\$) and the commodity prices illustrated below were used in the estimation process:

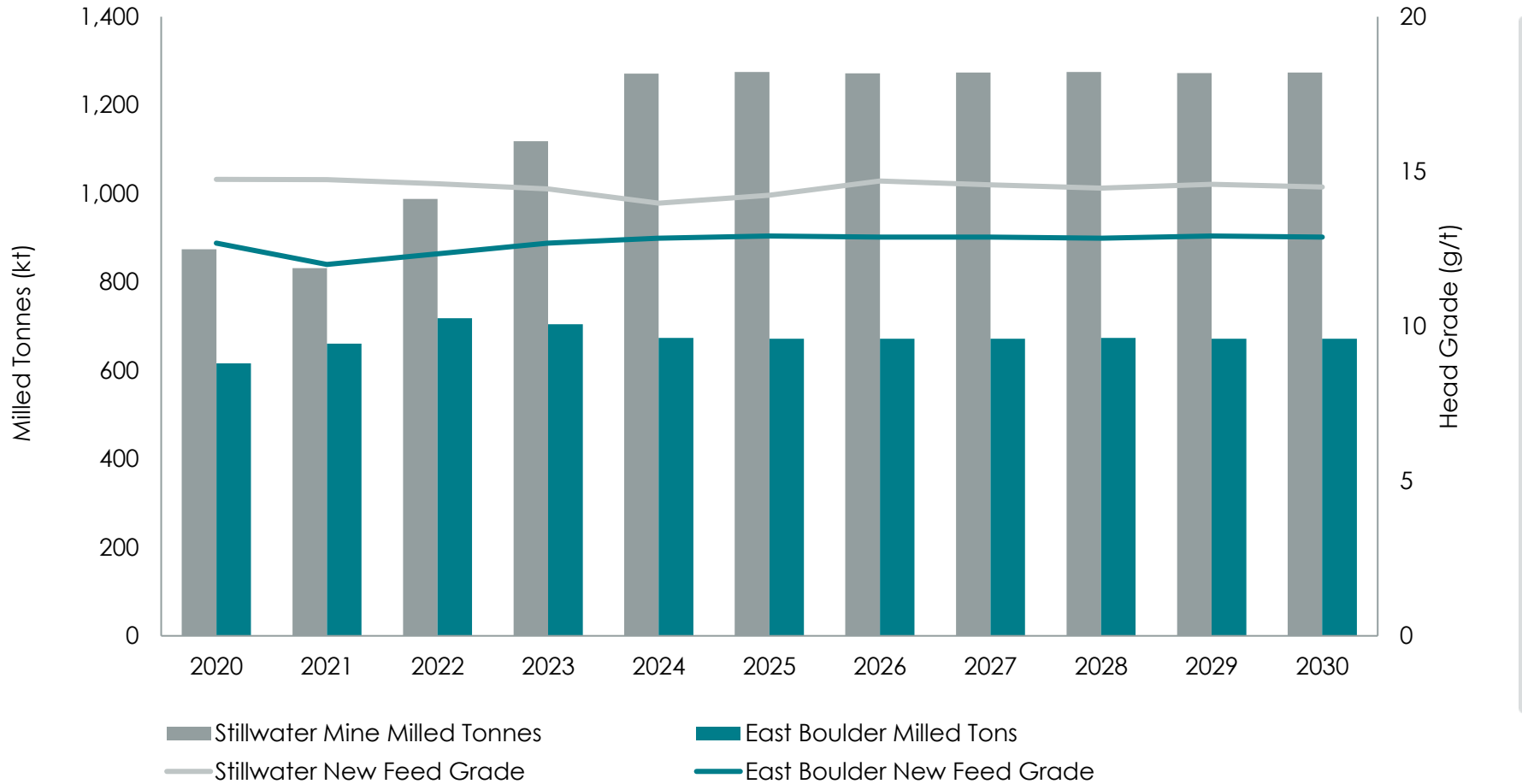
31 December 2020

Precious metals	US\$/oz	R/oz	R/kg
Gold	1,500	22,500	720,000
Platinum	880	13,200	424,389
Palladium	1,600	24,000	771,617
Rhodium	5,650	84,750	2,724,772
Iridium	1,450	21,750	699,278
Ruthenium	260	3,900	125,388
Base metals	US\$/lb	US\$/tonne	R/tonne
Nickel	5.90	13,000	195,000
Copper	2.72	6,000	90,000
Cobalt	15.00	33,069	496,040
Uranium oxide (U <sub>3</sub> O <sub>8</sub> ) <sup>1</sup>	32.00	70,548	960,000
Chromium oxide (Cr <sub>2</sub> O <sub>3</sub> ) <sup>2 3</sup>	0.07	160	2,400

1,2. Long term contract price

3. 42% concentrate

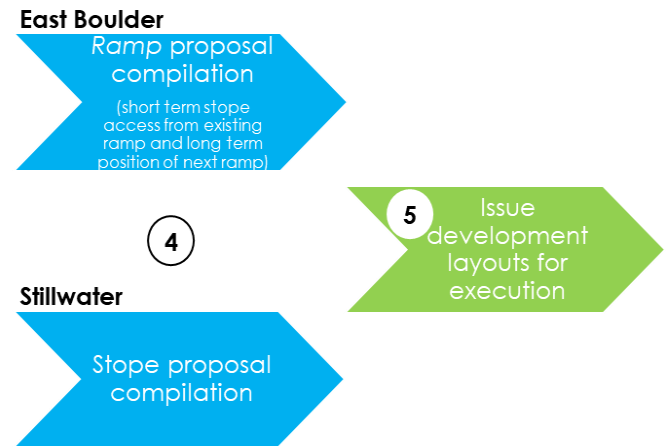
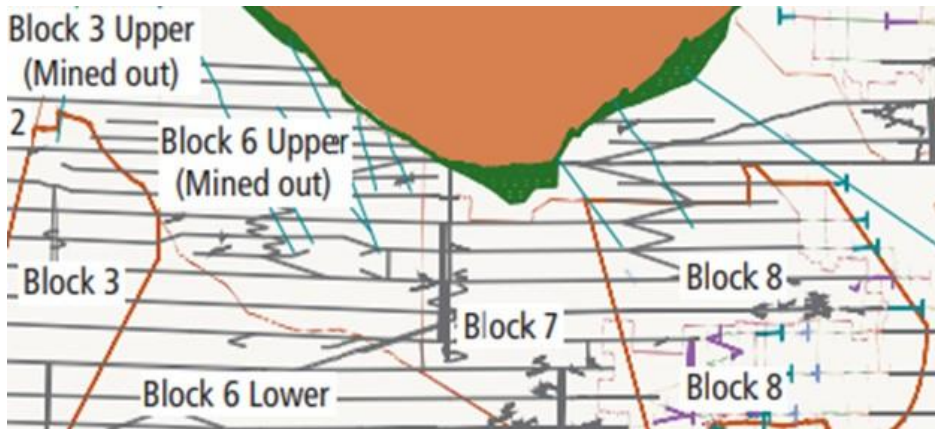
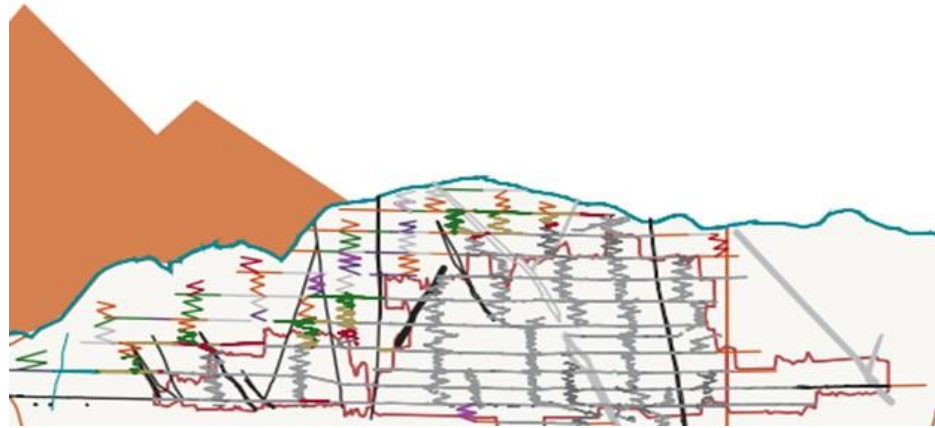
# Planned underground tonnes milled and grade



- Highest grade PGM operations globally
- (Reserves 58.2million tonnes at average LOM grade of 14.4g/t)



# Montana operations mineable ore reserve conversion process flow



- Surface topography and conservation easements make conventional surface geological drilling impractical
- Grade and structural definition of the orebody is largely informed by underground drilling using development headings as drilling platforms
- East boulder layout centered around ramp systems and LOM infrastructure
- Stillwater layout informed by localized orebody characteristics allowing more massive mining strategies like Transverse stoping

- East Boulder lower grade but more homogeneous - Stillwater higher grade but less homogeneous

## Wheaton streaming arrangement

<b>Streaming arrangement<sup>4</sup></b>	<ul style="list-style-type: none"> <li>• Sibanye-Stillwater entered into a streaming arrangement with Wheaton Precious Metals International (Wheaton International), a subsidiary of Wheaton Precious Metals™ Corp. Wheaton International will:             <ul style="list-style-type: none"> <li>- Advance a US\$500 million upfront cash payment (Advance Amount) to Sibanye-Stillwater</li> <li>- for every ounce of metal delivered until the US\$500m Advance Amount is repaid, pay Sibanye-Stillwater 18% of the spot price, thereafter 22% of the spot price<sup>1</sup></li> </ul> </li> <li>• Effective from 1 July 2018</li> <li>• Performance guarantees reside with entities holding the US PGM operations (EB &amp; SWO)</li> <li>• Completion targets / criteria have been met, resulting in limited risk of "value adjustment"</li> </ul>
<b>Sibanye-Stillwater commitments</b>	<ul style="list-style-type: none"> <li>• Production obligation from US PGM operations             <ul style="list-style-type: none"> <li>- Gold production                 <ul style="list-style-type: none"> <li>› 100% of gold produced over the life of mine</li> </ul> </li> <li>- Palladium production                 <ul style="list-style-type: none"> <li>› 4.5% of production until 375 koz delivered and the palladium portion of the Advance Amount reducing to nil</li> <li>› 2.25% of production until a further 175 koz have been delivered and the Advance Amount reduced to nil</li> <li>› From 550 koz over remaining life of mine: 1.0% of palladium produced</li> </ul> </li> </ul> </li> </ul>
<b>Metal NPV contribution<sup>1</sup></b>	<ul style="list-style-type: none"> <li>• At spot price<sup>(2)</sup>: 43% gold and 57% palladium</li> </ul>

### Extracting value for production streams that were largely ignored by the market

<sup>1</sup> Production payments may reduce if debt covenants exceed 3.5x Net debt:Adjusted EBITDA

<sup>2</sup> @7.5% weighted average cost of capital (WACC) (real)

<sup>3</sup> Spot prices at 30 June 2018 of US\$1,253/oz (gold) and US\$953/oz (palladium) over the life of Stillwater operations (in real terms)

<sup>4</sup> The stream includes a completion test on the development of the Blitz Project, including completion of underground development, critical surface infrastructure and expansion of the concentrator production output

## Collaboration in pristine environments

### Complex and sensitive environments

- Stillwater River; East Boulder River; Yellowstone River
- Adjacent to Absaroka-Beartooth Wilderness
- <25 miles from Yellowstone National Park
- Significant Wildlife Habitat and Wild & Scenic River Designation
- Heavy recreational use

### History of permitting success

- Over 50 new or modified permits granted in the last four years
- Unique ability to collaborate through the Good Neighbor Agreement and other stakeholder relationships

### Established governmental and community engagement

- Good Neighbor Agreement
- Hands-on community and stakeholder engagement, including watershed groups, positive labor union collaboration, local emergency response entities, and local government
- Federal and state legislative representatives
- Federal and state environmental agencies
- Federal and state industry groups



Limiting our impact on the environment is a critical focus



# Good Neighbour Agreement (GNA)

If we're going to have a mine,  
it's going to be the best damn mine in the world."

– Paul Hawks, Past Northern Plains Chair

- Established in 2000
- Applicable to Stillwater and East Boulder Mines
- Legally binding agreement between Sibanye-Stillwater and local NGOs
- Living, working document
- Mine oversight committees communicate routinely
- A cooperative model for the mining industry
- Funding for third-party technical consultants and agreement implementation



## GOOD NEIGHBOR AGREEMENT

BETWEEN

STILLWATER MINING COMPANY

AND

NORTHERN PLAINS RESOURCE COUNCIL  
COTTONWOOD RESOURCE COUNCIL  
STILLWATER PROTECTIVE ASSOCIATION

ORIGINALLY SIGNED  
MAY 8, 2000

AMENDED  
AUGUST 3, 2004  
REVISED AND AMENDED  
AUGUST 23, 2005  
AMENDED  
November 11, 2009

AMENDED  
May 31, 2014  
AMENDED  
December 8, 2014  
AMENDED  
October 19, 2017

The GNA results in proactive participation by our neighbors



Montana's Hard Rock Impact Act requires that large scale mineral developers prepare an impact plan that identifies local government services and facilities needed as a result of development

Developer must identify and commit to pay all increased local government costs resulting from the development

Impact plan is submitted to a state oversight board, which ensures that tax or other entity payments will be sufficient to ensure a positive impact on local infrastructure and government services

Impact plan is bonded and monitored annually

Metal mines license and gross proceeds taxes support both the state general fund and local counties identified in the impact plan

## Significant economic impacts

- Highly capitalized, highly productive, and highly compensated jobs
- The core input is a made in Montana product
- Montana's tax treatment of natural resource industries, especially mining, produces an outsized revenue impact
- Ultimately responsible for over 3% of Montana's economic output

Growth in Sibanye-Stillwater economic impacts		Analysis year	
Category	Units	2017	2019
Total employment	Jobs	5,995	9,382
Personal income	US\$m	501	828
Disposable personal income	US\$m	438	743
Selected state revenues	US\$m	94.7	128.2
Output	US\$m	1,556	3,044
Population	US\$m	10,724	15,694

## US region reclamation liability

- Reclamation liability bond updated for the 2016-2020 time period
- Reclamation bond developed by the agencies (Forest Service and Montana Department of Environmental Quality) and reviewed/approved by the public

Reclamation bonds funded through Surety Bonds with the State of Montana	US\$m
Mine site current bond total <ul style="list-style-type: none"> <li>• mine site obligated bond: 22.9</li> <li>• mine site unobligated bond: 0.1</li> </ul>	23.0
Benbow project exploration bond	0.3
<b>Total bond (Stillwater Complex)</b>	<b>23.0</b>
Total bond (East Boulder Complex)	30.0
<b>Total bond for US region</b>	<b>53.3</b>

Future reclamations are provided for

## Inclusion initiatives

Created first Women in Mining USA corporate membership

- Company-sponsored membership to provide employees access to WIM USA platform, materials, and community
- Engagement with local schools to educate on operations and career opportunities
- Inclusion resource group efforts to recruit and retain a more diverse workforce

Partnering with other regional businesses on community diversity, inclusion and equity efforts



**WIM**



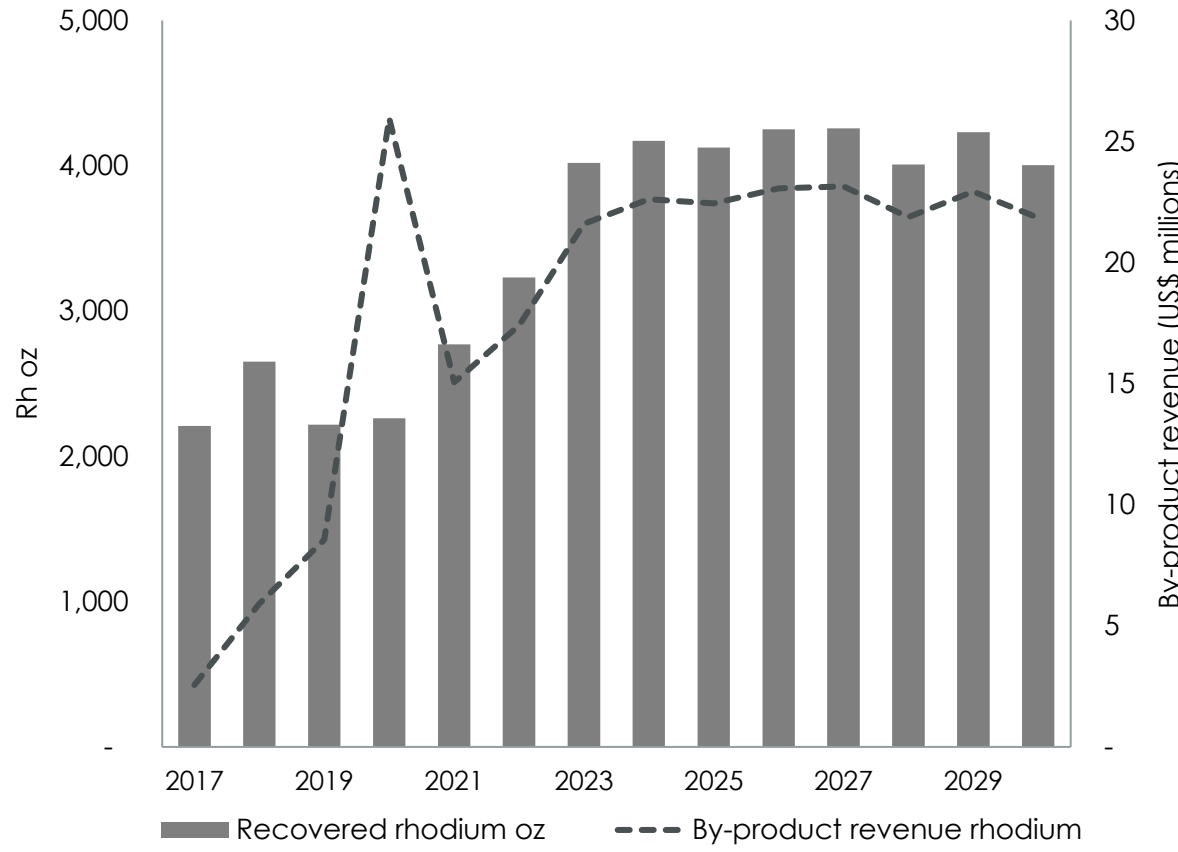
Unit process area	Stillwater <sup>1</sup>	East Boulder <sup>1</sup>	System rate limiting step
Crushing	1,914	2,585	Surface Cone Crusher
Grinding	955	767	SAG and Ball mill
Flotation	965	767	Mid and Scav Flotation; Verti-Mill; Flot cells
Concentrate handling	1,270+	859	Concentrate thickener; storage of filtered concentrate; batching to bins for shipment
Tailings	967	773	Reclaim Cyclone Feed Pump; Reclaim Thickener
Overall plant	1,159	767	Limited by Grinding
Opportunity	1,134	178	Estimated from Mine Plan; increased ore feed to mill
Recovery range	92.0%-92.5%	90.5%-91.0%	

- Concentrate transport
  - Concentrate expansion complete in H1 2021
  - Concentrates transported to Columbus in 25t side dump trucks
- Concentrate handling expansion complete in 2021
  - Increase concentrate handling to +1.4 million tonnes annually
  - Increase overall concentrator capacity to 953kt annually
  - Combine concentrate / slag hauling capabilities for SWM, EB and the Met Complex
- Post 2023, concentrator capacity increased to +1.4 million tonnes per annum
- Tailings Storage Facility (TSF) expansion
  - Blitz production increase sees the current Hertzler TSF capacity reached in mid-2027
  - TSF expansion planning is currently underway

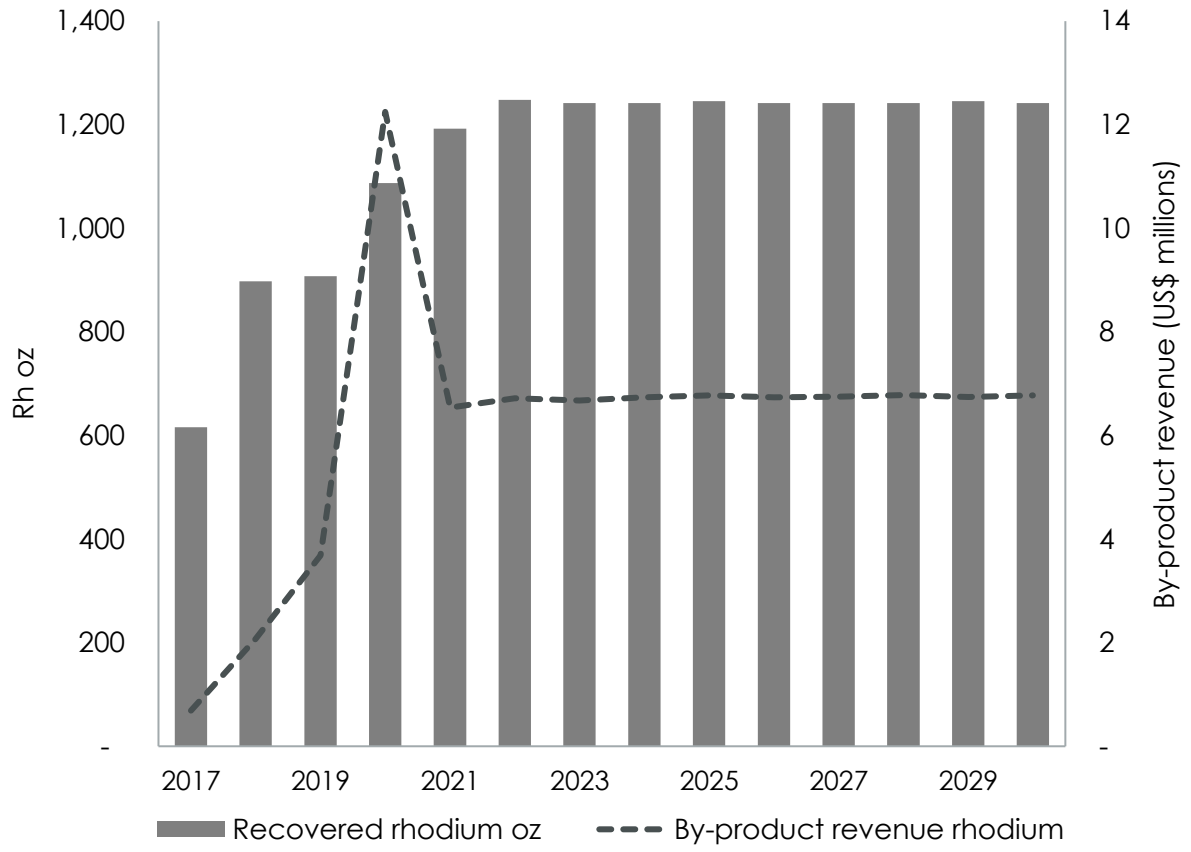
1. 000t (plant feed) pa unless otherwise noted

# By-products units and revenue (Rhodium)

Stillwater by-product production and revenue



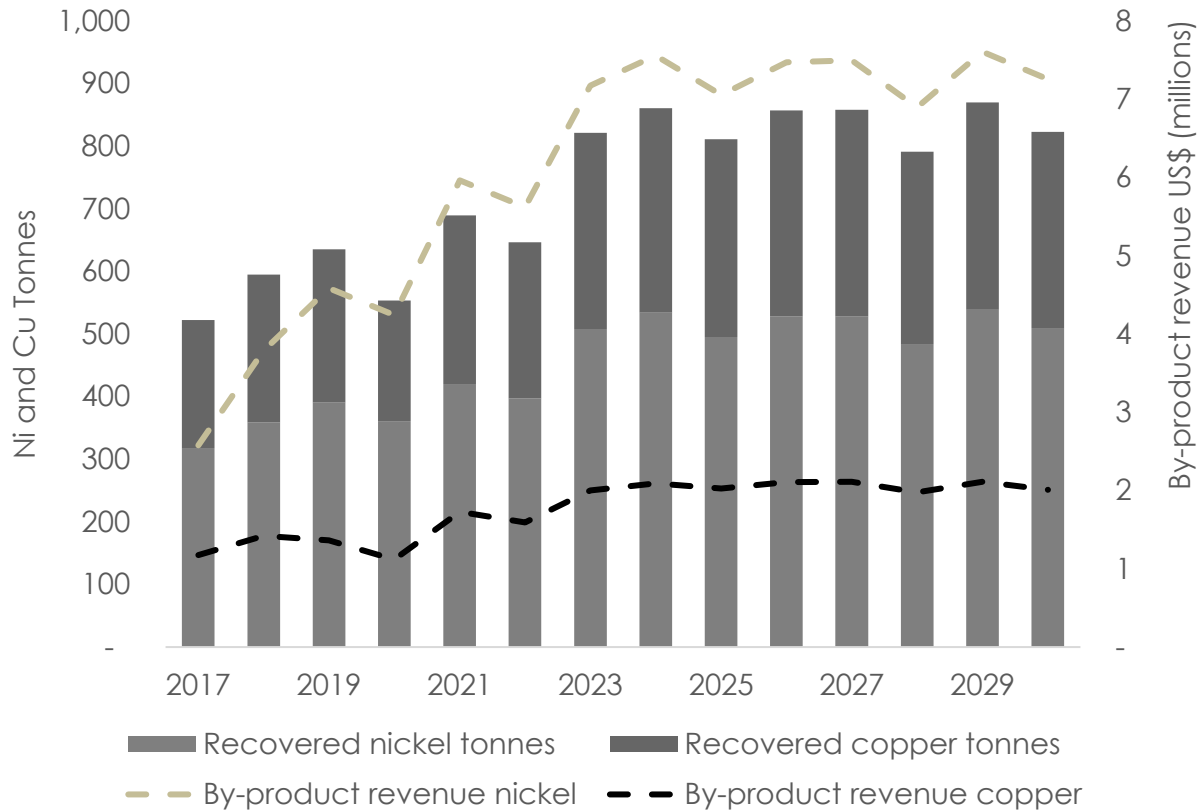
East Boulder by-product production and revenue



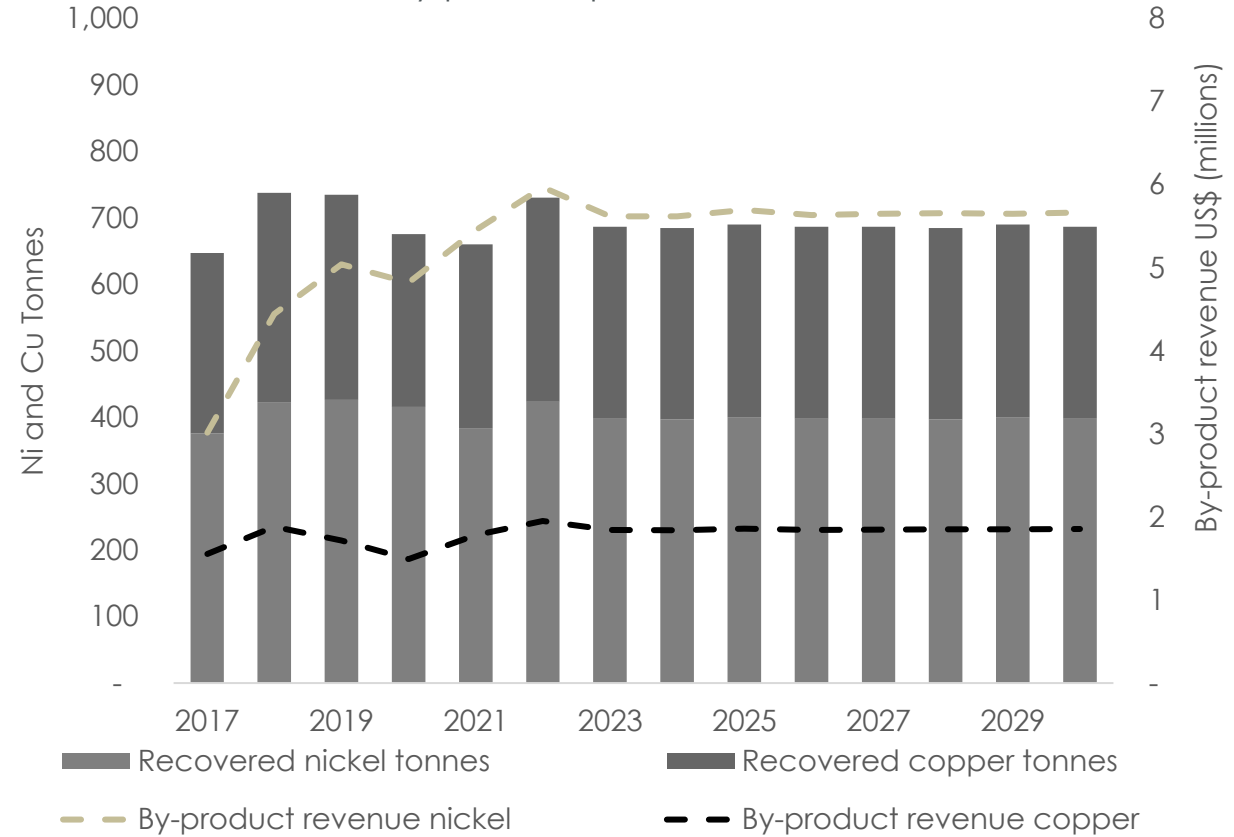
Notes:

# By-products units and revenue (Copper and nickel)

Stillwater incl blitz by-product production and revenue



East Boulder by-product production and revenue



NI and Cu by-product credits are material while Au is now subject to the Wheaton stream arrangement

Notes:  
• Tonnes are metric

## Mechanised mining operations

The US PGM operations are fully mechanised except for the following activities:

- 30% of ground support in production mining utilises handheld jacklegs at Stillwater
- 60% of ground support in production mining utilises handheld jacklegs at East Boulder

A programme is in place convert the balance of ground support activities to mechanical means by the end of 2022

- Captive cut and fill mining has been replaced by more productive and safer mechanised mining methods
- Mechanised cut and fill mining (MCF) – planned 80% of production for Stillwater Mine, 82% for East Boulder Mine
  - Intermediate to high quality (grade)
  - Intermediate to high tonnage productivity – 3.1 tonnes to 4.2 tonnes/man hour
  - Moderate secondary development
  - Mostly mechanised (jumbos, LHDs, jackleg & CMAC rock bolting)
  - Underhand MCF with engineered backs is utilized in challenging ground conditions
  - Stillwater east is characterized by increased ground complexity
- Sub-level mining – planned 20% of production for Stillwater Mine, 18% for East Boulder Mine
  - Low to intermediate quality (grade)
  - Intermediate to high tonnage productivity – 2.3 tonnes to 4.6 tonnes/man hour
  - Secondary development intensive
  - Mechanised (jumbos, long hole drills, LHDs)
- Mining methods are varied to accommodate ground conditions, metals price and in recent times lack of available hard rock miners