



# PALADIN ENERGY LTD

---

**Broker Roadshow**  
**April 2020**

Ian Purdy – Chief Executive Officer

# Disclaimer and notes

## JORC and NI 43-101 Mineral resources and ore reserves

This presentation contains summary information about the Company's activities current as at the date of this presentation. The information in this presentation is of a general background nature and does not purport to be complete or contain all the information investors would require to evaluate their investment in the Company, nor does it contain all the information which would be required in a prospectus or product disclosure statement prepared in accordance with the Corporations Act 2001 (Cth). The Company is not responsible for updating, nor undertakes to update, this presentation. This presentation should be read in conjunction with the Company's other periodic and continuous disclosure announcements, available at <http://www.paladinenergy.com.au>.

This presentation includes 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 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 the expectations expressed in the forward-looking statements. Factors that could cause actual results to differ materially from the expectations expressed those in forward looking statements include market prices, exploitation and exploration successes, continued availability of capital and financing and general economic, market or business conditions and risk factors associated with the Uranium industry generally.

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. No representation is made or will be made that any forward-looking statements will be achieved or will prove to be correct.

In this 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 information in this presentation relating to the Mineral Resources and Ore Reserves for all of the Company's deposits other than 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 the JORC Code 2012 on the basis that this information has not materially changed since it was last reported. Refer to the Resource and Reserve Tables slide in the Appendix of this presentation.

### Competent Persons Statement

The information contained within this presentation is extracted from the reports titled '30 June 2019 Annual Report' dated 27.08.2019 and 'Prefeasibility Study Delivers Improved Financials and Production Capacity for Langer Heinrich' dated 14.10.2019 and both are available to view on [www.paladinenergy.com.au](http://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.



# Why Paladin?

---



Paladin has streamlined the company with the sole focus on the restart of the globally significant Langer Heinrich operation in mining friendly Namibia

---



Our existing infrastructure, historic mine development and 10-year operations track record provides Paladin an early mover option in an improving uranium price market

---



Paladin has a strong financial position with US\$35.8M in cash reserves and a FY2021 cash spend forecast of <US\$10M

---



There is a growing structural  $U_3O_8$  supply deficit in the global uranium market which is being exacerbated by COVID 19 production disruptions

---



The company has completed an extensive Restart Pre-Feasibility Study that confirms Langer Heinrich's competitiveness with other large-scale suspended uranium operations

---



We have the right team to deliver & execute the Company's strategy





# Strong financial position

- US\$35.8M of Unrestricted Cash<sup>1,2</sup> provides extended runway for Paladin to execute its strategy
- Significantly reduced cash burn with FY2021 forecast < US\$10M (FY2020 guidance US\$17M) delivered by:
  - Sale of Kayelekera mine
  - Optimised care & maintenance costs at Langer Heinrich
  - Reduced levels of feasibility work
- US\$6M cash due from the sale of Kayelekera mine over the next 3 years (repayment of environmental bond)
- US\$142.2M of senior debt<sup>1</sup> including accrued interest, repayment due January 2023
- Paladin will only consider a restart of the Langer Heinrich operation when it secures uranium term-price contracts with sufficient tenure and value to deliver an appropriate level of return to stakeholders



1. As at 31 March 2020

2. Restricted Cash US\$1M





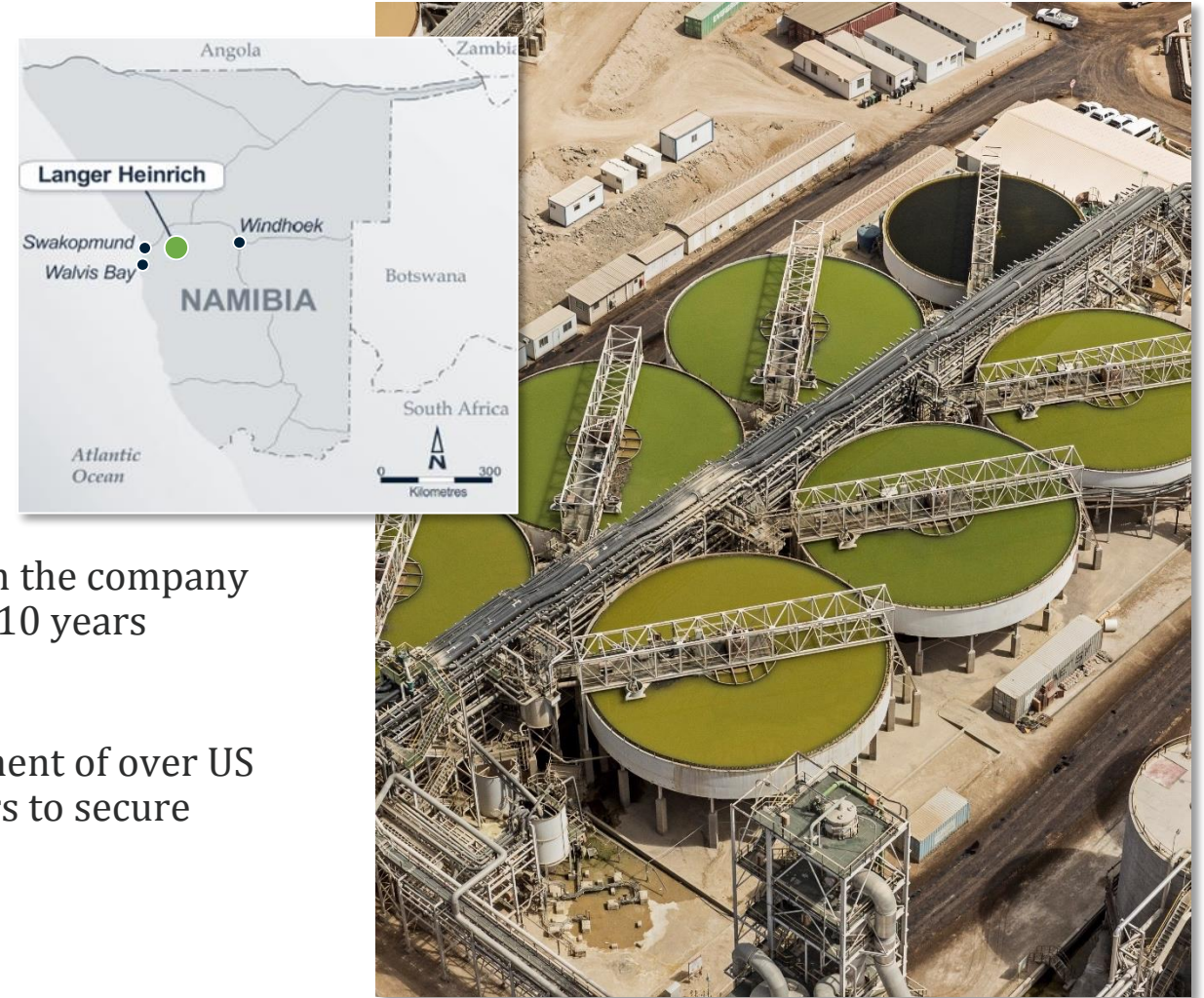
**Langer Heinrich**

**A Globally Significant Uranium Operation**



# Langer Heinrich operation overview

- A strategic, tier one mine with a historical production capacity of 5.2Mlb pa  $U_3O_8$
- Paladin suspended operations in May 2018 due to low uranium prices
- Paladin owns 75% (25% owned by CNNC Overseas Uranium Holding Limited)
- Fully permitted and licensed with a 17-year production life remaining
- Our relationships and uranium product are market proven with the company having produced and marketed 43Mlb of  $U_3O_8$  equivalent over 10 years
- Proven top 10 Uranium mine by volume when in production<sup>1</sup>
- To build Langer Heinrich today would require a capital investment of over US \$600M (plus working capital) and take approximately five years to secure approvals, plan, design, construct and commission



1. UxC Uranium Production Cost Study – August 2017



# Namibia is a premier uranium jurisdiction



Three globally significant Uranium mines (Husab, Rossing and Langer Heinrich) when at full capacity supply ~15% of the world's Uranium (~25Mlb pa  $U_3O_8$ )



Uranium has been continually produced in Namibia since 1976 under a stable mining and Uranium regulation regime



Mining contributes ~25% to the country's GDP



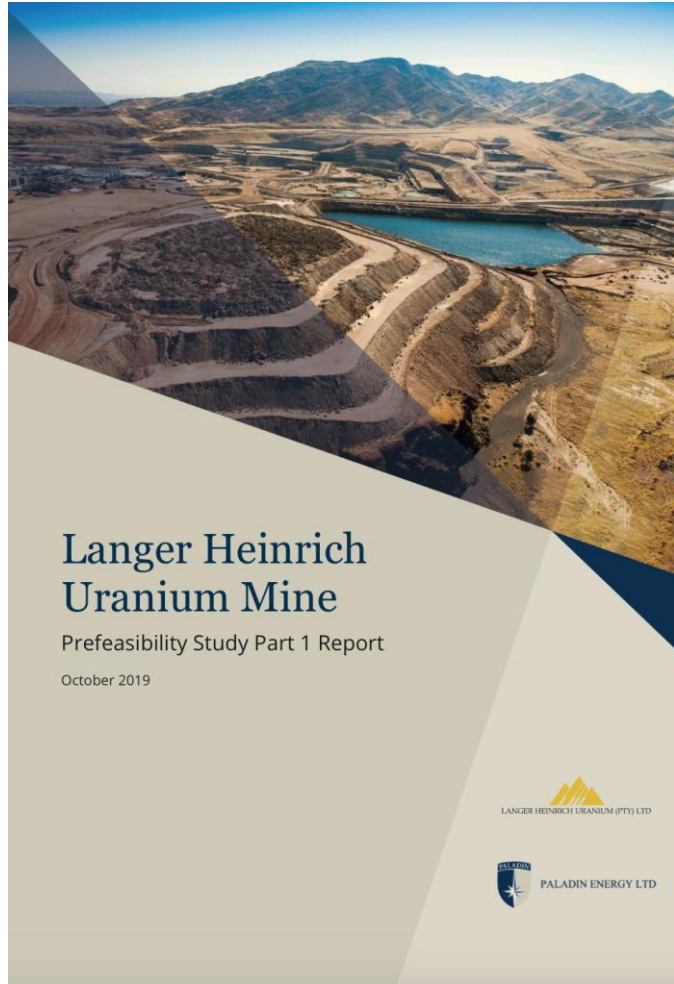
Excellent local infrastructure (port, road, rail, water & power) with proximity to the Walvis Bay industrial hub



Strong community and government support for the uranium industry



# Restart Pre-Feasibility Study complete



Paladin completed a Restart Pre-Feasibility Study in October 2019:

- RC drilling programme provided assurance on high grade mineral resources and stockpiled ore
- Geo-metallurgical testwork programme
- Detailed production restart plan including costs and ramp up schedule
- Processing bottlenecks and growth options identified
- Management systems assessed and optimised
- Process control automation program defined



Externally reviewed and verified by AMC Consultants and PQ Partners



Substantial body of work:

- Six-month programme
- 99,000 labour hours
- Over 100 contributors
- US\$4.8M cost





# Restart Pre-Feasibility Study economics

12-month lead time to first production after a restart decision is made



- Production restart costs (restock reagents, workforce recruitment, recommissioning, mobilisation of equipment, tailings dam and other operational readiness) - US\$42M
- Repairs and asset integrity improvements - US\$38M
- Growth capital improvements to increase production rate - up to US\$30M

1. Capital restart costs divided by annual production volume  
2. Average for first five years restarted production



# Langer Heinrich restart & debottlenecking plan underway

---



Restart & Debottlenecking Plan is currently underway and focused on:

- Pre-Feasibility Study (PFS) outcomes being stress tested to maximise financial returns
- Plant reliability and de-risking restart activities
- Future operational and financial projections being reconciled to historical operational performance
- “Base Case” restart plan to be defined and will fall within the range of economic parameters detailed in the PFS



Detailed ASX market update to be released in Q4 FY2020 with key economic parameters



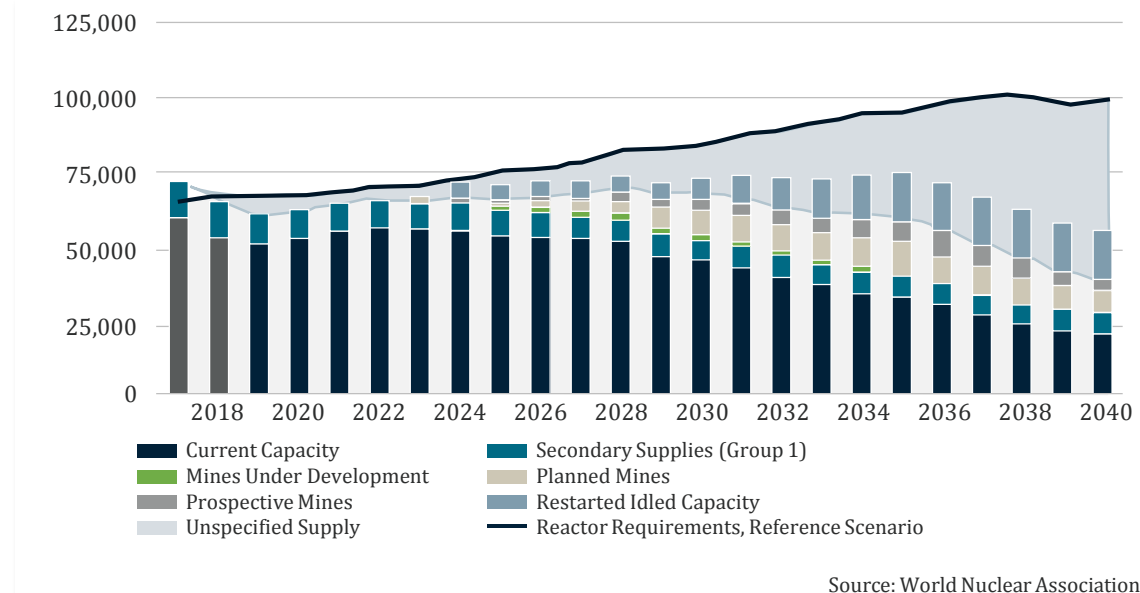


# Why Uranium?

## Positive Structural Dynamics

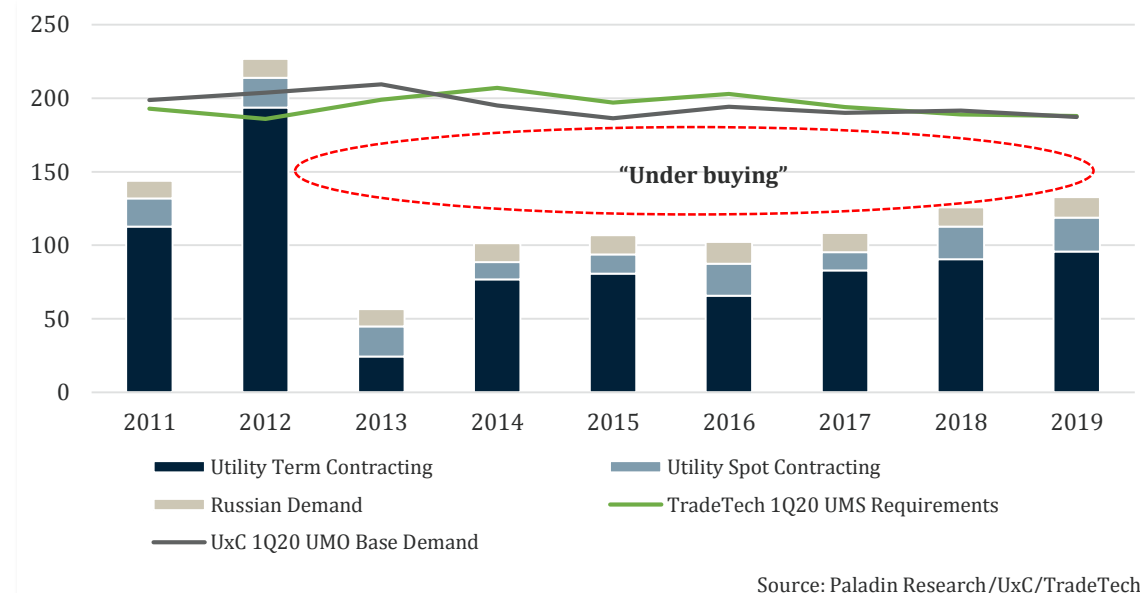
# Structural supply deficit

**World Nuclear Association Supply Shortage Graph**  
Tonnes U



- Current uranium supply unable to meet current demand
- Net increase in new nuclear reactors forecast to be built by 2040, after allowing for projected reactor closures (+135)
- Re-start of idled mine capacity and the development of planned & prospective mines requires incentive prices of US\$40-80/lb

**Stockpile Drawdown**  
Mlb



- Since 2012, utilities have been “under buying” at an average rate of 90Mlb per year relative to consumption
- US and European utilities have largely rundown stockpiles and contract positions put in place pre-Fukushima
- Asian utilities have higher stockpiles than their Western counterparts, but these are also decreasing

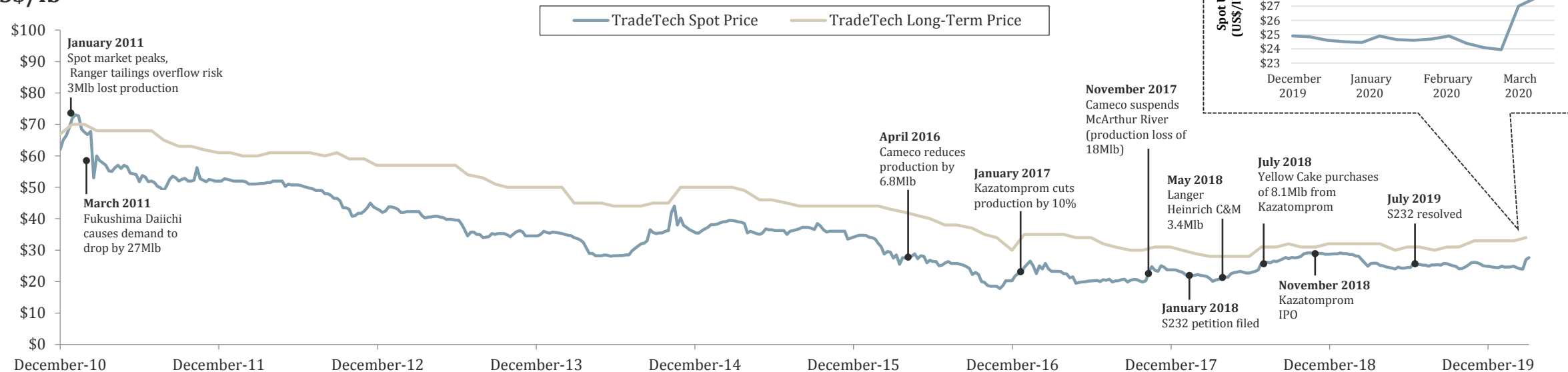




# Current pricing unsustainable

## Uranium Market Prices 2011-20

US\$/lb



Source: TradeTech Nuclear Market Review

## Uranium Prices

- Spot uranium prices have declined approx. 60% since the Fukushima nuclear accident
- Term prices have been below US\$40/lb since mid-2016
- Current pricing is sub-economic for existing producers and below incentive pricing for suspended operations

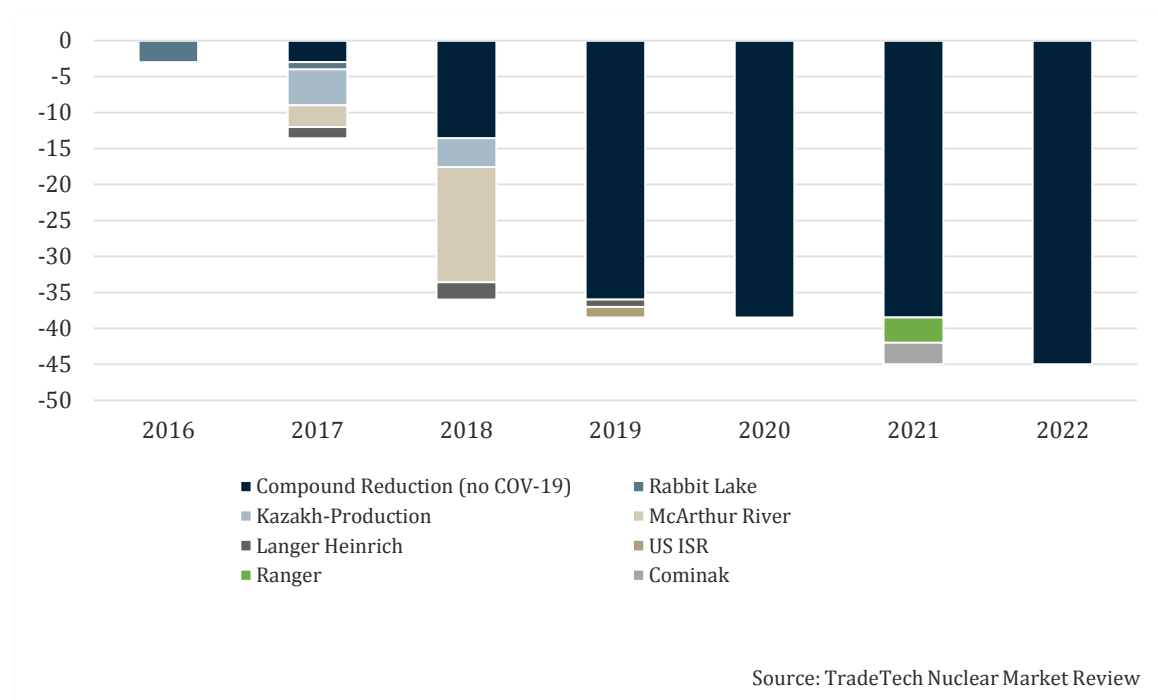
## COVID 19 Disruptions

- Mining operations have been disrupted at Cigar Lake, Kazatomprom and Namibian operations
- Suspensions are exacerbating the structural supply deficit
- Upward movement in the spot market price may be a precursor to term market activity



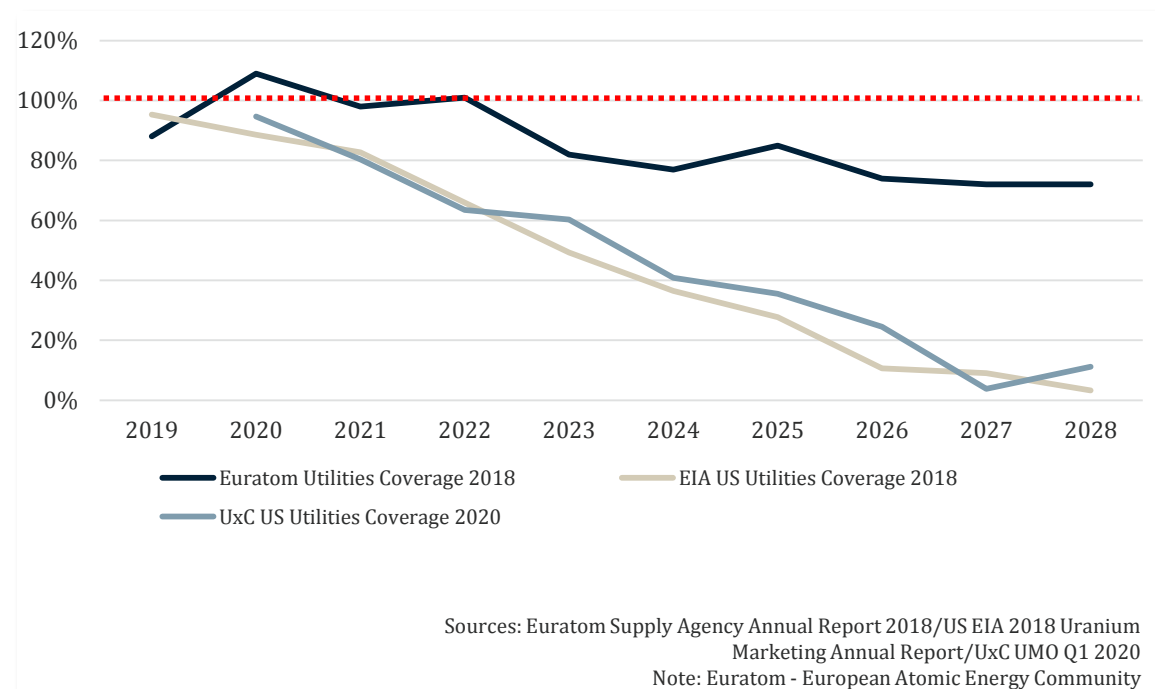
# Impact of sub-economic pricing

## Cumulative Primary Supply Cuts Mlb pa



- Primary uranium production cut-backs announced since 2016 total 45Mlb pa (excluding COVID disruptions)

## Future Contracted Coverage Rates of US & European Utilities Contract coverage (% of total requirements)



- US contract coverage reaching critical lows
- Minimal change in contract coverage since 2018







# Paladin Investment Conclusion



# Paladin investment conclusion

1

## Paladin is poised to take advantage of improving Uranium market

- Growing structural supply deficit
- Primary production cuts continuing
- US utility contract coverage reaching critical lows
- COVID19-related disruptions further tightening supply

2

## Langer Heinrich is competitively positioned versus other suspended mines

- 12-months to recommence production from decision to restart
- Modest restart costs and competitive operating costs
- Proven product quality
- Globally significant operation
- Lower incentive price than green-fields projects

3

## Strong Financial Position

- Significant runway to execute strategy
- Greatly reduced cash burn rate and significant cash on hand
- Disciplined and patient approach
- Flexibility to respond to market conditions





# Appendix



# Paladin corporate snapshot

## Market Snapshot ASX: PDN

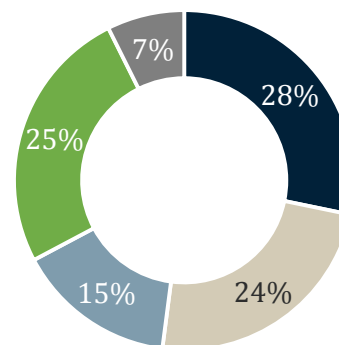
Shares on issue	2.027B
Share price (as at 14 April 2020) A\$	0.093c
Market capitalisation A\$	188.6M
Market capitalisation US\$ <sup>1</sup>	116.9M
Unrestricted cash US\$ <sup>2</sup>	35.8M
Debt US\$ <sup>3</sup>	142.2M

## Major Shareholders<sup>3</sup>

Tembo Capital Management Ltd	12.90%
Paradice Investment Management Pty Ltd	9.52%
Value Partners Ltd <sup>4</sup>	6.86%
Hopu Clean Energy (Singapore) Pte. Ltd.	5.94%

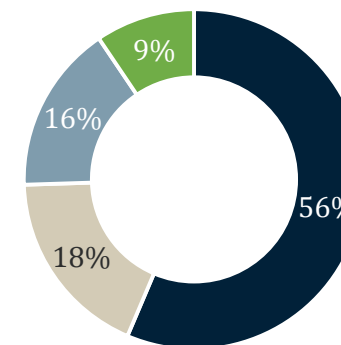
## A Supportive Shareholder Base<sup>5</sup>

### Geographic split



■ Australia ■ Asia ■ North America ■ UK/EU ■ RoW

### Top 50 holders own 90% of shares



■ Top 10 ■ Top 20 ■ Top 50 ■ Remaining Holders

## Specialist Uranium Funds<sup>3</sup>

Sachem Cove Partners, LLC	3.77%
Segra Capital Management, LLC	3.41%

1. A\$/US\$ exchange rate 0.62
2. As at 31 March 2020. Restricted Cash US\$1M
3. As at 31 March 2020
4. As at 8 April 2020
5. As at 29 February 2020



# Meet the new Board and CEO



**Cliff Lawrenson**  
**Non-Executive Chairman**

Mining executive with deep expertise in the minerals and energy sectors derived from global experience having worked extensively in project development and investment banking. A successful track record of leading strategic direction in companies and executing corporate transactions.



**Peter Main**  
**Non-Executive Director**

Mining and finance professional with extensive experience of the financial markets with a wealth of industry experience, having spent almost 15 years in a variety of roles in the mining industry from operations through to CEO of a TSX-V listed mining company.



**Peter Watson**  
**Non-Executive Director**

Chemical engineer with extensive experience in the global resources sector across senior technical, project, and management roles as well as running ASX-listed companies. His experience includes project development, project delivery, asset optimization and mining facilities operations across multiple commodities and global jurisdictions.



**Ian Purdy**  
**Chief Executive Officer**

Highly-respected executive with over three decades' experience within Australian and international resources companies. He has delivered significant shareholder value through managing and optimizing operations, delivering large projects and executing on business improvements and asset sales. He also has extensive capital markets experience and a proven track record of delivering company funding requirements.



# Meet the new management team



**Anna Sudlow**  
**Chief Financial Officer**

Highly qualified CFO with 25 years of experience across the energy and resources sectors specialising in corporate finance and funding, commercial management and investor relations. Her experience includes roles at ASX listed companies in senior leadership positions with a focus on finance and commercial.



**Michael Drake**  
**Chief Operating Officer**

Mining Professional with 25 years of experience in diversified studies, projects and operational leadership roles which included executive leadership roles in Australia, South America, Papua New Guinea and Indonesia with a range of large Australian companies and in diversified operations.



**Gary Stoker**  
**Principal Uranium Marketing Consultant**

Uranium marketing professional with over 30 years' experience in the nuclear fuels industry, working with Paladin in various capacities since 2008. Previously, co-founded a Uranium asset management company with prime responsibility for the management of nuclear fuels trading portfolios. Has worked as an investment advisor to a Uranium fund.



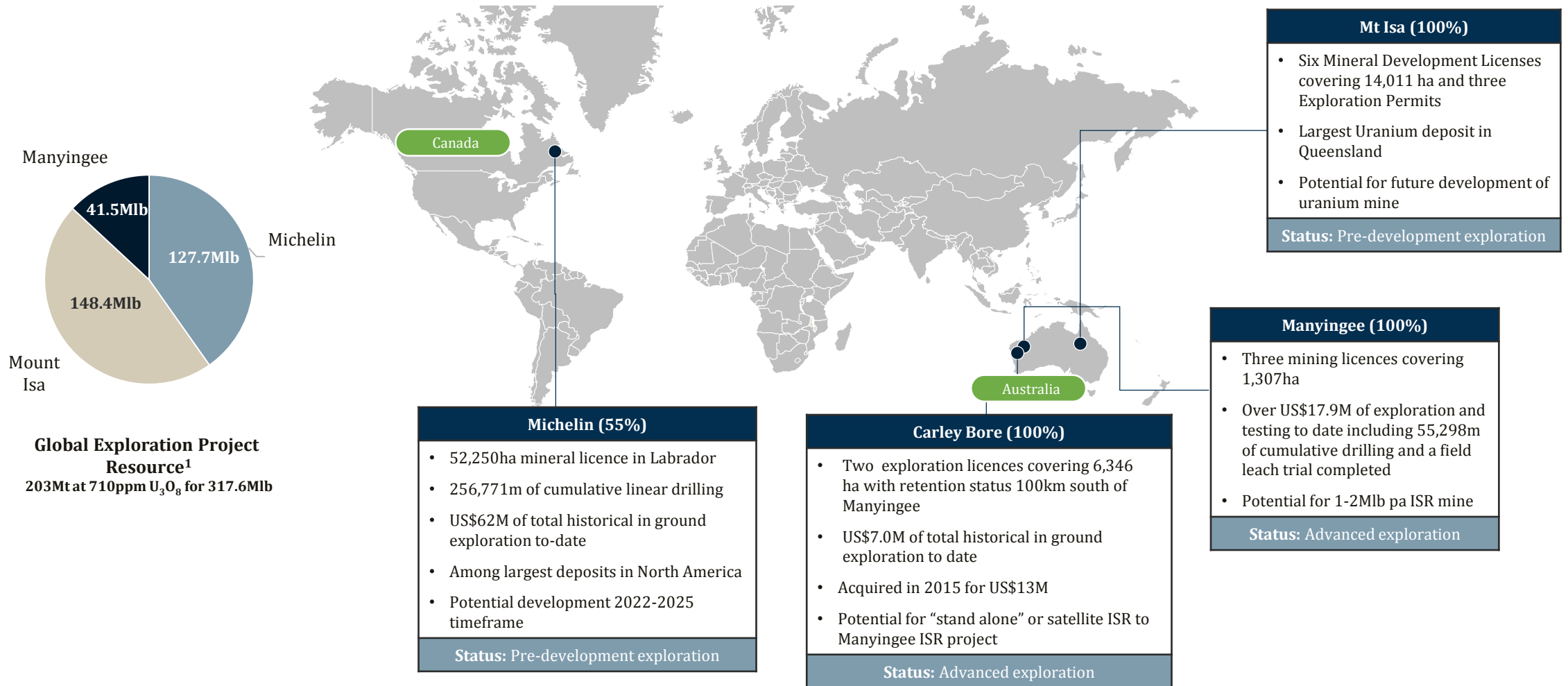
**Andrea Betti**  
**Company Secretary (Consultant)**

Accounting and corporate governance professional with over 20 years' experience in accounting, corporate governance, corporate advisory, finance and corporate banking, and has acted as Chief Financial Officer and Company Secretary for companies in the private and publicly listed sectors.





# A quality global suite of exploration assets



<sup>1</sup> Measured, indicated and inferred resources for the Michelin, Mount Isa and Manyingee Projects (including Carley Bore) on a 100% Project basis as at June 2018.  
Source: Paladin Research



# Resource & reserve tables

30 June 2019

Ore Reserves	Mt	Grade ppm U <sub>3</sub> O <sub>8</sub>	Mlb U <sub>3</sub> O <sub>8</sub>	Paladin Ownership (%)
Namibia	Langer Heinrich			
Proven <sup>16</sup>	42	525	48.5	75
Probable <sup>16</sup>	13.1	485	14	75
Stockpiles <sup>16</sup>	30.8	355	24	75
<b>Total Namibia</b>	<b>85.9</b>	<b>455</b>	<b>86.5</b>	<b>75</b>

Vanadium Mineral Resources	Mt	Grade ppm V <sub>2</sub> O <sub>5</sub>	Mlb V <sub>2</sub> O <sub>5</sub> (100% basis)	Paladin Ownership (%)
Namibia	Langer Heinrich			
Measured <sup>1</sup>	66.2	160	23.3	75
Indicated <sup>1</sup>	18.8	140	5.8	75
Inferred <sup>1</sup>	6.3	135	1.9	75
Stockpiles <sup>1</sup>	30.8	115	7.8	75
<b>Total Namibia</b>	<b>122.1</b>	<b>145</b>	<b>38.8</b>	<b>75</b>

<sup>1</sup>Refer ASX Announcement dated 14.10.2019 "Prefeasibility Study Delivers Improved Financials and Production Capacity For Langer Heinrich" p6; <sup>2</sup>Refer ASX Announcement dated 21.11.08 "Significant Resource Upgrade for Kayelekera"; <sup>3</sup>Refer ASX Announcement dated 31.01.2018 "Correction to 30 June 2017 Annual Report" pp13-15; <sup>4</sup>Refer SEDAR lodgment (TSX:FRG) dated 8.9.2009 "Frontier Reports Positive Preliminary Economic Assessment for Michelin Uranium Project"; <sup>5</sup>Refer Announcement (ASX:SMM) dated 19.10.2010 "Resource Upgrade for the Valhalla Uranium Deposit"; <sup>6</sup>Refer ASX Announcement dated 16.04.2012 "Quarterly Activities Report for period ending 31 March 2012"; <sup>7</sup>Refer ASX Announcement dated 15.04.2011 "Quarterly Activities Report for period ending 31 March 2011"; <sup>8</sup>Refer ASX Announcement dated 31.08.2011 "30 June 2011 Annual Report" p29; <sup>9</sup>Refer ASX Announcement dated 17.01.2012 "Quarterly Activities Report for period ending 31 December 2011"; <sup>10</sup>Refer ASX Announcement dated 13.07.2012 "Quarterly Activities Report for period ending 30 June 2012"; <sup>11</sup>Refer ASX Announcement (ASX:EMX) dated 12.02.2014 "Energia Delivers Significant Uranium Resource Upgrade"; <sup>12</sup>Refer ASX Announcement dated 14.01.2014 "Manyingee Minerals Resources - Amendment"; <sup>13</sup>Refer ASX Announcement dated 10.12.2008 "Maiden Uranium Resource at Valhalla North Project"; <sup>14</sup>Refer ASX Announcement dated 30.08.12 "30 June 2012 Annual Report" p27 and 129; <sup>15</sup>Refer ASX Announcement dated 29.08.2013 "30 June 2013 Annual Report" p24; <sup>16</sup>Refer ASX Announcement dated 27.08.2019 "30 June 2019 Annual Report" p. 14.

The Group is not aware of any new information or data that materially affects the information in the relevant market announcements all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Mineral Resources		Mt	Grade ppm U3O8	Mlb U3O8 (100% basis)	Paladin Ownership (%)
Namibia	Langer Heinrich				
Measured <sup>1</sup>		66.2	490	71.9	75
Indicated <sup>1</sup>		18.8	435	18.0	75
Inferred <sup>1</sup>		6.3	420	5.8	75
Stockpiles <sup>1</sup>		30.8	355	24.0	75
<b>Total Namibia</b>		<b>122.1</b>	<b>445</b>	<b>119.7</b>	<b>75</b>
Canada					
Measured	Michelin <sup>3</sup>	17.6	965	37.6	55
	Rainbow <sup>4</sup>	0.2	920	0.4	55
Indicated	Gear <sup>4</sup>	0.4	770	0.6	55
	Inda <sup>4</sup>	1.2	690	1.8	55
	Jacques Lake <sup>3</sup>	13.0	630	18.0	55
	Michelin <sup>3</sup>	20.6	980	44.6	55
	Nash <sup>4</sup>	0.7	830	1.2	55
	Rainbow <sup>4</sup>	0.8	860	1.4	55
Inferred	Gear <sup>4</sup>	0.3	920	0.6	55
	Inda <sup>4</sup>	3.3	670	4.8	55
	Jacques Lake <sup>3</sup>	3.6	550	4.4	55
	Michelin <sup>3</sup>	4.5	985	9.9	55
	Nash <sup>4</sup>	0.5	720	0.8	55
	Rainbow <sup>4</sup>	0.9	810	1.6	55
<b>Total Canada</b>		<b>67.6</b>	<b>860</b>	<b>127.7</b>	<b>55</b>
Australia					
Measured	Valhalla <sup>5</sup>	16.0	820	28.9	100
Indicated	Andersons <sup>6</sup>	1.4	1,450	4.6	100
	Bikini <sup>7</sup>	5.8	495	6.3	100
	Duke Batman <sup>8</sup>	0.5	1,370	1.6	100
	Odin <sup>9</sup>	8.2	555	10.0	100
	Skal <sup>10</sup>	14.3	640	20.2	100
	Valhalla <sup>5</sup>	18.6	840	34.5	100
	Carley Bore <sup>11</sup>	5.4	420	5.0	100
	Manyingee <sup>12</sup>	8.4	850	15.7	100
Inferred	Andersons <sup>6</sup>	0.1	1,640	0.4	100
	Bikini <sup>7</sup>	6.7	490	7.3	100
	Duke Batman <sup>8</sup>	0.3	1,100	0.7	100
	Honey Pot <sup>13</sup>	2.6	700	4.0	100
	Mirrioola <sup>14</sup>	2.0	560	2.5	100
	Odin <sup>9</sup>	5.8	590	7.6	100
	Skal <sup>10</sup>	1.4	520	1.6	100
	Valhalla <sup>5</sup>	9.1	640	12.8	100
	Watta <sup>15</sup>	5.6	400	5.0	100
	Warwai <sup>15</sup>	0.4	360	0.3	100
	Carley Bore <sup>11</sup>	17.4	280	10.6	100
	Manyingee <sup>12</sup>	5.4	850	10.2	100
<b>Total Australia</b>		<b>135.4</b>	<b>635</b>	<b>189.9</b>	<b>100</b>
<b>Total Mineral Resources</b>		<b>325.1</b>	<b>610</b>	<b>349.8</b>	





## CONTACT US

### HEAD OFFICE

Level 4, 502 Hay Street  
Subiaco Western Australia 6008

T: +61 (0) 8 9423 8117

E: [paladin@paladinenergy.com.au](mailto:paladin@paladinenergy.com.au)

[www.paladinenergy.com.au](http://www.paladinenergy.com.au)