For personal use only

PALADIN ENERGY LTD

TORONTO CANADA ROAD SHOW

MARCH 2019

ASX: PDN

DISCLAIMER AND NOTES

JORC AND NI 43-101 MINERAL RESOURCES AND ORE RESERVES

For personal use only

This presentation includes certain statements that may be deemed "forward-looking statements". All statements in this presentation, other than statements of historical facts, that address future production, reserve or resource potential, exploration drilling, exploitation activities and events or developments that Paladin Energy Ltd (the "Company") expects to occur, are forward-looking statements.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward looking statements include market prices, exploitation and exploration successes, and continued availability of capital and financing and general economic, market or business conditions.

Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Readers should not place undue reliance on forward-looking information. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

In the following presentation, for those deposits that are reported as conforming to the Joint Ore Reserves Committee (JORC) 2004 or 2012 code, the terms Inferred Mineral Resources, Indicated Mineral Resources, Measured Mineral Resources, Ore Reserves, Proved Ore Reserves, Probable Ore Reserves and Competent Person are equivalent to the terms Inferred Mineral Resources, Indicated Mineral Resources, Measured Mineral Resources, Mineral Reserves, Proven Mineral Reserves, Probable Mineral Reserves and Qualified Person, respectively, used in Canadian National Instrument 43-101 (NI 43-101).

The technical information in this is extracted from the report entitled Paladin Energy Ltd 2018 Annual Report released on 28 August 2018 and is available to view on www.paladinenergy.com.au. The company confirms that it is not aware of any new information or data that materially affect the information included in the original announcement and, in the case of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement.

Some of the information in this presentation, in relation to the mineral resources and ore reserves for all deposits except Langer Heinrich, Michelin, Jacques Lake and Manyingee was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with JORC Code 2012 on the basis that the information that the estimates are derived from has not materially changed since it was last reported.

A GLOBAL URANIUM LEADER &

PROVEN PRODUCER

For personal use only

The best leverage to uranium upside

CORPORATE SNAPSHOT

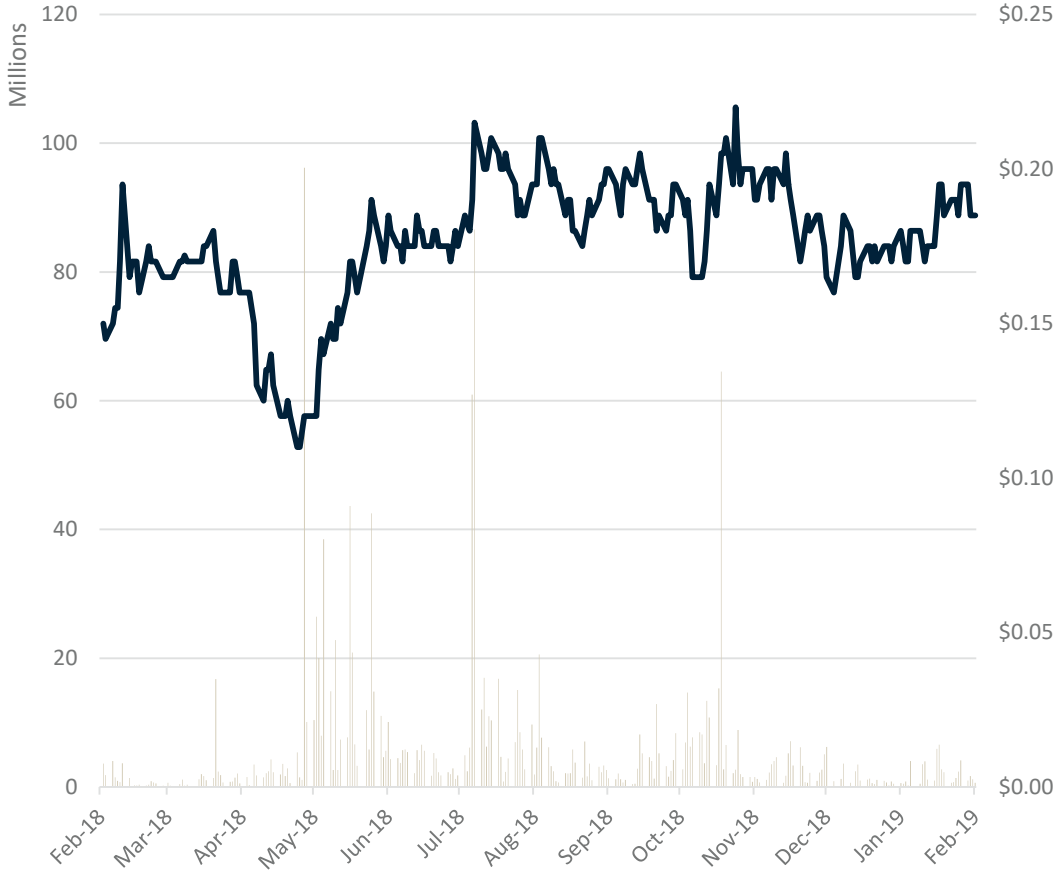
CAPITAL STRUCTURE *As at 22/02/2019*

Shares on issue	1,752M
Share price A$	19.0c
Market capitalisation A$	332.8M
Market capitalisation US$[1]	236.3M
Cash US$[2]	33.0M
Debt US$[2]	125.9M
Enterprise value US$	329.2M

SUBSTANTIAL SHAREHOLDERS *As at 31/01/2019*

Tembo	12.76%
Paradice Investment Management	9.55%
Value Partners	9.14%
HOPU	6.87%
China Investment Corporation	5.49%
BlueBay Asset Management	5.40%

SHARE PRICE SINCE RE-STRUCTURE

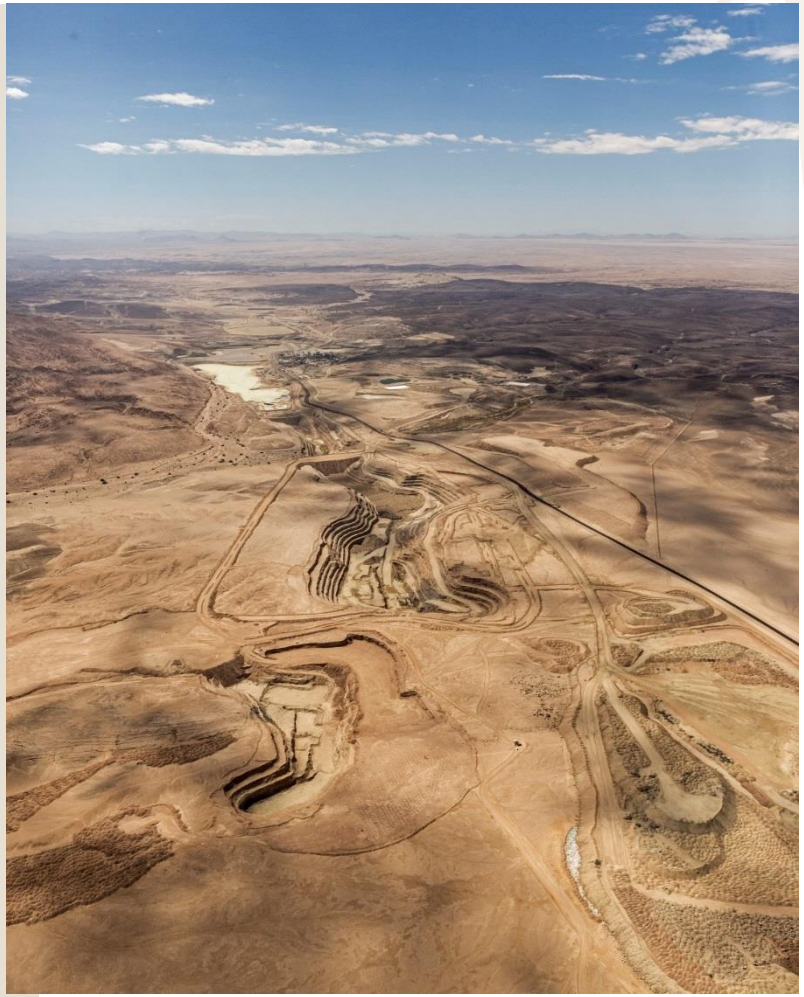


[1] AUD/USD exchange rate 0.71
[2] As at 31 December 2018

For personal use only

INVESTMENT HIGHLIGHTS

- Proven producer and product. Diversified portfolio of developed mines and projects with unsurpassed uranium price leverage (~8Mlbpa idled capacity)
- Lead time and capital associated with a re-start to bring Langer Heinrich back into production is less than new projects
- Exploration portfolio – large (>320Mlb[1]) and globally diversified
- Balance sheet re-capitalised – significant debt reduction (was US$739M now US$125M)[2]



[1] Measured, indicated and inferred resources for the Michelin, Mount Isa and Manyingee Projects (including Carley Bore) on a 100% Project basis
[2] As at 31 December 2019

For personal use only

MEET OUR BOARD OF DIRECTORS

For personal use only

Mr Rick Crabb
B. Juris (Hons), LLB, MBA, FAICD

Non-executive Chairman

- Mr Crabb is a solicitor by background and was a partner in Perth firms Robinson Cox (now Clayton Utz) and Blakiston & Crabb (now Gilbert & Tobin).
- He has over 25 years experience specialising in mining, corporate and commercial law, advising multinational and Australian companies in relation to numerous project developments in Australia, Asia and Africa.
- He is also chairman of Eagle Mountain Mining Limited, director of Thundelarra Limited and was previously chairman of Golden Rim Resources Ltd, Otto Energy Ltd and Lepidico Ltd (formerly Platypus Minerals Ltd).

Mr David Riekie
BEcon, Dip Acc , MAICD, CA

Independent Non-executive Director

- Mr Riekie has operated in a variety of counties globally and throughout Africa; notably Namibia and Tanzania. David was the former Managing Director of junior explorer MetalsTech Limited. David has throughout his career provided corporate, strategic and compliance services.
- Additional experiences were been gained during his time as a corporate reconstruction specialist with Price Waterhouse. David has overseen, exploration and resource development, scoping and feasibility studies, production, optimisation and rehabilitation initiatives.
- Mr Riekie has special interest in the energy and energy storage sector, primarily through energy storage minerals and commodities with specific knowledge of uranium (Uranio Limited), oil and gas (Hawkley Oil and Gas), graphite (Battery Minerals Limited) and cobalt (MetalsTech Limited).

Mr Daniel Harris
BSc

Independent Non-executive Director

- Mr Harris is a seasoned and highly experienced mining executive and director and has most recently held the role of interim CEO and Managing Director of ASX listed Atlas Iron Ltd. Daniel remains a Director of the Atlas Iron Board.
- Mr Harris has been involved in all aspects of the industry for over 37 years and held both COO and CEO positions in Atlantic Ltd.
- Mr Harris is also the former Vice President of EVRAZ Plc, responsible for their global vanadium business. EVRAZ plc is a £4.2 billion publicly traded steel, mining and vanadium business with operations in the Russian Federation, Ukraine, Europe, USA, Canada and South Africa.
- Mr Harris is also a Director Australian Vanadium Ltd, a consultant and member of the Advisory Board of Black Rock Metals. Mr Harris is the Chief Advisor to the Board of Directors of Queensland Energy Minerals.

Mr John Hodder
BSc, BCom, MBA

Non-executive Director

- Mr Hodder is a Geologist by background and spent ten years in the mining and oil and gas industries before completing a MBA at London Business School. John established the Commonwealth Development Corporation (CDC) mining, oil and gas investment department in 1995 and was responsible for its investment activities for some eight years.
- Mr Hodder has served as a director of a number of junior mining companies and has significant experience of operating and investing in Africa. John also worked at Suncorp and Solaris as a Fund Manager focusing on the resources sector managing an index-linked natural resource portfolio of ~AUD$1.25bn. In 2014 John was one of three principals who established Tembo Capital a mining focused private equity fund.

MEET OUR SENIOR MANAGEMENT

For personal use only

Mr Scott Sullivan
BEng (Hons1), MBA

Chief Executive Officer

- Mr Sullivan brings 30 years of diversified mining experience to Paladin, across multiple commodities and projects domestically and internationally. His experience spans strategic planning in mines and smelters; feasibilities; commissioning; mine expansion and restructuring; mine, port and rail infrastructure; project management; sustainability and government and has a strong emphasis on operational optimisation.
- Prior roles include CEO and Managing Director roles with ASX-listed companies centered in West Africa and the US and Asset President of NSW Energy Coal at BHP Billiton, being directly responsible for the operation and rapid expansion of one of Australia's iconic and highest producing coal mines, Mt Arthur, along with the Caroona Coal project and BHPB's share in the NCIG port infrastructure in Newcastle. Mr Sullivan was also GM of the Wambo Coal OC and UG operations in the Hunter Valley with Peabody Energy and successfully commissioned the UG mine to be one of the most productive thin seam Long Wall mines in the world.
- Mr Sullivan is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM) and Graduate of the Australian Institute of Company Directors (GAICD).

Mr Craig Barnes
BCom, BCom (Hons), CA

Chief Financial Officer

- Mr Barnes is a chartered accountant with more than 20 years of experience in senior finance and financial management within the mining industry and previously the financial services industry. Before joining Paladin, Craig held the position of Chief Financial Officer of DRDGOLD Limited and its affiliated subsidiaries for 7 years after initially joining the company as the Group Financial Controller. Prior to that, he was the Head of Financial Reporting at Liberty Life Limited. Craig has considerable experience in project financing, mergers and acquisitions and implementation of accounting controls and systems.

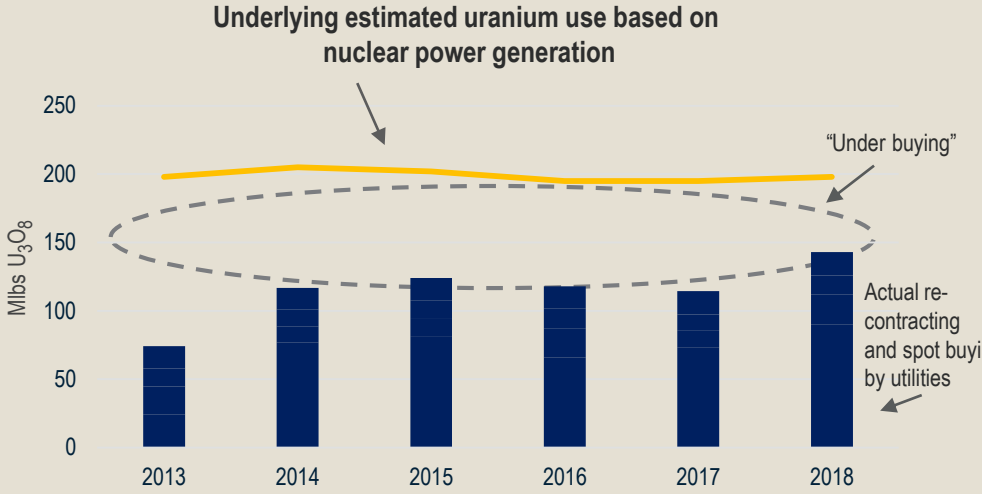
STRONG DEMAND IN THE

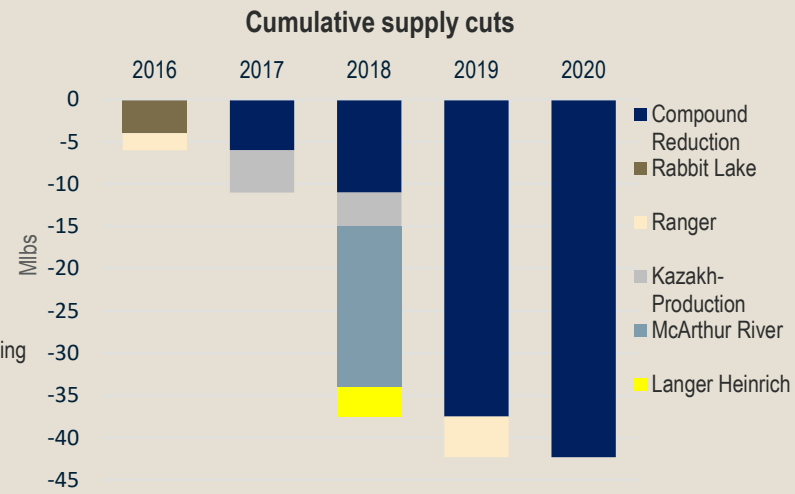
URANIUM MARKET

For personal use only

A solid long-term outlook

THE URANIUM STORY IS COMPELLING





Source:
- UxC, TradeTech and Paladin Research

Spot uranium prices recovering from a 13-year low

Growth in China, India and elsewhere means the nuclear power industry is consuming more uranium than pre-Fukushima

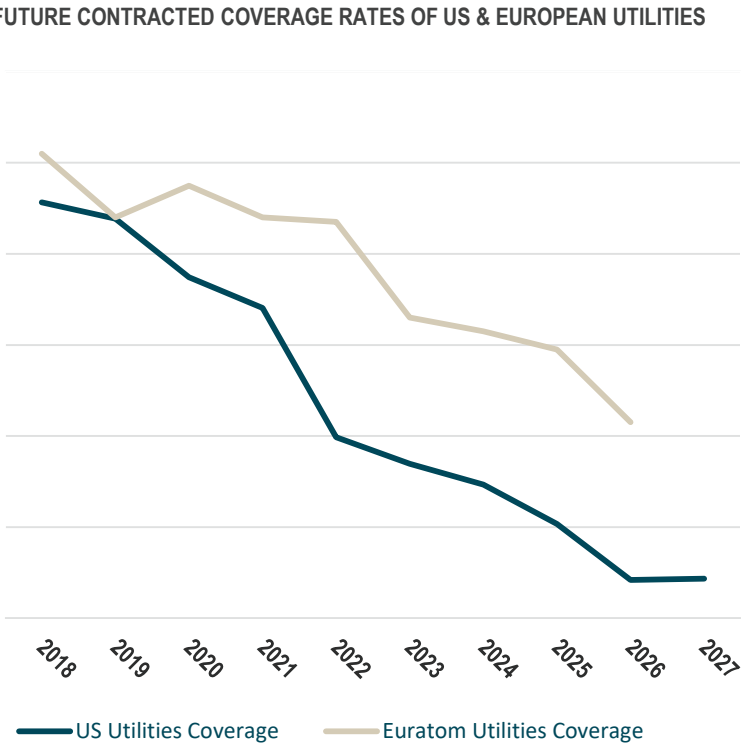
Utilities have been "under buying" at an average rate of 80Mlbs less per year than consumption

Running down stockpiles and contract positions put in place pre-Fukushima when European and U.S. utilities worried about market tightness due to rapid China growth

Mined supply is being rapidly cut back

For personal use only

IT'S ALL ABOUT SUPPLY



- +40Mlbs taken out of the market in recent years (including Ranger 2019)
- Significant decrease in exploration spend since Fukushima
- New Project Development timelines stretched:
  - Majority are still very much in the early stages of development
  - Require significantly higher incentive prices
  - Production from new mines will be many years after incentive prices reached
  - Permitting uncertainty remains in many jurisdictions

- Global mine supply now structurally impaired and unable to respond in time to price increases. Potential for short-term price spikes.
- When long-term contracting returns to historical levels, enrichment tails will increase, reducing the contribution of secondaries to the market
- Supply shock impact exacerbated by US utilities reluctance to contract whilst s232 petition unresolved – final decision expected mid 2019
- Mines currently on C&M have a restart timeline advantage

For personal use only

Sources: (1) EIA Uranium Marketing Annual Report 2017
(2) Euratom Supply Agency Annual Report 2017

GREEN SHOOTS ARE STILL VISIBLE

- IPCC REPORT – Global warming increase by 1.5˚C by 2030
  - China - Plans to have 56 reactors operating by 2020 and 180 reactors, or 220% increase, by 2030 to reduce its reliance on coal
  - India following suit with 21 reactors into operation by 2031
  - 17 new reactors in Saudi Arabia announced in 2018
- Demonstrated willingness of supply to self correct
- Lack of exploration and near term options
- Kazakhstan 38% of world production
  - Reduce growth plans 20% next 3 years, 15% IPO, Align with global marketing practices
- The level of reactor fuel requirements covered under contract is decreasing – not sustainable
- EV MARKET - Forecasts shows sales of EVs increasing from a record 1.1 million worldwide in 2017, to 11 million in 2025, surging to 30 million in 2030

Source:
- ©Climate Council of Australia Limited
- BloombergNEF

THE GOOD, THE BAD AND THE UGLY: LIMITING TEMPERATURE RISE TO 1.5°C

For personal use only

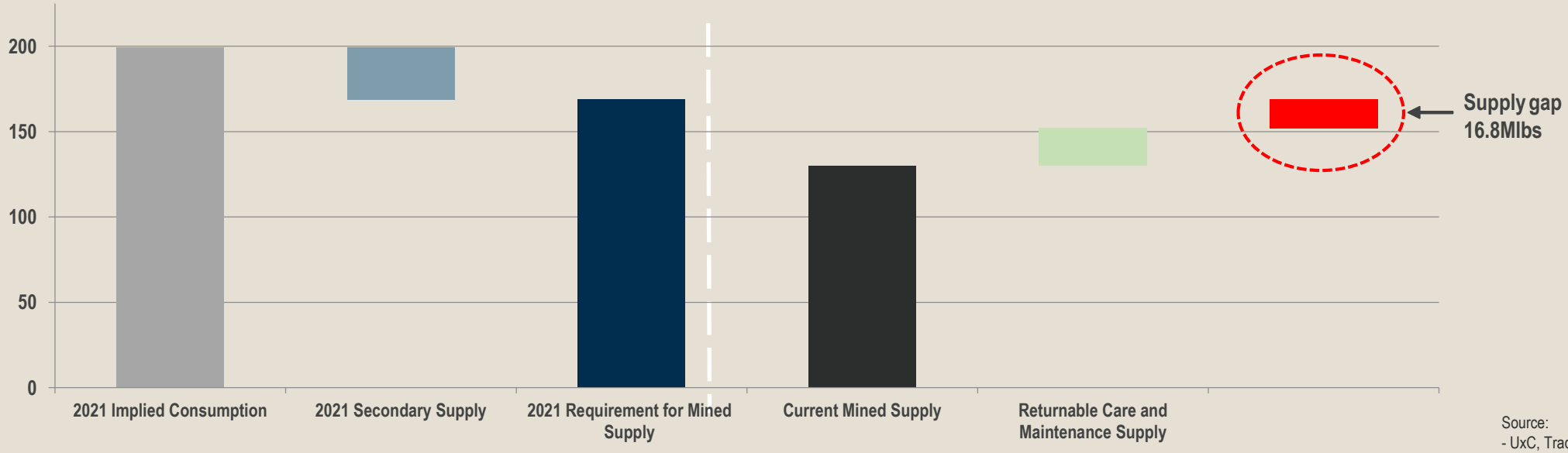
CHINA KEY DRIVER OF DEMAND

- China National Nuclear Corp (CNNC) looking to invest in overseas uranium mines to secure supply for an expected ramp-up in China's nuclear power generation. 1.4Blb's stated requirement.
- CNNC worth $100 billion as China's premier energy company, with investments including Paladin and the Azelik uranium mine in Niger
- *"**Our vision is to be the world's leading uranium company,**"* Ni Tao, deputy manager of China National Uranium Co Ltd, said at the IMARC mining conference in Melbourne. "***We are open to taking a minority stake in a partnership or to* taking a whole company."** *(Source: Reuters)*
- China's uranium demand is expected to grow to around 10,800 tonnes by 2020, rising to 16,300-18,500 tonnes by 2025 (*Source: Reuters*)

Source:
- ©Climate Council of Australia Limited
- Reuters/Stringer

For personal use only

POSSIBLE OUTLOOK – MID LEVEL GROWTH



Source:
- UxC, TradeTech and Paladin Research

Care and maintenance supply expected to come back online if prices lift to US$40-50/lb range

The industry also needs additional new growth from mining before 2021 – this requires incentive prices of US$60-80/lb (i.e. 2-3 x current price levels)

In reality, the downtrend has been so long and deep, it will be difficult for the industry to meet medium term demand and conditions are in place for an "overshoot"

For personal use only

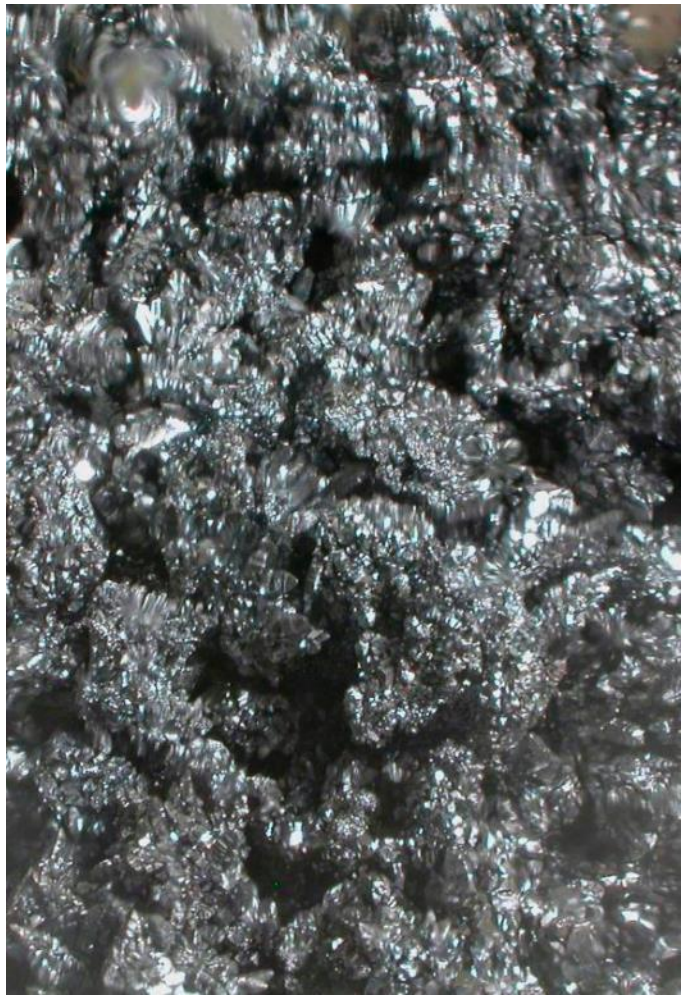
A NEW OPPORTUNITY

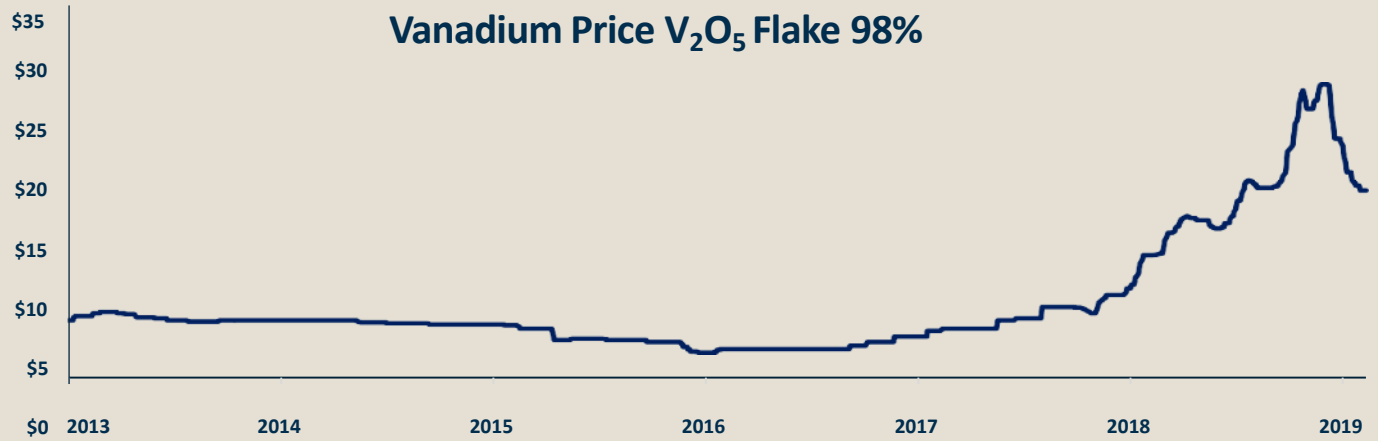
VANADIUM

For personal use only

Vanadium to be produced as a co-product

VANADIUM - A NEW OPPORTUNITY FOR LANGER HEINRICH

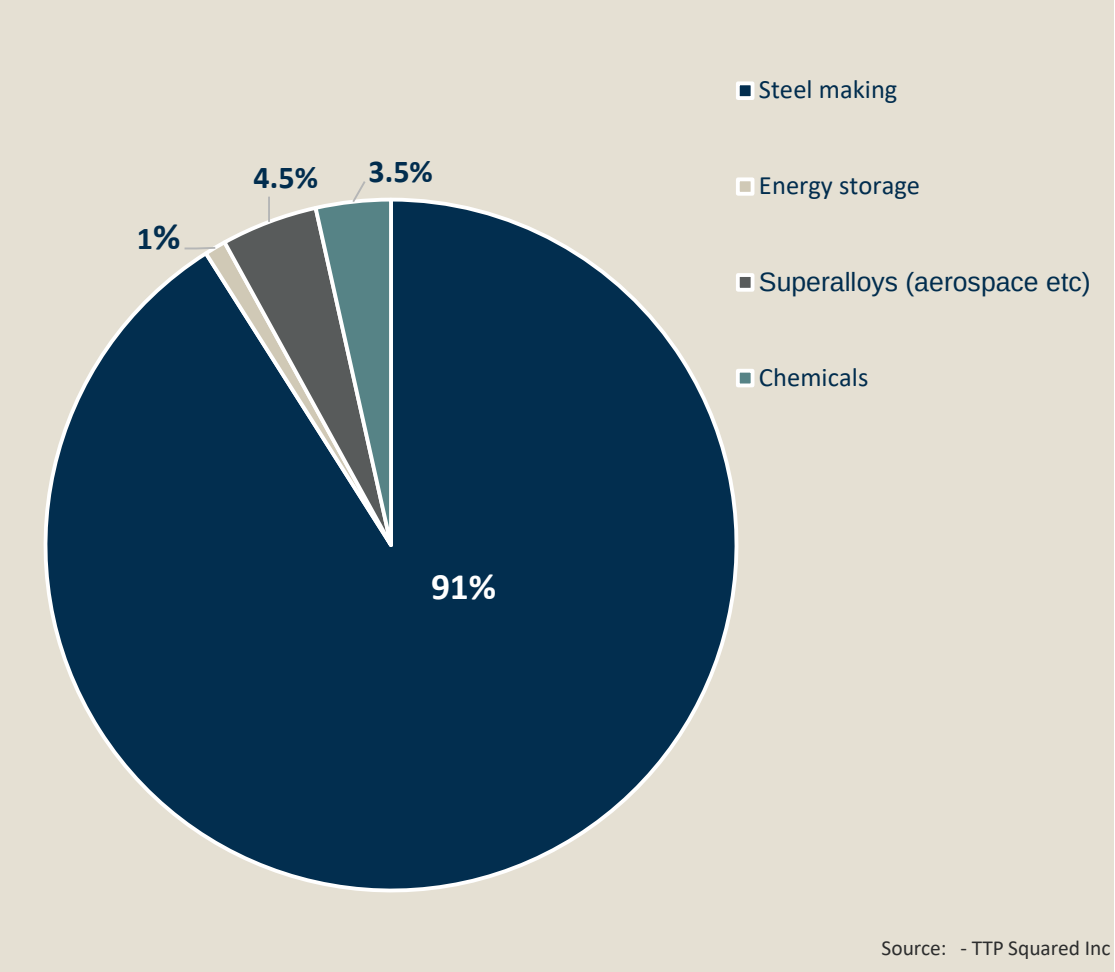




- Opportunity to produce Vanadium at LHM
- Estimated production circa 1.3Mlbs
- Long term price of US$8.50/lb
- Significant price increase due to Chinese rebar specification changes and use in redox flow batteries, specialty metals and chemicals
- Future demand is expected to rise due to supply constraints

For personal use only

VANADIUM VITAL FOR NEXT-GEN INDUSTRIES



Source: - TTP Squared Inc

Steel industry consumption continues to grow – China's new high-strength rebar specification standards implemented in November 2018, using alloys such as vanadium has created a supply shortage, with demand expected to increase

~90%

Over 90% of the current demand for vanadium arises from its use to strengthen steel. Significant growth is expected in high-tech chemical and alloy applications

5%

Rebar consumption continues to grow at 5% annually

For personal use only

A STRATEGIC TIER-ONE ASSET AT

LANGER HEINRICH

For personal use only

A LOW COST, LONG LIFE URANIUM MINE

LANGER HEINRICH

- Lowest cost open-pit mine globally[1]
- Top 10 Uranium Mine by Production[2]
- +20 year mine life[3]
- 43.3Mlb cumulative production. Remaining resources 123.4Mlbs.
- Stable government

Mineral Resources depleted to 30th June 2018			
Class	**Tonnes Mt**	**Grade ppm**	**U_3O_8 Mlb**
Measured	60.7	515	68.7
Indicated	21.5	460	21.7
Inferred	8.7	470	9.0
Stockpiles	30.8	355	24.0
Total	121.7	460	123.4
Mineral Reserves depleted to 30th June 2018			
Class	**Tonnes Mt**	**Grade ppm**	**U_3O_8 Mlb**
Proved	42.0	525	48.5
Probable	13.1	485	14.0
Stockpiles	30.8	355	24.0
Total	85.9	455	86.5

Figures may not add due to rounding. Mineral Resources and Ore Reserves quoted on a 100% basis.

Source:
1. UxC Uranium Production Cost Study – August 2017
2. TradeTech Uranium Market Study – 2017: Issue 3 (based on 2016 production)
3. At current processing rates

For personal use only

WE ARE PLANNING FOR A RAPID, RELIABLE RESTART

OPERATIONAL REVIEW OF LANGER HEINRICH MINE (LHM)

For personal use only

CONCEPT STUDY COMPLETED TO OPTIMISE RESTART:

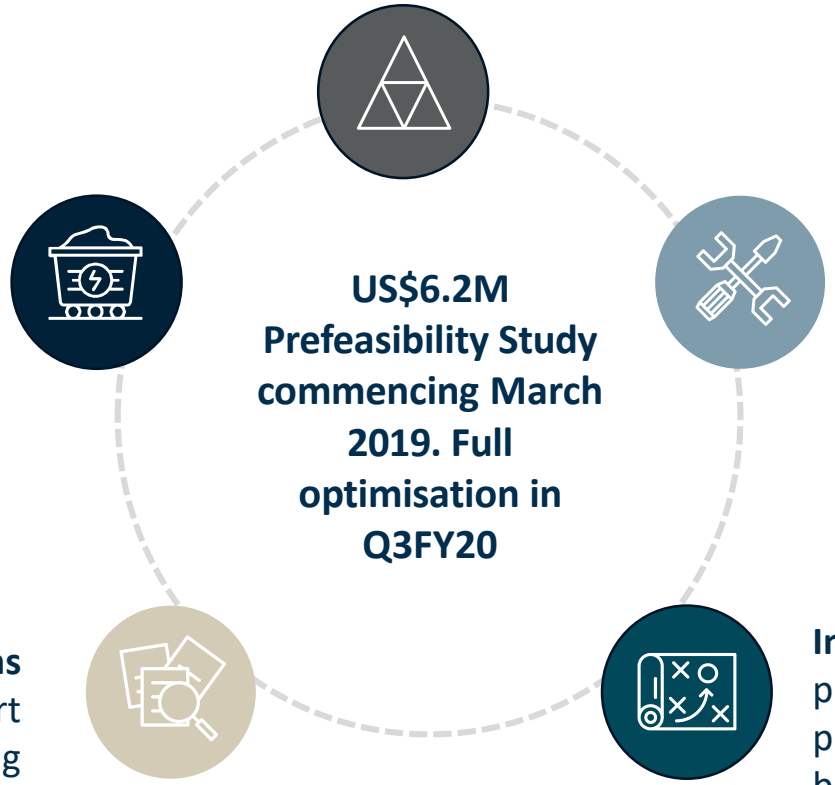
Verifying Care & Maintenance (C&M) practices to ensure asset is preserved for low-cost restart	Learning from ten years of operation to ensure restart is safe, predictable and successful	Defining further potential improvements to enhance value. US$6.00/lb cost reduction and saleable vanadium product	Prefeasibility study for **rapid, low-risk restart** to be completed Q1 FY20	Prefeasibility study for **optimised plant and extraction process to be** completed Q3 FY20

Note: Concept Study results are ± 30%.

ADDING VALUE THROUGH A RIGOROUS STUDY METHODOLOGY

Improve definition of restart scope – repair, improve processing facility and Process debottlenecking study

Mineral Resource definition – drilling to build Vanadium geology model, drill to basement under TSF1 and assays. Potential to increase High/Medium Grade Resources



Process test work for improvements – potential for vanadium (~1.3Mlb pa). Also investigating membrane technology for uranium recovery, reducing reagent costs (through caustic regeneration, water recycling, carbonate/bi-carbonate recovery) and increased ore beneficiation to improve Low-Grade Ore economics

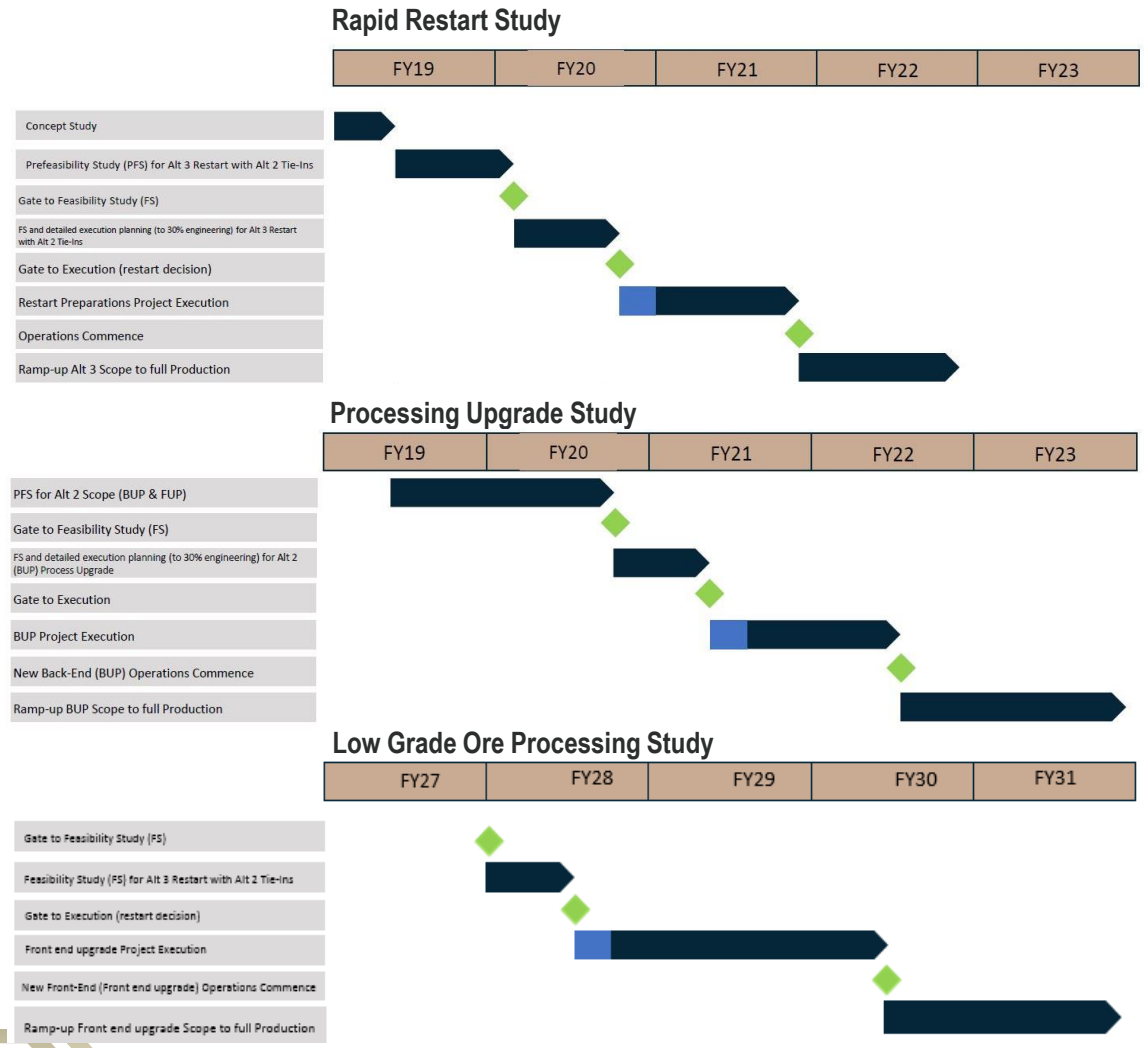
Statutory rights and obligations review – to ensure low-risk restart and closure planning

Improve Geo-Met model – increase predictive power of model to make better planning and operational decisions for beneficiation, leaching and contaminants

Recruited expert study and restart team – balanced between Site and major project experience

For personal use only

BE READY! BUT CONTINUE TO OPTIMISE



RAPID RESTART STUDY:

- 6-9 month Prefeasibility Study focused on optimising the current facility
- 6-9 month Feasibility Study to enable LHM Restart to be triggered from June 2020

PROCESSING UPGRADE STUDY:

- 12-15 month Prefeasibility Study to select process flow sheet changes:
  - **Back End Upgrade -** to reduce reagent costs and recover vanadium
  - **Front End Upgrade -** selectively upgrading low-grade ore to deliver higher leach feed grades and maintain current levels of uranium production
  - Water recovery from tailings and Pressure leach
- 6-9 month Feasibility Study to plan implementation. Execution most likely after plant restarted (FY22 or later)

LOW GRADE ORE PROCESSING STUDY:

- Feasibility deferred until required end FY27

For personal use only

WE HAVE VERIFIED OUR RESTART AND LOM IMPROVEMENT CAPITAL

Relatively low initial capital requirements of circa US$100M (excludes C&M and study costs)

Plant repair and improvement **US$24M**	Working capital **US$50M** (includes: first fill of reagents, recommissioning and remobilisation costs)	Pre-start tailings facility construction **US$4M**	Back-End Upgrade Project execution **US$22M** (Initial Capex spend for US$43M project)

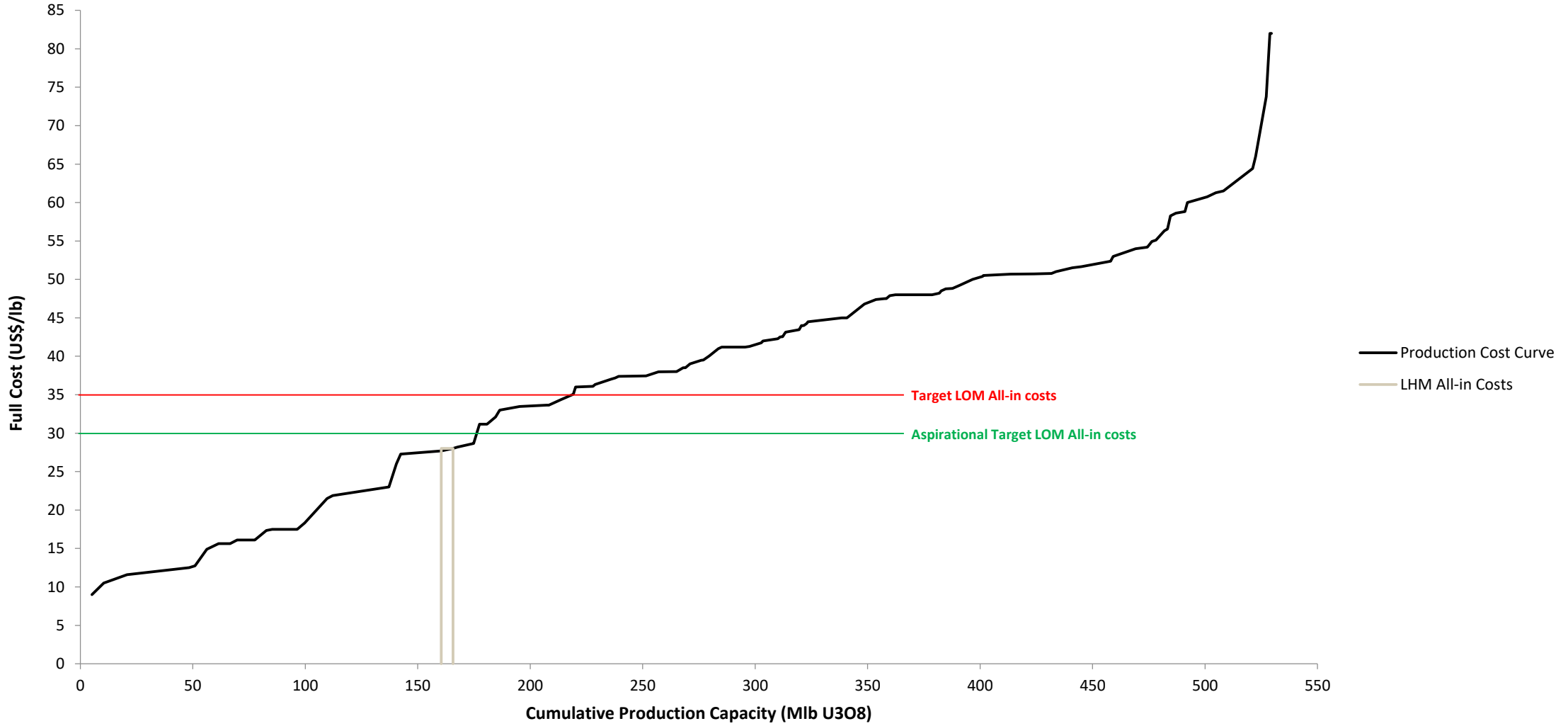
Post production plant optimisation capital requirements (funded from operating cash flows)

Back-End Upgrade Project completion **US$21M** (Balance of project Capex)	Front End Upgrade Project in FY28-30 **US$60M**

Note: BUP total Capex is US$43m, of which US$22m is incurred in FY21 and the remaining US$21m is incurred in FY22.

For personal use only

WORLD WIDE PRODUCT COST CURVE – ALL PROJECTS



Source: UxC Uranium Production Cost Study – September 2017

For personal use only

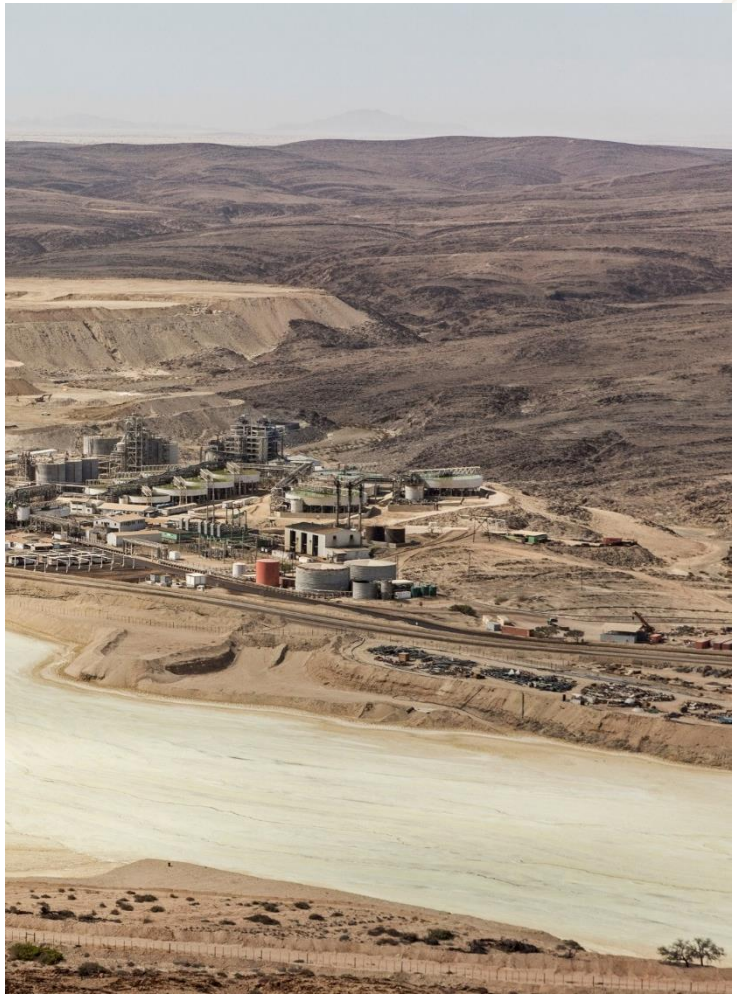
KEYELEKERA

For personal use only

3.3Mlbpa Proven Producer

KAYELEKERA MINE

- Developed mine on care and maintenance – fully built mine commissioned in 2008 with 3.3Mlbpa nameplate capacity
- Restart implementation plan under preparation incorporating optimised economics
- >5 Year Remaining Mine Life[1]
- 10.9Mlb - Production before being placed on care and maintenance in 2014



1 Based on 14Mlb reserve at 30 June 2018

For personal use only

For personal use only

PALADIN ENERGY LTD

CONTACT US

HEAD OFFICE
Level 4, 502 Hay Street
Subiaco Western Australia 6008
PO Box 201, Subiaco, Western Australia 6904

T: +61 (0) 8 9381 4366
E: paladin@paladinenergy.com.au

www.paladinenergy.com.au

INVESTOR RELATIONS
Karen Oswald
T: +61 (0) 423 602 353
E: Karen.oswald@paladinenergy.com.au

APPENDIX

RESOURCE & RESERVE TABLES

For personal use only

30 June 2018

Ore Reserves		Mt	Grade ppm U_3O_8	Mlb U_3O_8	Paladin Ownership %
NAMIBIA	Langer Heinrich				
Proven		42.0	525	48.5	75
Probable		13.1	485	14.0	75
Stockpiles		30.8	355	24.0	75
Total Namibia		**85.9**	**455**	**86.5**	
MALAWI	Kayelekera				
Proven		0.4	1,170	1.0	85
Probable		5.3	880	10.4	85
Stockpiles		1.6	755	2.6	85
Total Malawi		**7.3**	**870**	**14**	

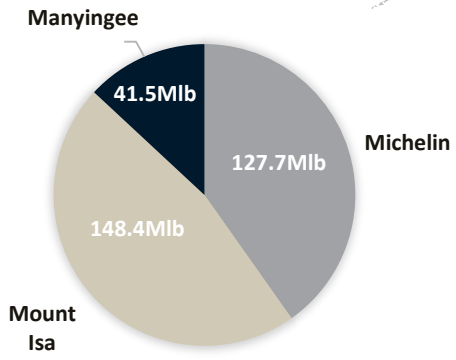
30 June 2018

Mineral Resources		Mt	Grade ppm U_3O_8	Mlb U_3O_8
NAMIBIA	Langer Heinrich			
Measured		60.7	515	68.7
Indicated		21.5	460	21.7
Inferred		8.7	470	9.0
Stockpiles		30.8	355	24.0
Total Namibia		**121.7**	**460**	**123.4**
MALAWI	Kayelekera			
Measured		0.7	1,010	1.7
Indicated		12.7	700	19.6
Inferred		5.4	620	7.4
Stockpiles		1.6	755	2.6
Total Malawi		**20.4**	**695**	**31.3**
CANADA				
Measured	Michelin	17.6	965	37.6
	Rainbow	0.2	920	0.4
Indicated	Gear	0.4	770	0.6
	Inda	1.2	690	1.8
	Jacques Lake	13.0	630	18.0
	Michelin	20.6	980	44.6
	Nash	0.7	830	1.2
	Rainbow	0.8	860	1.4
Inferred	Gear	0.3	920	0.6
	Inda	3.3	670	4.8
	Jacques Lake	3.6	550	4.4
	Michelin	4.5	985	9.9
	Nash	0.5	720	0.8
	Rainbow	0.9	810	1.6
Total Canada		**67.7**	**860**	**127.7**
AUSTRALIA				
Measured	Valhalla	16.0	820	28.9
Indicated	Andersons	1.4	1,450	4.6
	Bikini	5.8	495	6.3
	Duke Batman	0.5	1,370	1.6
	Odin	8.2	555	10.0
	Skal	14.3	640	20.2
	Valhalla	18.6	840	34.5
	Carley Bore	5.4	420	5.0
	Manyingee	8.4	850	15.7
Inferred	Andersons	0.1	1,640	0.4
	Bikini	6.7	490	7.3
	Duke Batman	0.3	1,100	0.7
	Honey Pot	2.6	700	4.0
	Mirrioola	2.0	560	2.5
	Odin	5.8	590	7.6
	Skal	1.4	520	1.6
	Valhalla	9.1	640	12.8
	Watta	5.6	400	5.0
	Warwai	0.4	360	0.3
	Carley Bore	17.4	280	10.6
	Manyingee	5.4	850	10.2
Total Australia		**135.4**	**635**	**189.8**

Figures may not add due to rounding. Mineral Resources and Ore Reserves quoted on a 100% basis

A QUALITY GLOBAL SUITE OF EXPLORATION & DEV. ASSETS

For personal use only



Global Exploration Project Resource Inventory[1]

203Mt at 710ppm U_3O_8 for 144,074t U_3O_8 (317.6Mlb)

Michelin (50%)

- 91,500ha mineral licence in Labrador
- 336,130m of cumulative linear drilling
- US$75M of total historical in ground exploration to-date
- Among largest deposits in North America
- Potential development 2022-2025 timeframe

Status: Pre-development exploration/scoping

Carley Bore (100%)

- Three exploration licences covering 1,013km^2, 100km south of Manyingee
- Acquired in 2015 for US$13M
- Potential for "stand alone" or satellite ISR to Manyingee ISR project

Status: Pre-development exploration/scoping

Mt Isa (82/91/100%)

- Direct 50% interest in 2,724ha of licences and 82% ownership of ASX-listed Summit Resources
- Largest uranium deposit in Queensland
- Potential for future development of 5-7Mlbpa uranium mine

Status: Pre-development exploration/scoping

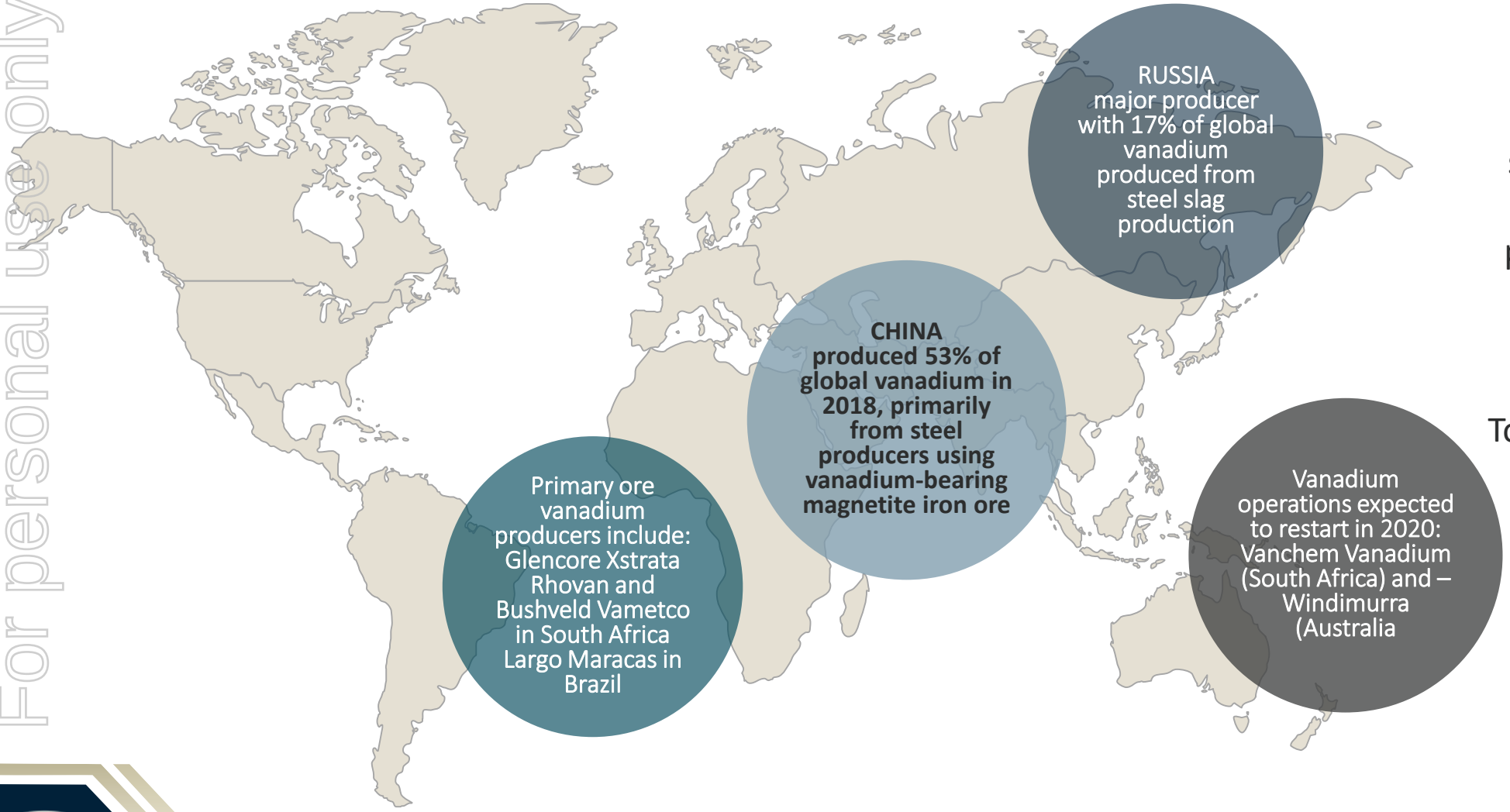
Manyingee (100%)

- Three mining licences covering 1,307ha
- Over US$17.9M of exploration and testing to date including 55,764m of cumulative drilling and field leach trial
- Potential for 1-2Mlbpa ISR mine

Status: Moving to pre-feasibility

GLOBAL VANADIUM PRODUCTION

90% of the world's vanadium is produced by four countries



Vanadium production soared from 2000-2014 as Chinese steel production boomed but no more growth is expected from this source.

Today China produces 140 million tonnes high strength rebar

For personal use only