Turquoise Hill Resources Ltd.

TD Securities Mining Conference
JANUARY 18-19, 2017

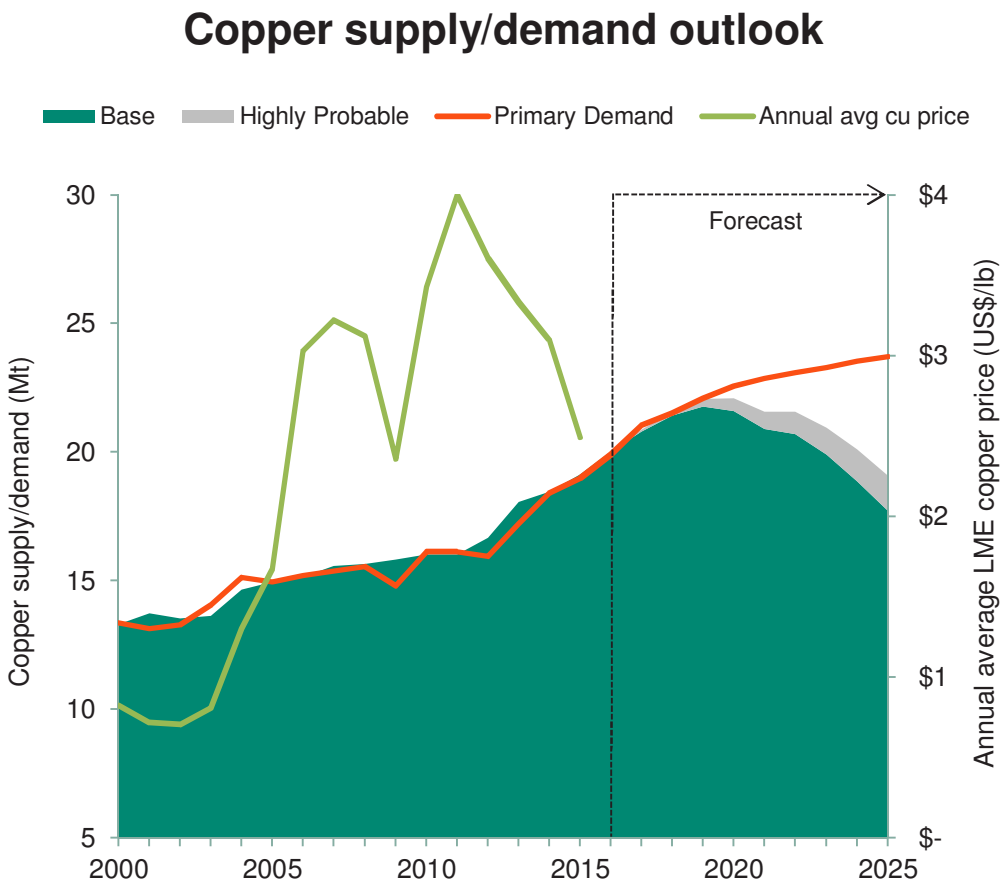
Oyu Tolgoi:Creating long-term value at world's best developing copper project

Turquoise Hill's investment thesis

- Oyu Tolgoi expected to be world's third-largest copper mine with underground
- Hugo North Lift 1 financing in place[1]
- Timing of underground benefits from expected drop in copper supply (~2020)
- Oyu Tolgoi's resources provide long-term development optionality

1. Financing sources includes project finance facility, supplemental debt (in progress), operating cash flow from Oyu Tolgoi and Turquoise Hill's cash; excludes power plant CAPEX.

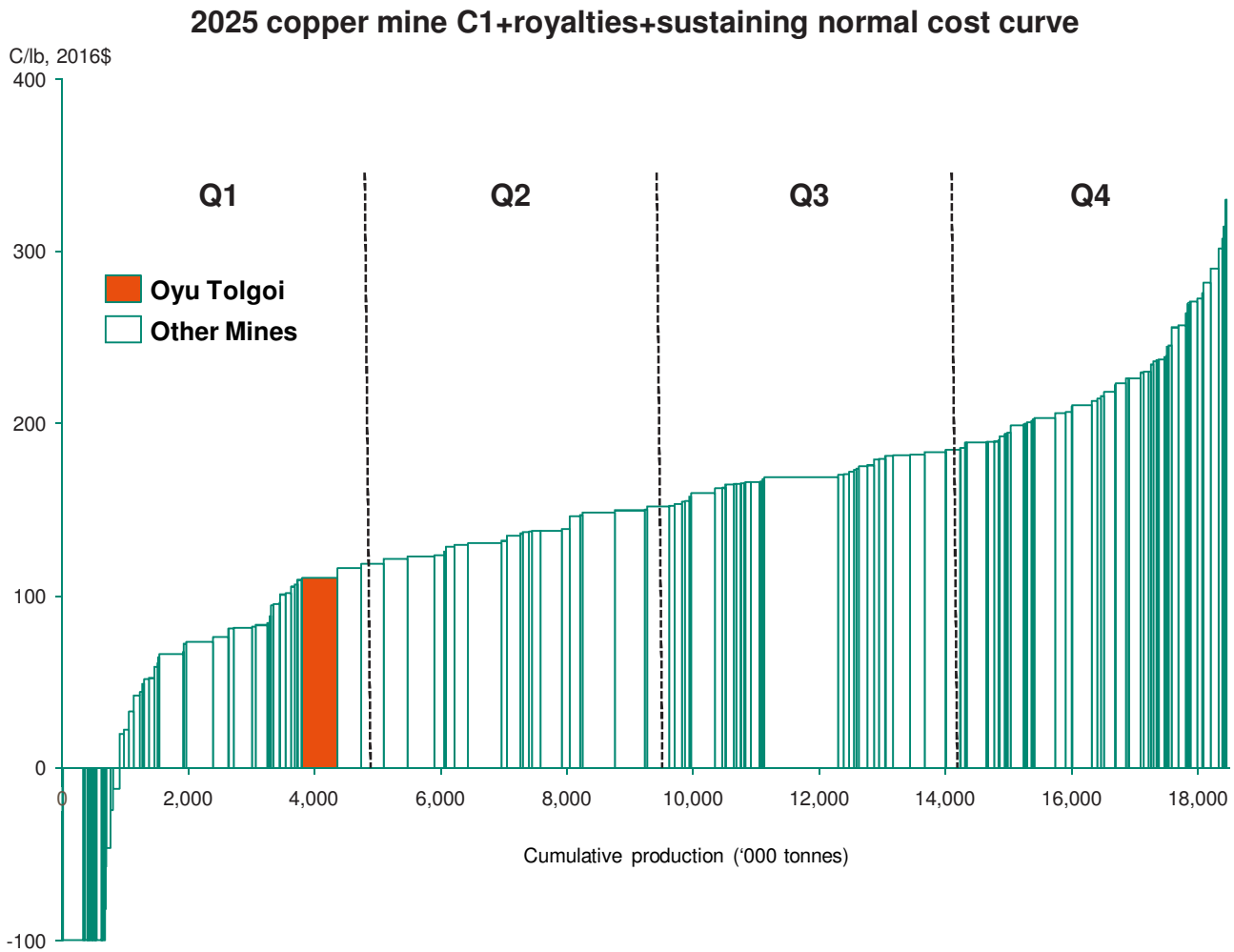
Long-term copper fundamentals strong



Source: Wood Mackenzie (Q3'16 Long-Term Outlook)

- Copper market likely to be in balance in 2017
- Ongoing attrition at existing mines driven by declining grade
- Continued demand growth requires new capacity in the medium-term
- Market anticipates surplus in 2018-19 before moving into deficit from 2020
- China now largest buyer of gold and continues to be largest consumer of copper

Oyu Tolgoi underground a Tier 1 asset



Source: Wood Mackenzie (Q3'16 Cost Service), 2016 Oyu Tolgoi Technical Report and Turquoise Hill Resources.
Normal C1 cost + sustaining capex, range capped at -100/lb & 400/lb for base, highly probable and probable mines only. Oyu Tolgoi costs and volumes for 2025-30.

Potential full-production valuation upside

Indicative valuation[1] (US$B)

Trading comps[2]

Turquoise Hill Resources Ltd.

Current EV[3]: $5.7B
Reserves[4]: 33.9B lb.
Resources[5,6]: 95.7B lb.
NAV[7]: $6.9B

EV/Reserves	EV/M+I+I Resources[5,6]	Price/NAV
TRQ EV/Reserves ($/lb.)	TRQ EV/M+I+I Resources ($/lb.)	TRQ P/NAV
$0.17	$0.06	0.82x
Average EV/Reserves ($/lb.)	Average EV/M+I Resources ($/lb.)	Average P/NAV
$0.33	$0.13	1.01x
$0.30 *Range +/- 10%* $0.37	$0.12 *Range +/- 10%* $0.14	0.91x *Range +/- 10%* 1.11x
Implied TRQ EV ($B)	Implied TRQ EV ($B)	Implied TRQ NAV ($B)
$11.3B	$12.2B	$7.0B+
$10.2B *Range +/- 10%* $12.4B	$11.0B *Range +/- 10%* $13.5B	$6.3B+ *Range +/- 10%* $7.7B+

Transaction comps[2]

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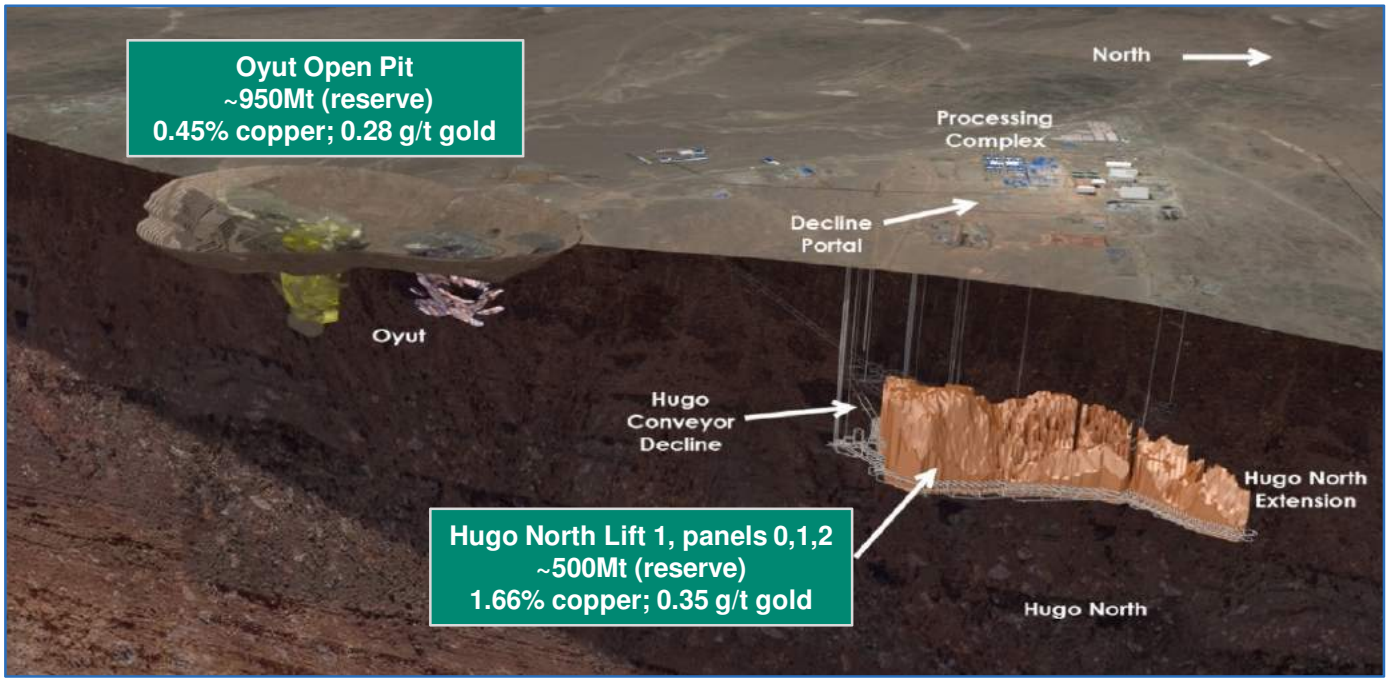
TRQ EV/Reserves ($/lb.)	TRQ EV/M+I+I Resources ($/lb.)	TRQ P/NAV
$0.17	$0.06	0.82x
Average EV/Reserves ($/lb.)	Average EV/M+I Resources ($/lb.)	Average P/NAV
$0.36	$0.17	1.10x
$0.33 *Range +/- 10%* $0.40	$0.15 *Range +/- 10%* $0.19	0.99x *Range +/- 10%* 1.21x
Implied TRQ EV ($B)	Implied TRQ EV ($B)	Implied TRQ NAV ($B)
$12.3B	$16.1B	$7.6B
$11.1B *Range +/- 10%* $13.5B	$14.5B *Range +/- 10%* $17.7B	$6.8B+ *Range +/- 10%* $8.4B+

1. Valuation is based on the current trading multiples in $2.60 per pound copper price environment; current long term (2-3 years) copper price assumption varies between $2.75 - $3.00 per pound; transaction comps based mostly on deals done in $2.18 - $2.51 per pound copper price ranges; does not include valuation uplift from the expected copper price increase ~ 2020; 2. Valuation based on range derived for companies with projects with similar characteristics and in full production; 3. Adjusted for project finance drawdown cash; 4. Reserves and resources are based on equivalent units of production; 5. Resources includes reserves; 6. TRQ reserves and resources figures includes 80% of EJV. Resources figure assumes conversion of inferred resources into M+I category (with the exception of Heruga) around the time of achieving full production; 7. The NAV would be higher closer to production. Source: Brokers, Capital IQ, Mergermarket, company technical reports, annual reports and press articles. Share prices as of 09/12/16. Note: Full production comparables analysis shows Turquoise Hill valuation

2016 Reserves Case mining areas



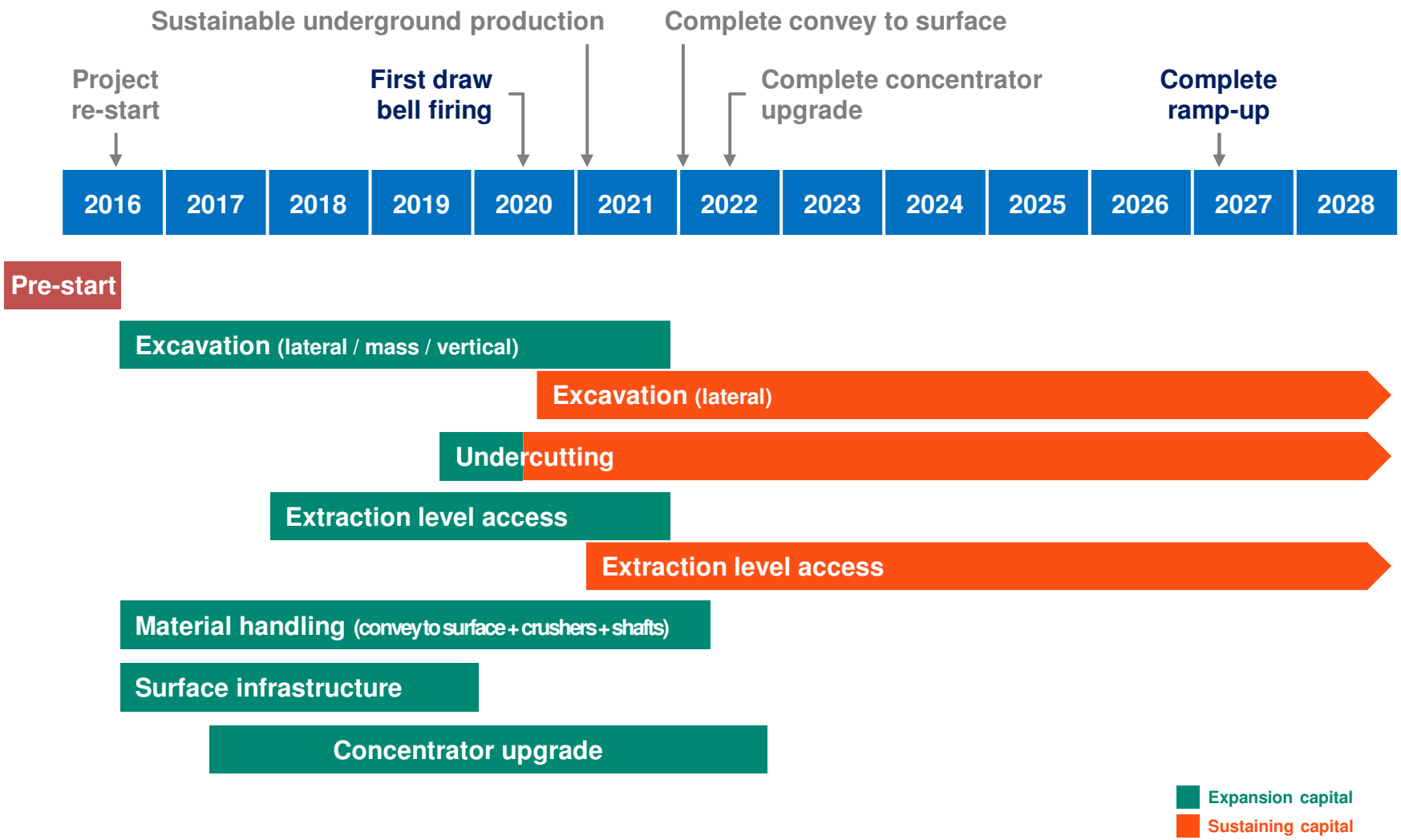
Hugo North Lift 1 Underground

- **Ramp-up (2020-2027), full production (~33mtpa)**
- **Highest grade ore mined first (copper ~2.5%)**
- **Opportunities to reduce construction time, faster ramp-up and increase underground production >95ktpd**
- **Concentrator 40mtpa, *10% above nameplate***

Open Pit

- **Open-pit mine tops-up concentrator when Hugo North Lift 1 begins production**
- **After 2039, open-pit head grades average ~ 0.45% copper**
- **First production in January 2013; ~2.5 million tonnes of concentrate produced by year-end 2016**

Complete ramp-up expected by 2027



Timeline is illustrative only and subject to change

Key underground components

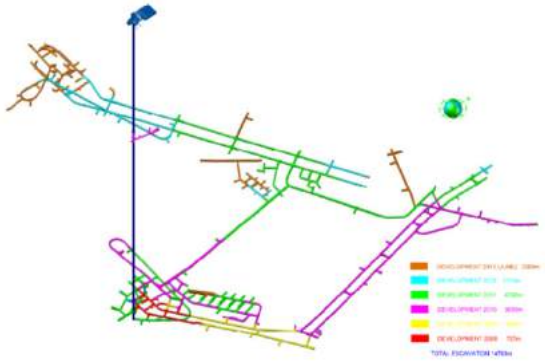
	Shaft 1 (early development and ventilation)	Shaft 2 (production and ventilation)	Shaft 5 (ventilation)	Shaft 3 (ventilation)	Shaft 4 (ventilation)
Total Depth	1,385 metres	1,284 metres	1,178 metres	1,148 metres	1,149 metres
Diameter	6.7 metres	10 metres	6.7 metres	10 metres	11 metres
Completion	2008	Expected 2017	Expected 2017	Expected 2021	Expected 2021
Remaining	Complete	~100 metres	~1,000 metres	Not started	Not started

Lateral Development

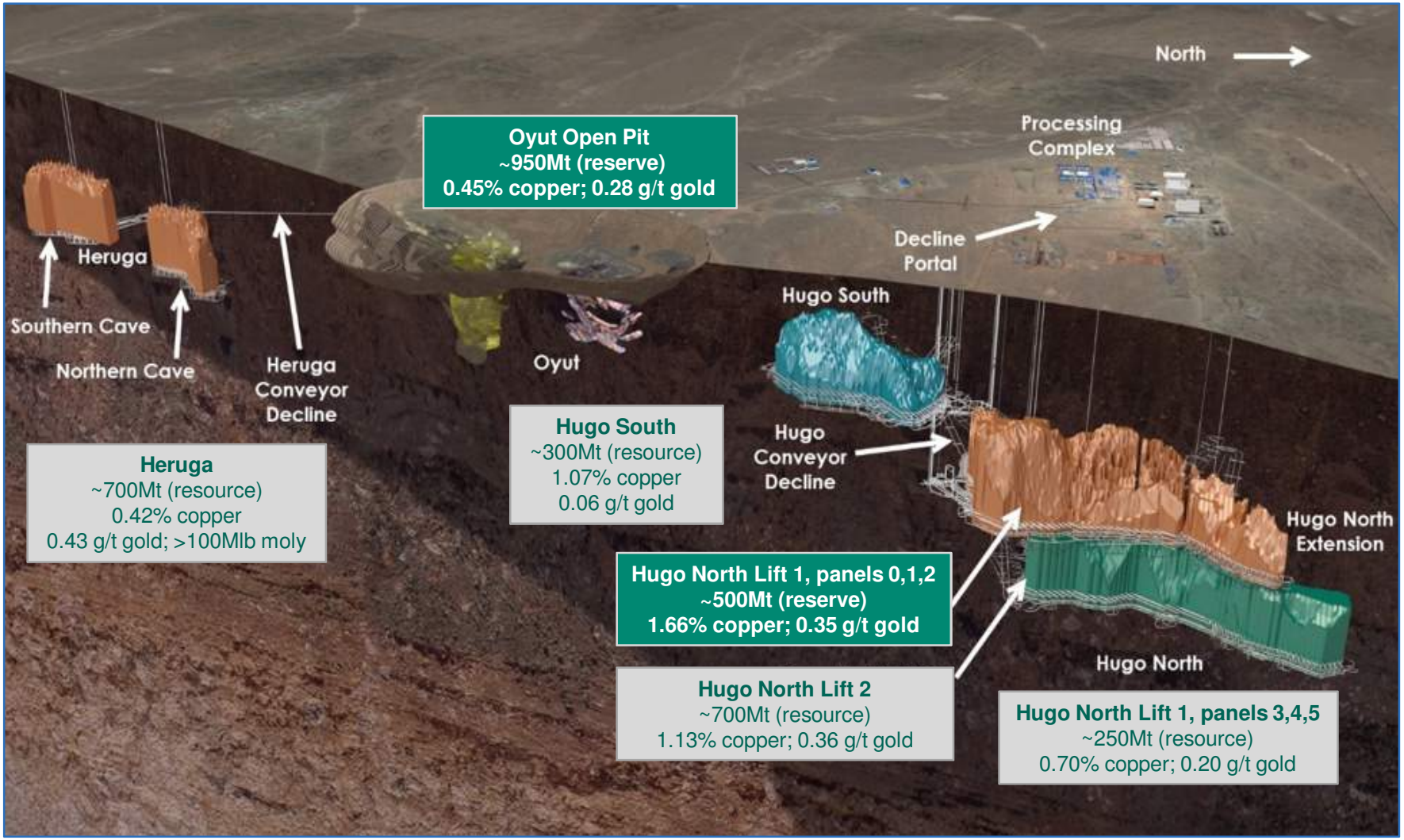
(includes conveyor development)

Underground Development

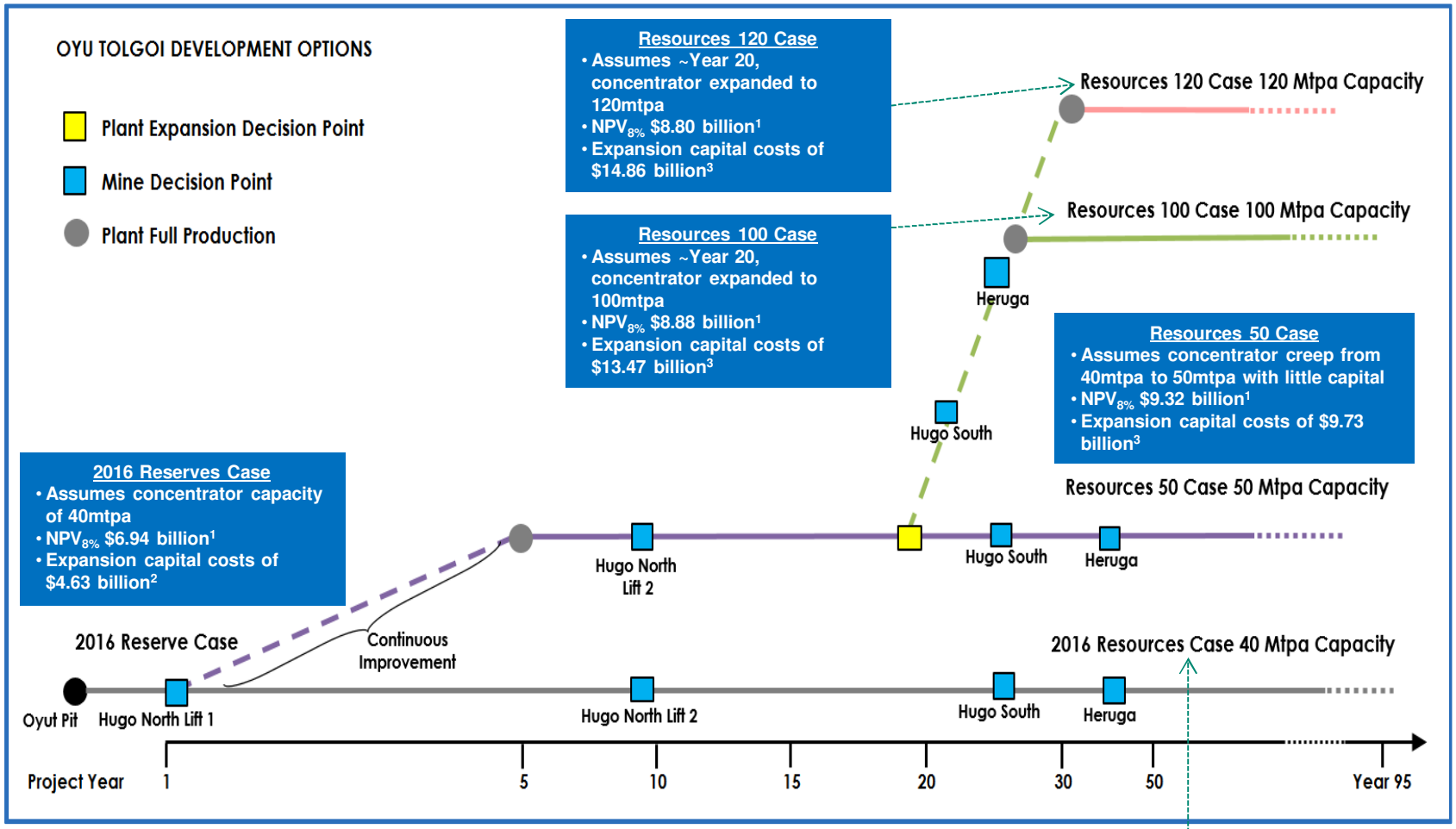
2008-2013



2016 Resources Case



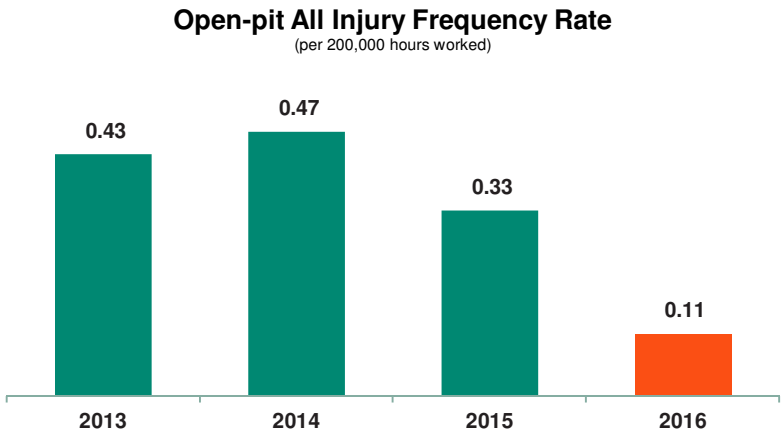
Alternative Production Cases



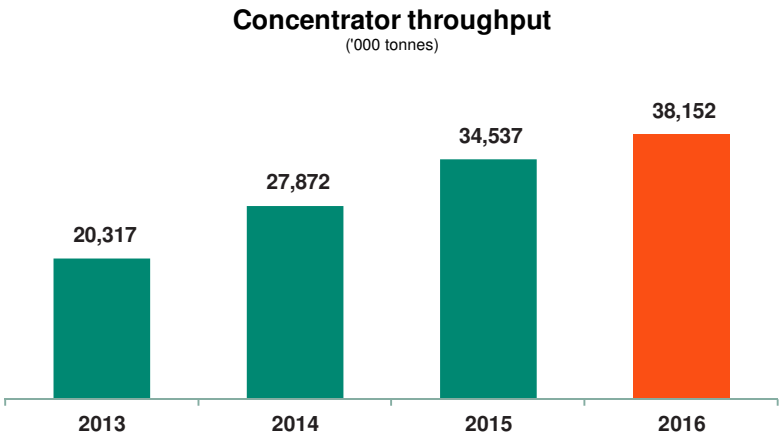
2016 Resources Case
- Assumes concentrator capacity of 40mtpa for life
- Base Case $NPV_{8\%}$ $8.37 billion[1]
- Expansion capital costs of $9.73 billion[3]

1. NPV8% assumes $3.00/lb copper and $1,300/oz gold
2. Expansion capital costs include only direct project costs and exclude interest expense, capitalized interest, debt repayments, tax pre-payments and forex adjustments. In all cases, total capital cost excludes capital costs for the year 2016. Expansion capital for 2016 excluded is $0.46 billion.
3. Expansion capital costs inclusive of 2016 Reserves Case expansion capital. Expansion capital costs include only direct project costs and exclude interest expense, capitalized interest, debt repayments, tax pre-payments and forex adjustments. In all cases, total capital cost excludes capital costs for the year 2016.

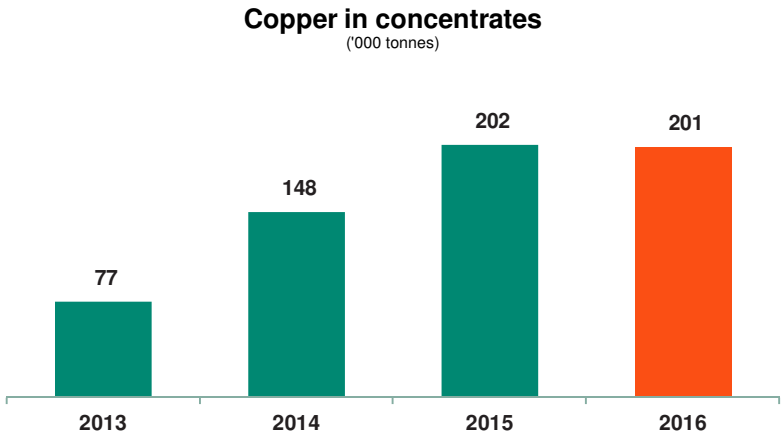
Production highlights



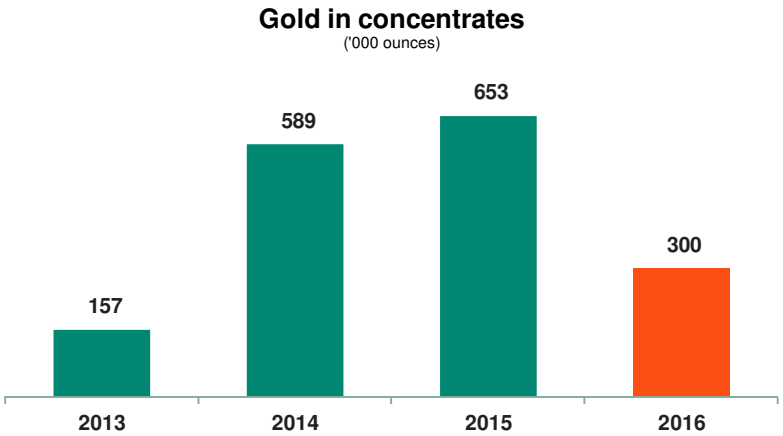
Industry-leading safety performance



Multiple productivity initiatives have led to improved throughput

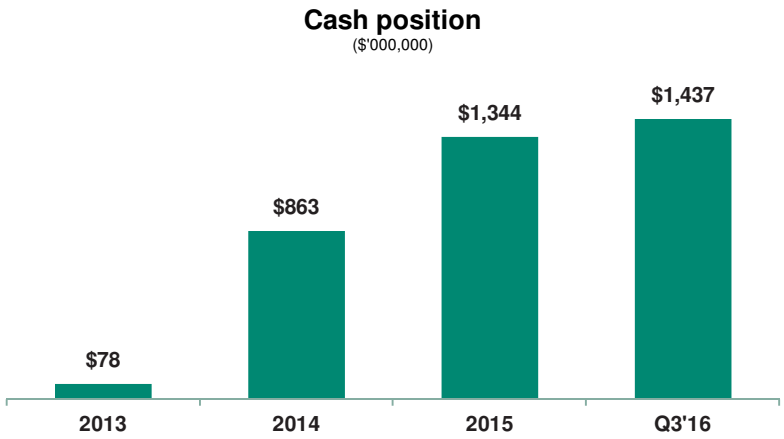


Exceeded 2016 guidance of 175,000–195,000 tonnes of cooper and 255,000 – 285,000 ounces of gold

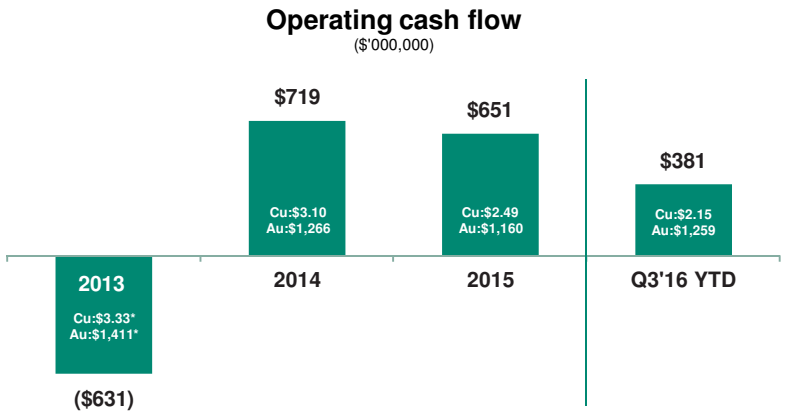


2016 gold production reflects lower grades due to completion of mining in Phase 2

Financial highlights

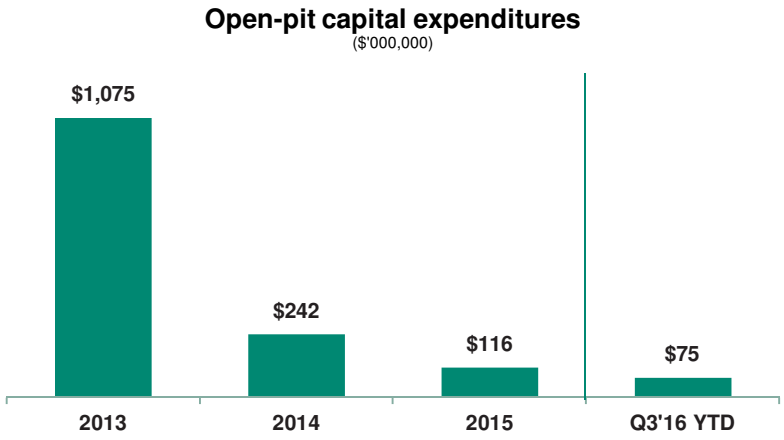


Strong cash position

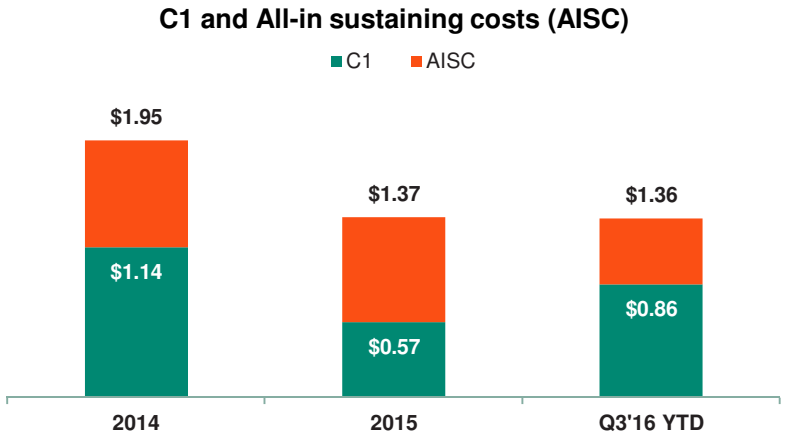


Consecutive periods of positive operating cash flow

*Source: Average quarterly Comex copper price and average quarterly LBMA gold price.



2016 YTD open-pit CAPEX reflects completion of Phase 2, near-surface capital for Phase 3 and 6 as well as Phase 4 stripping



Competitive unit costs

Note: C1 and AISC not meaningful in 2013.

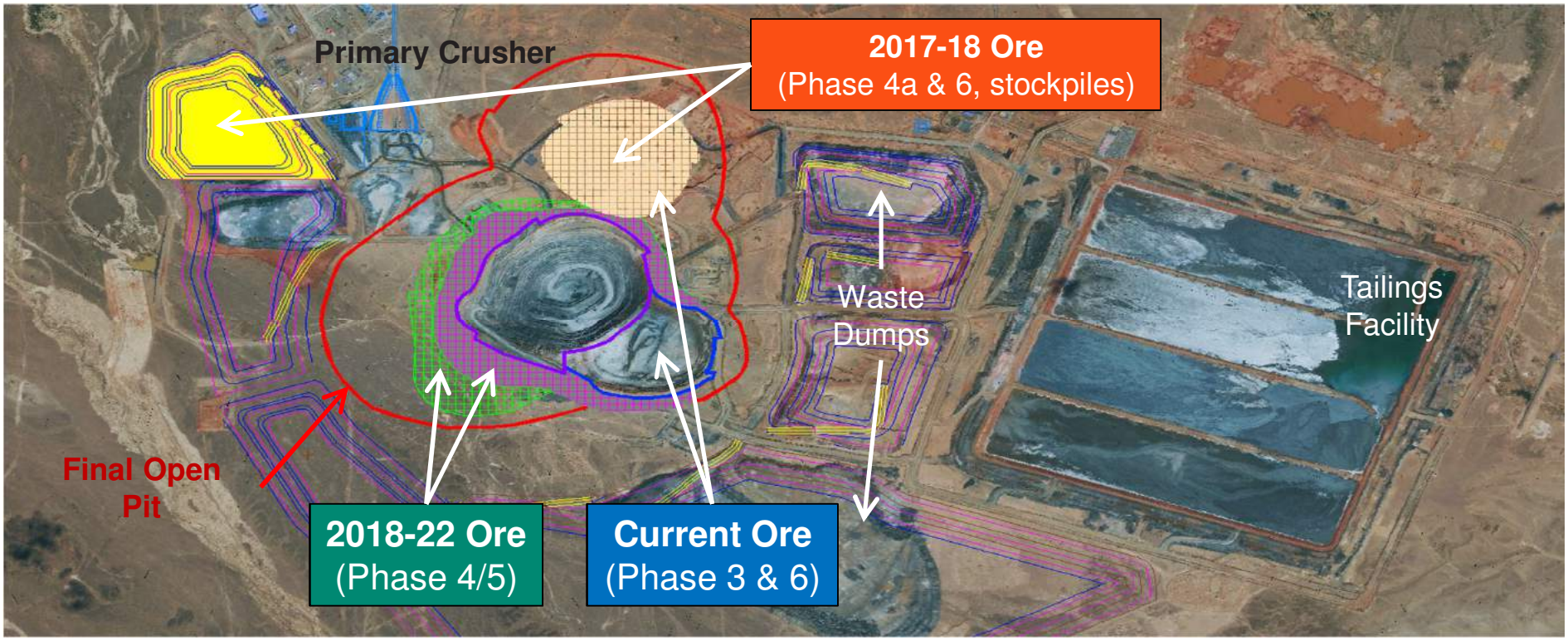
Production and financial guidance

	2016	2017
Copper in concentrates	175,000 – 195,000 tonnes	130,000 – 160,000 tonnes
Gold in concentrates	255,000 – 285,000 ounces	100,000 – 140,000 ounces
Operating cash costs	$840 million	$720 million
Capital expenditures	$200 million (open pit)	$100 million (open pit) $825 million - $925 million (underground)

- 2017 production impacted by ~25% less copper head grade and ~50% less gold head grade
- 2017 operating cash costs reflects cost improvements and impact of lower logistics costs from decreased production
- 2017 open-pit CAPEX reflects lower maintenance costs, reduced deferred stripping cost due to optimization and improved tailings storage costs

Managing near-term ore grade challenges

- **Phase 3** nearly complete (2017)
- **Phase 6** and lower-grade **stockpile** ore processed mid-2016 to mid-2018
- **Phase 4** waste mining critical, uncovers 2017 medium-grade ore, then 2018 high-grade ore



Oyu Tolgoi's impact in Mongolia

Mongolian Workforce

94%

At the end of Q3'16, ~94% of Oyu Tolgoi's workforce was Mongolian

Taxes and Fees

$1.6B

Between 2010 and 1H'16, Oyu Tolgoi paid $1.6B in taxes, fees and other payments to the Mongolian Government

In-country Spend

$5.9B

Between 2010 and Q3'16, Oyu Tolgoi has spent $5.9B in Mongolia[1]

Taxpayer Rank

#1

Oyu Tolgoi was the top corporate taxpayer in Mongolian for 2015

Community Investment

$9.2M

Oyu Tolgoi invested $9.2M in sustainable long-term projects in the South Gobi community in 2015

Water Recycling

84.9%

Oyu Tolgoi's water recycling rate averaged 84.9% at the end of Q3'16 against a recycling target of 80%

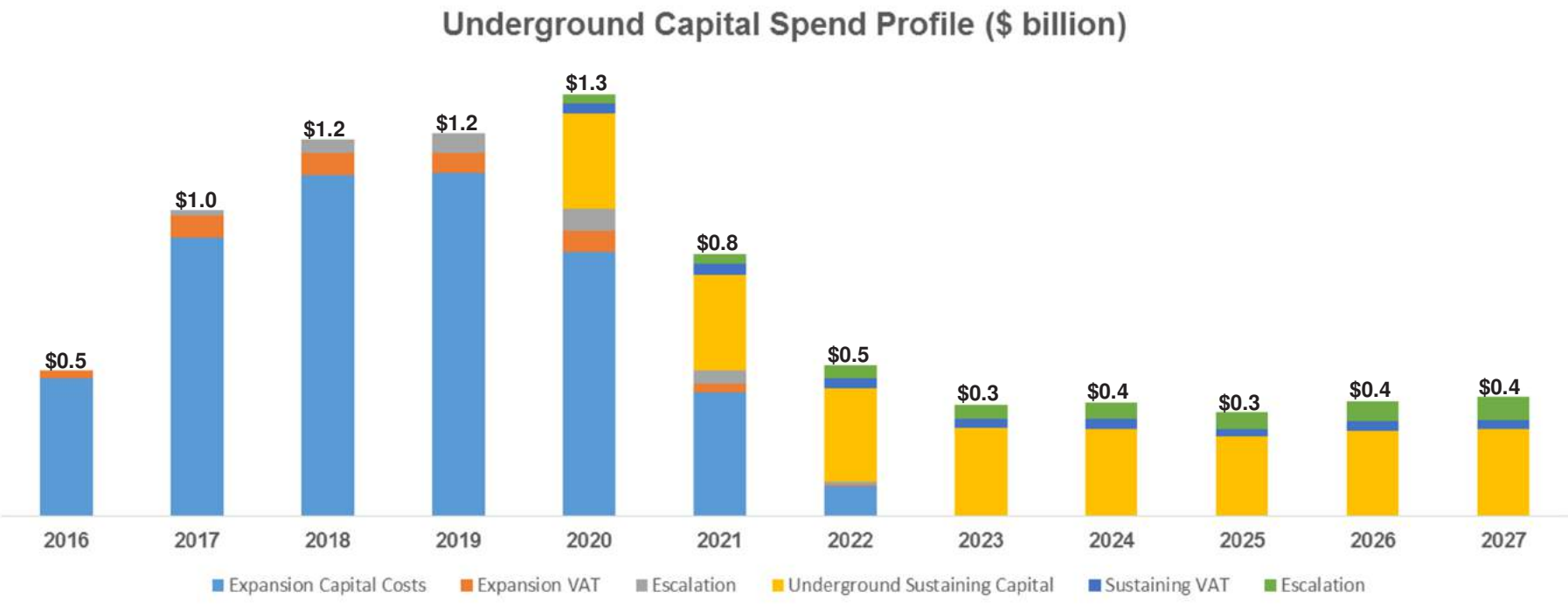
1. In-country spend includes salaries, payments to Mongolian suppliers, taxes and other payments to the Government of Mongolia.

Oyu Tolgoi– a long-term growth opportunity

- Underground development progressing
- Long-term development optionality and plant expansion opportunities
- Open-pit mine performing as expected in low gold areas
- Demonstrated productivity and cost improvements
- Oyu Tolgoi is the best copper asset in development today

Appendix

Approved underground CAPEX



- Underground expansion capital, VAT and escalation of $5.3 billion
- Underground sustaining capital, VAT and escalation of $2.8 billion to full ramp-up expected in 2027

Project financing – flow of funds

At September 30, 2016[1]

Payable to Turquoise Hill*

Shareholder loan: $2.9 billion

Receivable from Oyu Tolgoi*

Shareholder loan: $2.9 billion

1. In accordance with the ARSHA, Turquoise Hill funded the common share investments in Oyu Tolgoi on behalf of Erdenes Oyu Tolgoi LLC; at September 30, 2016 the balance was approximately $1.0 billion
** Interest rate LIBOR + 6.5%*

At project finance drawdown

Proceeds: $4.3 billion[2] → **$4.3 billion[3]** → **$4.2 billion**

Payable to Turquoise Hill*

Shareholder loan: $2.9 billion

Receivable from Oyu Tolgoi*

Shareholder loan: $2.9 billion

Deposit from Turquoise Hill

Deposit: $4.2 billion
Waive 2.5%** guarantee fee with amount on deposit

2. Project finance facility made directly with Oyu Tolgoi
3. Amount received net of bank fees
** Interest rate LIBOR + 6.5%*
*** When guarantee fee paid, Oyu Tolgoi pays 1.9% and Turquoise Hill pays 0.6%*

Priority of funding used for development

- **#1** Oyu Tolgoi operating cash flow
- **#2** Project finance funds
- **#3** Turquoise Hill cash

Oyu Tolgoi cash call

Funding ← **Funding** ← **Funding**

Payable to Turquoise Hill
(2.5%** guarantee fee on funds used)

Shareholder loan: ↑
Equity loan: ↑

Receivable from Oyu Tolgoi*

Shareholder loan: ↑
Equity loan: ↑

Reduction in deposit from Turquoise Hill*

Deposit: ↓

** Indicative, does not show the withholding tax implications | original shareholder loan interest rate LIBOR + 6.5% | Oyu Tolgoi's all-in project finance interest rate, including upfront and ongoing fees as well as the guarantee fee, is LIBOR + 6.0%*
*** Guarantee fee - Oyu Tolgoi pays 1.9% and Turquoise Hill pays 0.6%*

Oyu Tolgoi at China's doorstep