

**BOSS**  
ENERGY LTD

# ENHANCED FEASIBILITY STUDY RESULTS

*Australia's Next Uranium Producer*

JUNE 2021

ASX: BOE | OTC: BQSSF | @BOSS\_ENERGY



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The information in this document relating to the Enhanced Feasibility Study (“EFS”) is extracted from the announcement entitled ‘Updated Feasibility Study identifies lower costs and increased financial returns’ dated 21<sup>st</sup> June 2021. Boss Energy confirms that all the material assumptions underpinning the production targets, and forecast financial information derived from the production targets, continue to apply and have not materially changed.

As the EFS utilises a portion of Inferred Mineral Resources, the ASX Listing Rules require a cautionary statement to be included in this presentation. The EFS is based on a Mineral Resources Estimate in accordance with JORC guidelines 2012 (ASX: 149% Increase in Measured and Indicated Resources at Honeymoon date 25 February 2019). The Company advises that the EFS uses a portion of Inferred Resources; in the first 3 years (less than 4%) and over the 11-year life of mine (24.7%). The Company confirms that the use of Inferred Resources is not a determining factor to the Honeymoon Project’s economic viability. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration or evaluation work will result in the determination of Indicated Resources or that the production targets reported in this announcement will be realised.

## REFERENCE TO PREVIOUS ASX ANNOUNCEMENTS

The mineral resource estimate and exploration target in this announcement were reported by the Company in accordance with listing rule 5.8 and 5.7 (respectively) on 25 February 2019 and 25 March 2019, respectively. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimates in the previous announcement continue to apply and have not materially changed.

In relation to the exploration target, this does not include areas of the existing mineral resource and the potential quantity and grade reported are conceptual only in nature. Insufficient exploration has been conducted to estimate a mineral resource and it is uncertain whether future exploration will lead to the estimation of a mineral resource in the defined areas.

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# INTRODUCTION



# HONEYMOON URANIUM PROJECT

A technically proven, low-cost re-start operation in a uranium friendly jurisdiction



Honeymoon is a brownfield project that has produced and exported  $U_3O_8$  to global markets



Industry competitive upfront capital requirement of only US\$80M



Tier one, 1<sup>st</sup> world mining jurisdiction of South Australia; a destination of choice for utilities



Fast track to production, <12 months from Final Investment Decision to first  $U_3O_8$  production



Low-cost producer; LOM average AISC of US\$25.6/lb, AIC of US\$31.9/lb and Cash Costs of US\$18.5/lb



Fully permitted. All Native Title Agreements in place. Ready to go when the uranium price rebounds





# HONEYMOON'S PATH FORWARD

Project finance and offtake negotiations underway seeking to maximise Boss' exposure to  $U_3O_8$  price recovery

- **Strategic timetable** aimed at ensuring Boss signs long-term offtake agreements when prices strengthen, locking in robust margins and substantial free cashflow
- The EFS has confirmed **reduced operating costs** and **increased nameplate capacity** up to 2.45Mlb p.a.  $U_3O_8$  by adopting Ion Exchange production using NIMCIX columns
- Honeymoon has a valid Uranium Mineral Export Permission for 3.3Mlb p.a. **No further permitting required**
- **Substantial scope to extend LOM and/or increase production profile** utilising the known JORC Resource and significant defined Exploration Target of up to 190Mlb
- **Strong potential to increase free cashflow substantially**, targeting an increased production profile and commensurate reduction in unit costs of production
- **Engagement with potential debt providers underway**. Honeymoon has one of the lowest capital intensities in the uranium sector with an added advantage of being a technically proven, re-start operation
- **Negotiations and tenders with utilities ongoing**, with fuel buyers showing increased interest in Honeymoon



# KEY MILESTONES ACHIEVED

Track record of delivering project growth while technically de-risking the Honeymoon re-start strategy

Milestone	Date	Status
Acquisition of Honeymoon Uranium Project - global <b>Resources of 16.6Mlb U<sub>3</sub>O<sub>8</sub></b>	Dec 2015	✓
Scoping study confirming <b>low capital requirements and operating costs for Honeymoon re-start</b>	Sept 2016	✓
<b>PFS - 2Mlb p.a. U<sub>3</sub>O<sub>8</sub> production</b> , significant potential for economic upside with further resource expansion and/or LOM extension	May 2017	✓
Field Leach Trial - improved leach chemistry results in historic high tenors (>80mg/L U <sub>3</sub> O <sub>8</sub> ) exceeded plant design. <b>Ion Exchange process successfully proved</b> with excellent performance of selected resins on Honeymoon conditions	Nov 2017	✓
Boss acquired the remaining 20% of Honeymoon project - <b>100% ownership</b>	Mar 2018	✓
Mineral Resource upgrade - global <b>Resources of 71.6 Mlb U<sub>3</sub>O<sub>8</sub></b> , increasing Honeymoon's re-start area to 36Mlb contained U <sub>3</sub> O <sub>8</sub>	Feb 2019	✓
Australian Government renews Honeymoon's <b>Export Permit for 3.3Mlb p.a. U<sub>3</sub>O<sub>8</sub></b> , planned operations fully permitted	Apr 2019	✓
<b>Feasibility Study confirming Honeymoon as Australia's next Uranium Producer</b> with global first mover advantage. 12 month timeframe from Final Investment Decision to production	Jan 2020	✓
<b>\$15M Capital Raising at \$0.067/sh</b> - to fund ongoing technical process optimisation studies and exploration activities	Oct 2020	✓
Comprehensive geological review of historic database while site activities were restricted due to COVID-19	2020	✓
<b>\$60M Capital Raising at \$0.14/sh</b> - acquisition of 1.25Mlb U <sub>3</sub> O <sub>8</sub> strategic inventory to strengthen off-take and project funding negotiations	Mar 2021	✓
Enhanced Feasibility Study - incorporating <b>NIMCIX Ion Exchange columns, vastly reduced execution risk</b>	Jun 2021	✓
Progress off-take negotiations and project financing efforts		Ongoing
Develop a plan for increasing production profile and extending mine life through development of satellite resources		Ongoing
Maintain a strong exploration focus		Ongoing



# INVESTMENT RATIONALE

An institutional grade uranium developer in a Tier 1 jurisdiction



## Advanced Stage Developer

12 month pathway to production (post-FID)



## Existing Infrastructure

Sunk cost of A\$170M



## Tier 1 Jurisdiction

Fully Permitted  
3.3Mlb p.a.  
Export License



## Strong ESG Focus

Towards sustainable mining



## Robust Financials

47% IRR  
62% EBITDA Margin



## Board and Management

with proven uranium experience



**<US\$32/lb**  
**All in Cost (AIC)**  
Global low cost producer



**US\$309M**  
NPV<sub>8%</sub>, Pre-tax  
at US\$60/lb



**1.25Mlb**  
Physical U<sub>3</sub>O<sub>8</sub>  
inventory



**Exploration Upside**  
Multiple brownfield expansion targets





# HONEYMOON EFS RESULTS

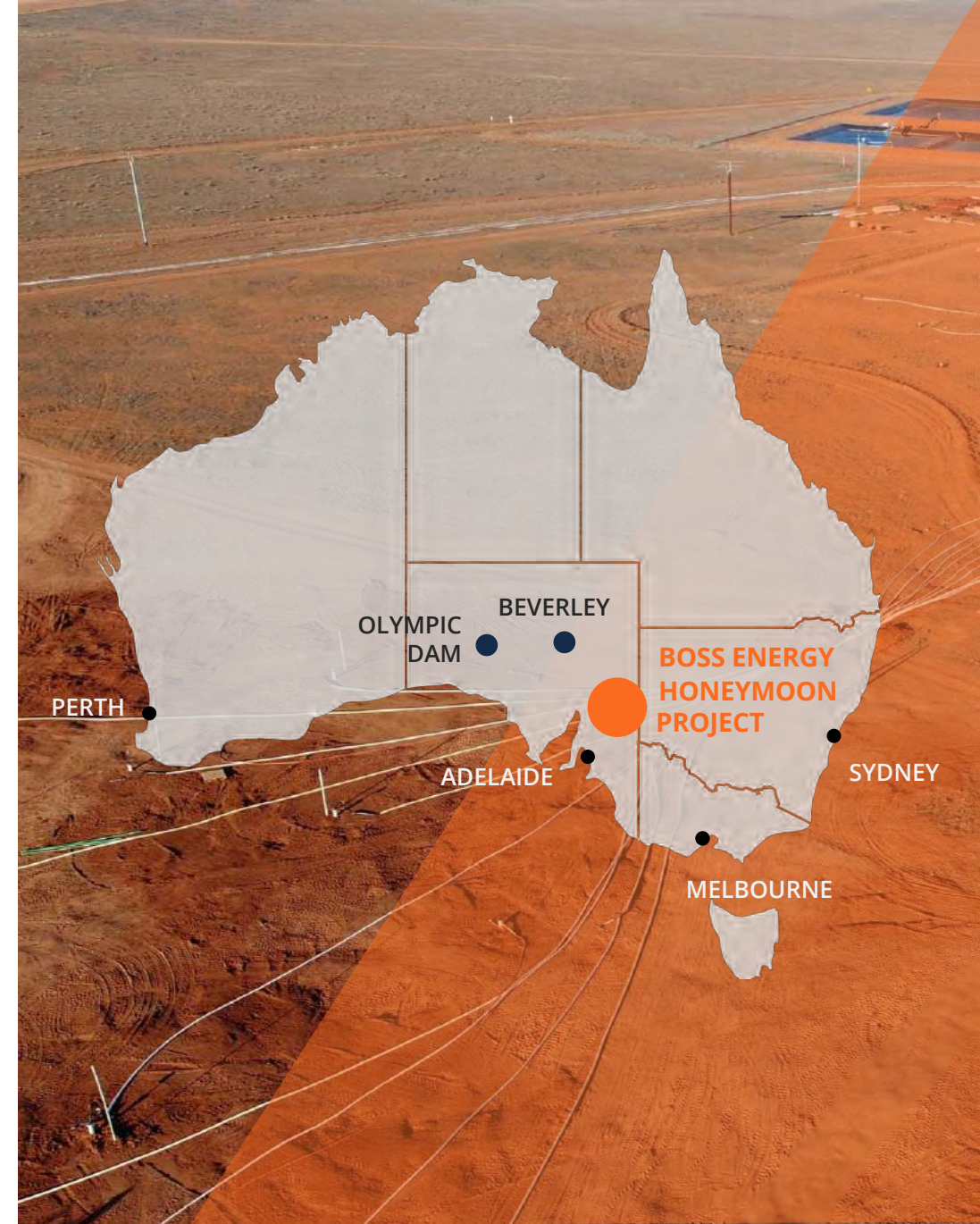




# EFS OVERVIEW

## A pivotal step in Honeymoon's path to production

- The EFS has delivered a more resilient, sustainable mining operation
  - Higher confidence NIMCIX columns, replacing traditional SX
  - Reduced uncertainty in all capital and operating cost inputs
  - Finalised all required permits for production re-start
- Optimised utilisation of installed infrastructure through increased production profile (up from 2.00Mlb p.a. to 2.45Mlb p.a.)
- Reduced unit cost of production to US\$25.62/lb AISC
  - Improved financial returns
  - More robust throughout U<sub>3</sub>O<sub>8</sub> price cycles
- Improved level of confidence and detail
  - Streamline project financing process
  - Vastly reduced technical execution risk in construction and commissioning phase of development





# TECHNICAL IMPROVEMENTS

Continuous improvement and technical advances has greatly improved the operability of Honeymoon

- The below table summarises key improvements at Honeymoon, addressing historical issues encounter by Uranium One

	Uranium One	Boss Energy Improvements	Proven Outcomes
Leach Fluid Stability	pH ~2	pH 1.5	Increase silica stability
	Low iron	1.5 g/L iron	'Ties-up' sulphate (supressing gypsum formation)
	Large bleed treatment	Groundwater pre-treatment	Cost effective calcium and chloride removal
High Operating Cost	Solvent Extraction (100%)	NIMCIX (EFS 100%)	Lower unit costs
	High pH / low iron	Revised leach chemistry	Faster leaching – higher feed grade
	Unstable leachate	Stable leachate	Lower wellfield maintenance
Low Uranium Production	Solvent Extraction only	Modular NIMCIX	Enables much higher throughput with lower footprint
	Complex operation	Simple operation	Less operators / unit production
Product Quality	Organic (SX) contamination	Eliminated	Improved product safety and saleability
	Iron contamination	Iron does not load on IX	Lower probability of iron rejection
	Low wash capacity	Introduced 2 stage re-pulp	Improved product wash efficiency
	Vacuum dryer (UO <sub>4</sub> )	Calciner (U <sub>3</sub> O <sub>8</sub> )	Higher packing density Improved customer acceptance
Environmental	Potential for solvent loss to wellfield	Eliminated through IX	Lower environmental impact



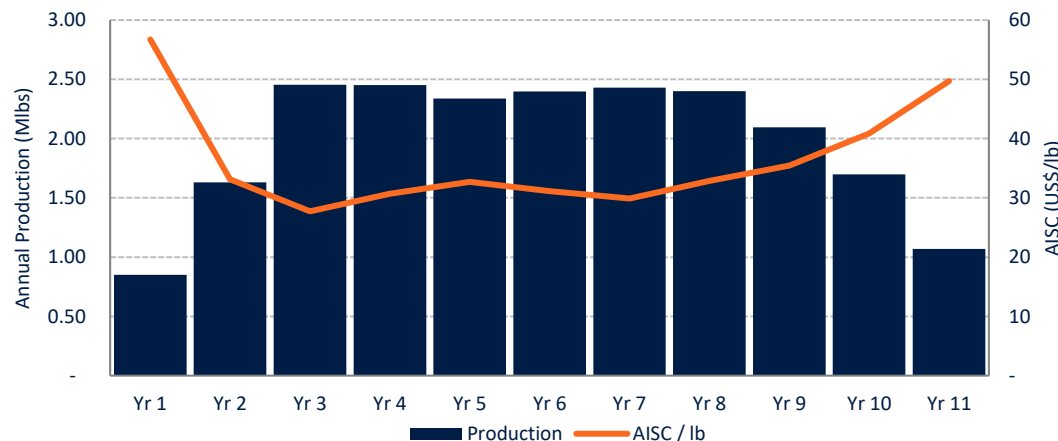


# FINANCIAL HIGHLIGHTS

Honeymoon's low cost of production delivers robust financial returns

<b>US\$309M</b> <b>NPV</b> 8%, Pre-tax	<b>US\$25.62/lb</b> <b>AISC</b>
<b>62%</b> <b>EBITDA Margin</b>	<b>Low US\$80M</b> <b>Capital Cost</b>

## PRODUCTION SUMMARY



KEY STUDY OUTCOMES		2020 FS <sup>1</sup>	2021 EFS	Change
<b>Physical Summary</b>				
Life of Mine	Years	12	11	
U <sub>3</sub> O <sub>8</sub> Production	Mlb	20.74	21.81	5%
<b>Financial Summary</b>				
NPV <sub>8%, Pre-tax</sub>	US\$M	228.3	308.7	35%
IRR <sub>Ungeared, Pre-tax</sub>	%	51.4%	47.1%	
Revenue	US\$M	1,199	1,279	7%
Free Cash Flow (Pre-tax)	US\$M	452	580	28%
EBITDA Margin	%	53%	62%	17%
<b>Operating Costs</b>				
Cash Cost	US\$/lb U <sub>3</sub> O <sub>8</sub>	23.3	18.5	(21%)
All In Sustaining Cost	US\$/lb U <sub>3</sub> O <sub>8</sub>	30.5	25.6	(16%)
All In Cost	US\$/lb U <sub>3</sub> O <sub>8</sub>	35.9	31.9	(11%)
<b>Capital Costs</b>				
Re-start	US\$M	69.7	60.2	(14%)
Additional IX Columns	US\$M	-	19.8	
<b>Total</b>	US\$M	69.7	80.0	15%

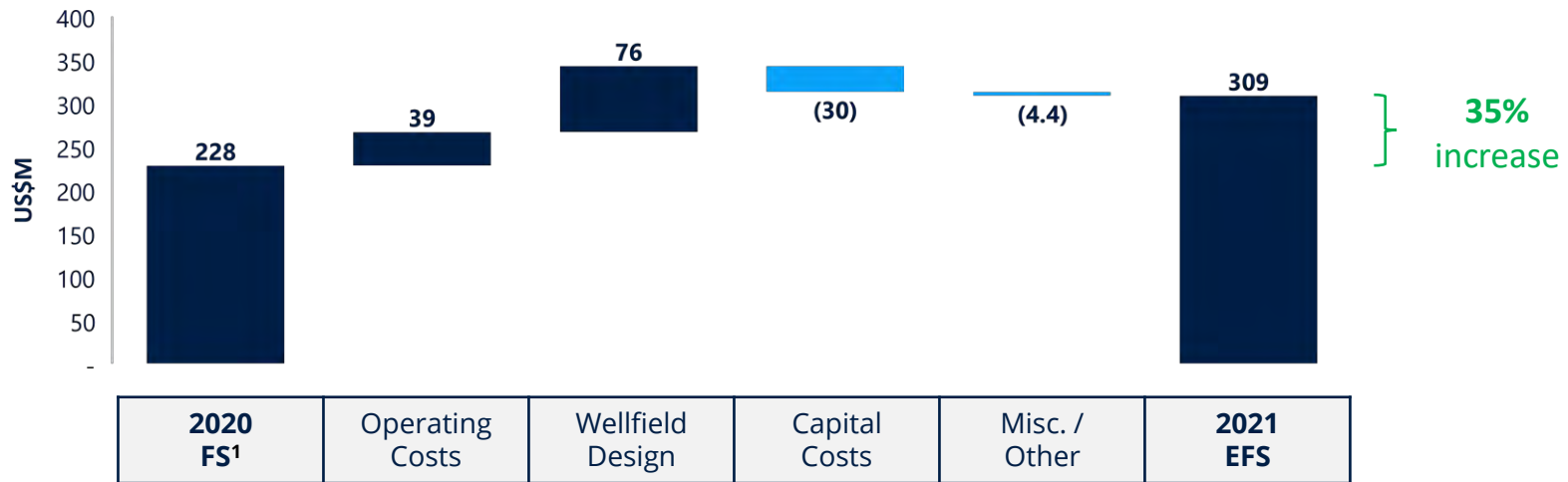
<sup>1</sup> For comparative purposes only, the key financial outcomes for the Feasibility Study have been presented in the table above using a U<sub>3</sub>O<sub>8</sub> price of US\$60/lb and an exchange rate of A\$1:US\$0.75. Nothing in the above table changes the results of the Feasibility Study released on the ASX on 21 January 2020



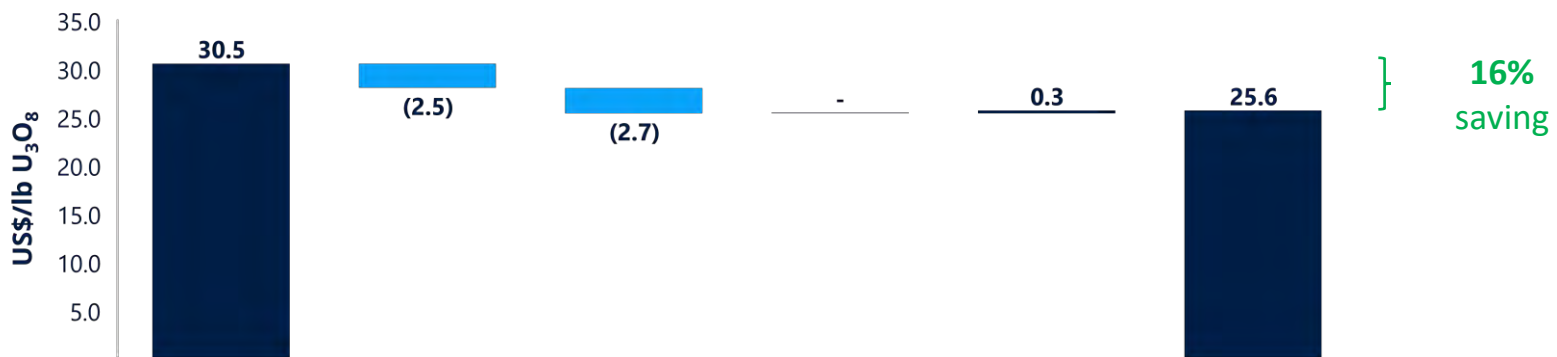
# COMPARISON TO JANUARY 2020 FS

The EFS has delivered significantly improved returns and operating costs

**NPV<sub>8%</sub>**  
(Pre-tax)



**AISC**



<sup>1</sup> For comparative purposes only, the key financial outcomes for the Feasibility Study have been presented in the table above using a U<sub>3</sub>O<sub>8</sub> price of US\$60/lb and an exchange rate of A\$1:US\$0.75. Nothing in the above graphs changes the results of the Feasibility Study released on the ASX on 21 January 2020

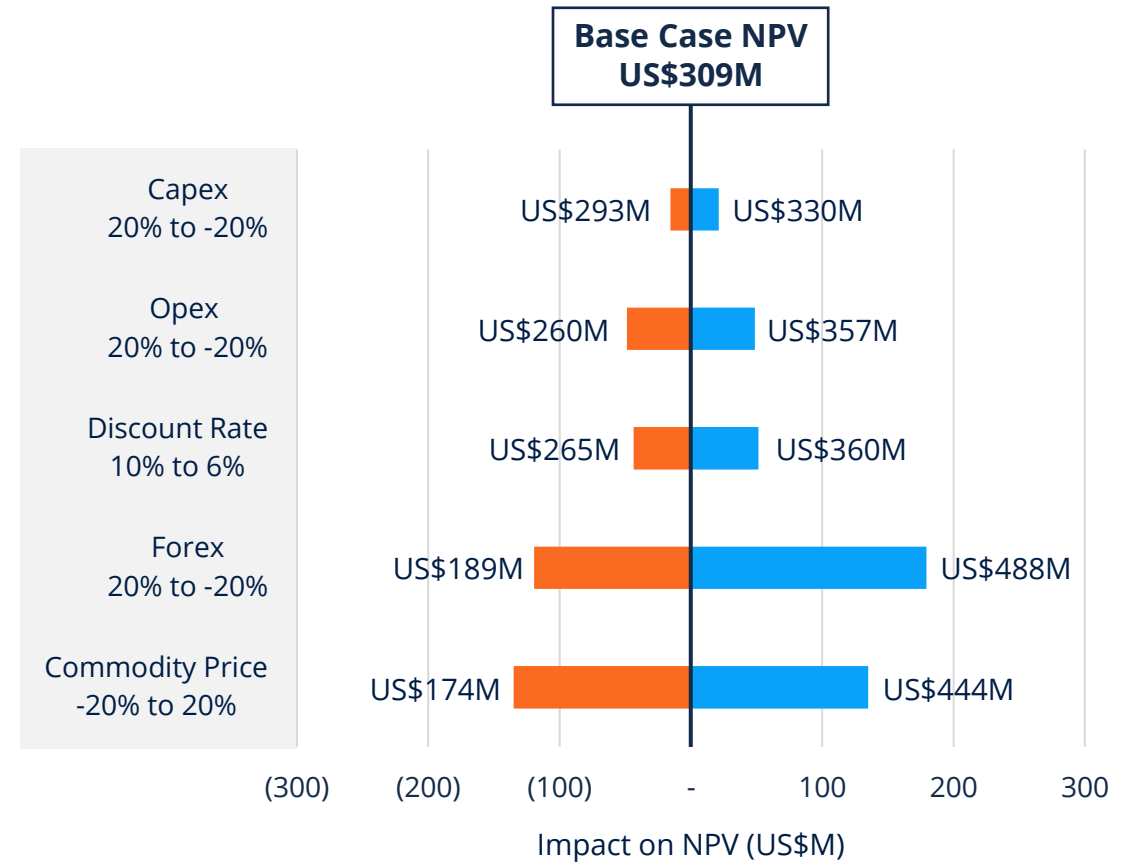




# SENSITIVITY ANALYSIS

## Key input sensitivities and impact on NPV

- Variances to Honeymoon's upfront capital cost and ongoing operating costs do not have a material impact on project value
  - Confirms Honeymoon's **low capital intensity** and **low cost of production**
  - 20% increase in capital costs results in the NPV decreasing by only 5%
  - 20% increase in operating costs results in the NPV decreasing by only 16%
- As expected, the underlying uranium price and foreign exchange rate have the biggest impact on project return
  - Boss is **highly leveraged to future uranium price improvements**
  - 20% increase in base case uranium price delivers a 44% uplift in NPV





# OPPORTUNITIES

Further upside to the EFS results leveraging known Resources and improving technologies

- The below table highlights several of the remaining opportunities for Honeymoon following completion of the EFS

OPPORTUNITY	DESCRIPTION
LOM Extension	<ul style="list-style-type: none"><li>• The EFS is based on 36Mlb of Honeymoon's total JORC Resources of 71.6Mlb U<sub>3</sub>O<sub>8</sub><sup>1</sup></li><li>• Potential to incorporate existing Resources at Gould's Dam and Jason's into a LOM extension<ul style="list-style-type: none"><li>- Gould's Dam contains ~<b>25Mlb U<sub>3</sub>O<sub>8</sub></b> (22.1Mt at 514ppm)<sup>1</sup></li><li>- Jason's contains ~<b>11Mlb U<sub>3</sub>O<sub>8</sub></b> (6.2Mt at 790ppm)<sup>1</sup></li><li>- Both projects are within pumping distance of Honeymoon's processing infrastructure</li></ul></li><li>• Additional ongoing exploration efforts have significant potential to deliver a near-mine discovery</li></ul>
Expanded Production Capacity	<ul style="list-style-type: none"><li>• Honeymoon is fully permitted to produce and export up to 3.3Mlb p.a.<sup>2</sup><ul style="list-style-type: none"><li>- Updated EFS Ion Exchange plant design allows for future expansion in existing plant footprint</li><li>- Potential increase of ~35% to annual production rate</li><li>- Expanded production capacity would be expected to deliver a reduced unit cost of production</li><li>- Possible improved offtake terms for larger volumes</li></ul></li></ul>
Reagents	<ul style="list-style-type: none"><li>• Continued improvements in reagent technologies create ongoing opportunities for Honeymoon<ul style="list-style-type: none"><li>- New improved, lost-cost IX resins</li><li>- Alternative and low-cost oxidants for the leach solution</li><li>- Potential to refine reagent dosing regimes through ongoing metallurgical test work and process control optimisation</li></ul></li></ul>

<sup>1</sup> Refer ASX announcement 25 February 2019. Refer Slide 18 for full JORC Resource for Honeymoon

<sup>2</sup> Refer ASX announcement 8 April 2019





# HONEYMOON: A BIRD'S EYE VIEW

Site Infrastructure (Sunk Cost of \$170M)

WATER  
TREATMENT  
PLANT

PRODUCTION  
WELL  
FIELDS

CONTROL  
CENTRE

ADMIN  
BUILDINGS

CAMP

PRODUCTION  
FACILITY

WORKSHOP

PLS  
PONDS





# STRATEGIC URANIUM INVENTORY

Boss' investment in strategic uranium inventory complements the Honeymoon Project



## OPTIMISE RESTART TIMING

- Provides restart optionality
- Exercise patience in a rising price environment - platform to maximise shareholder value
- Enhanced visibility to uranium price movements



## OFFTAKE FLEXIBILITY

- Boss presents as an attractive counterparty
- Retain off-take contract execution flexibility
- Potential to sell into offtake(s) either before Honeymoon's restart, during commissioning or into the future
- Remain fully leveraged to future price increases



## STRENGTHEN BALANCE SHEET

- Strengthens the balance sheet - leverage to the uranium price
- Delivers optionality - ability to use inventory as collateral to support Honeymoon's future funding requirements
- Provide initial funding towards Honeymoon's re-start capital requirements



## ALIGNED WITH HONEYMOON

- De-risks contract delivery during commissioning phase
- Uranium inventory equates to ~70% of the first 6 months of production
- Purchase price lower than Honeymoon's average all-in cost (AIC) of production ~US\$32/lb



## MARKETING ADVANTAGES

- Significant benefits for uranium marketing
- Strengthening the marketing infrastructure and in-house management expertise for the purchase and trading of uranium
- Ability to layer contracts over time - first mover advantage amongst ASX peers





# EFS RESULTS SUMMARY

Key financial results for prices between US\$40 and US\$80/lb U<sub>3</sub>O<sub>8</sub> and foreign exchange of 0.75 AUD:USD

FINANCIAL METRICS	US\$40/lb U <sub>3</sub> O <sub>8</sub>		Base Case US\$60/lb U <sub>3</sub> O <sub>8</sub>		US\$80/lb U <sub>3</sub> O <sub>8</sub>		
	A\$	US\$	A\$	US\$	A\$	US\$	
Revenue	\$M	1,139	854	1,705	1,279	2,272	1,704
EBITDA	\$M	528	396	1,058	793	1,588	1,191
Re-start Capex	\$M	84	63	84	63	84	63
Additional IX Columns Capex	\$M	28	21	28	21	28	21
Free Cash flow (Pre-tax)	\$M	244	183	774	580	1,304	978
Free Cash flow (Post-tax)	\$M	187	140	567	425	938	704
<b>IRR (Pre-tax)</b>	%	19.2%	<b>19.2%</b>	47.1%	<b>47.1%</b>	69.6%	<b>69.6%</b>
IRR (Post-tax)	%	15.2%	<b>15.2%</b>	37.2%	<b>37.2%</b>	54.7%	<b>54.7%</b>
<b>NPV 8% (Pre-tax)</b>	\$M	94	<b>71</b>	412	<b>309</b>	729	<b>547</b>
NPV 8% (Post-tax)	\$M	58	<b>44</b>	285	<b>214</b>	506	<b>380</b>
Revenue p.a. (Steady State <sup>1</sup> )	\$M	113	<b>84</b>	169	<b>126</b>	225	<b>168</b>
EBITDA p.a. (Steady State <sup>1</sup> )	\$M	55	<b>41</b>	107	<b>81</b>	160	<b>120</b>
AISC <sup>2</sup>	\$/lb U <sub>3</sub> O <sub>8</sub>	32.5	<b>24.4</b>	34.2	<b>25.6</b>	35.8	<b>26.9</b>
<b>AIC <sup>3</sup></b>	\$/lb U <sub>3</sub> O <sub>8</sub>	40.8	<b>30.6</b>	42.5	<b>31.9</b>	44.2	<b>33.1</b>

<sup>1</sup> Steady State - 5th Quarter to 48th Quarter of production

<sup>2</sup> AISC = all mining costs, onsite processing costs, onsite general and administrative costs, logistical costs, royalties and sustaining capital expenditure

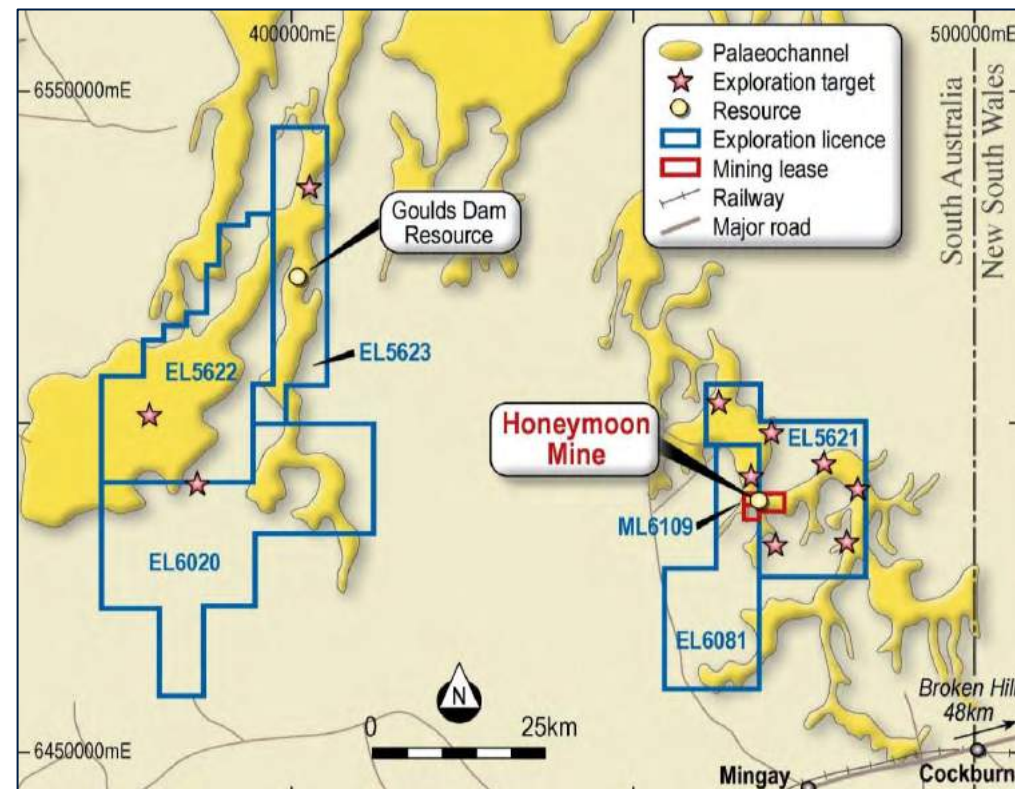
<sup>3</sup> AIC = AISC + upfront and deferred capital expenditure



# JORC RESOURCES

Solid base with significant exploration upside

- 71.6Mlb U<sub>3</sub>O<sub>8</sub> JORC Resource<sup>1</sup> at an average grade of 620ppm U<sub>3</sub>O<sub>8</sub>
- The Honeymoon Re-start Area (HRA) contains 36Mlb U<sub>3</sub>O<sub>8</sub>
  - Underpins the proposed 11 year operation
  - ML 6109 sits on top of the HRA
  - Shallow mineralisation at 90 - 120m depth
- A further 36Mlb sits outside the HRA, providing long term upside
- In addition to the JORC Resource, Honeymoon has a substantial Exploration Target<sup>2</sup>
  - Target of 28Mt to 133Mt at grades of 340ppm to 1,080ppm U<sub>3</sub>O<sub>8</sub>
  - Equates to a potential further 58Mlb to 190Mlb contained U<sub>3</sub>O<sub>8</sub>
  - Historical drill hole database (>5,000 holes) and modern exploration targeting technology creates an opportunity for cost effective, large scale discoveries



Classification	Ore	Grade	Contained U <sub>3</sub> O <sub>8</sub>	
	(Mt)	(ppm U <sub>3</sub> O <sub>8</sub> )	(kt)	(Mlb)
Measured	3.1	1,100	3.4	7.6
Indicated	18.4	630	12.0	25.5
Inferred	30.9	570	18.0	38.5
<b>Total</b>	<b>52.4</b>	<b>620</b>	<b>32.5</b>	<b>71.6</b>

<sup>1</sup> Refer ASX announcement 25 February 2019

<sup>2</sup> Refer ASX announcement 25 March 2019. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain whether future exploration will result in the definition of a Mineral Resource





# SUMMARY





# CORPORATE OVERVIEW

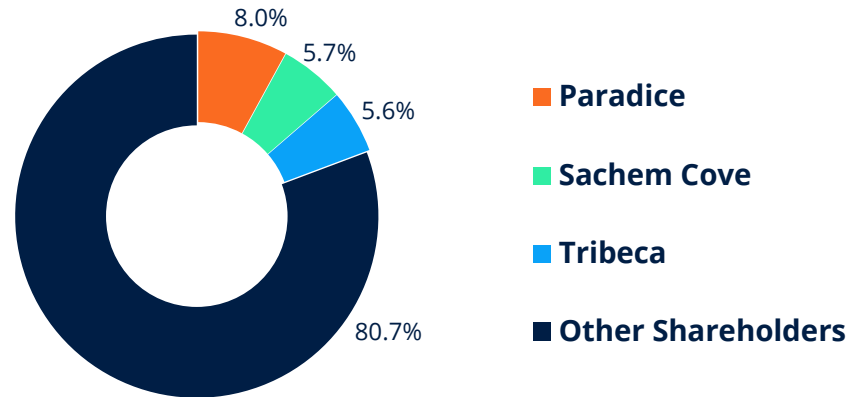
## BOARD OF DIRECTORS

Non-Executive Chairman	Peter O'Connor
Managing Director & CEO	Duncan Craib
Technical Director	Bryn Jones
Non-executive Director	Wyatt Buck
Non-executive Director	Dudley Kingsnorth

## STRATEGIC & MARKET ADVISER

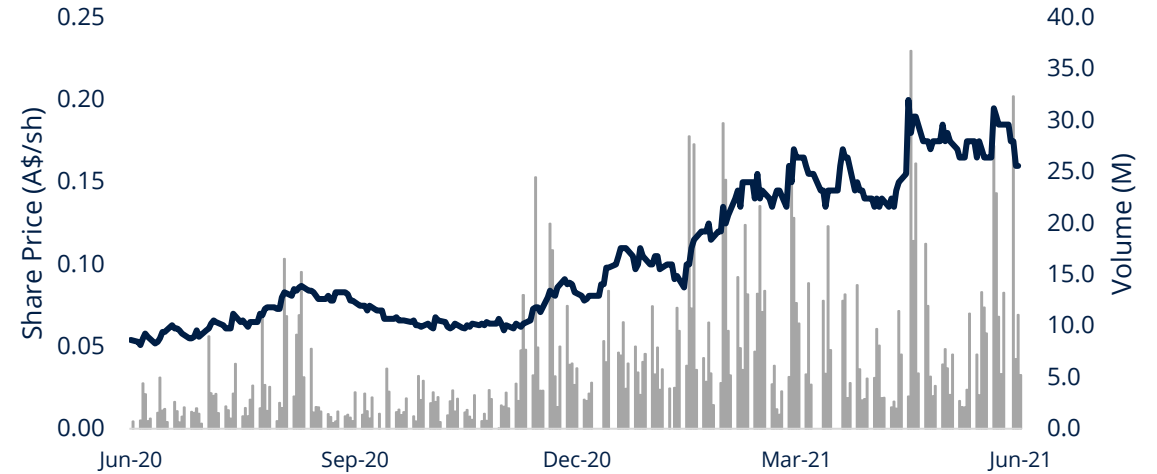
Strategic Adviser	Sashi Davies
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## SHAREHOLDER SUMMARY



<sup>1</sup> 1.25Mlb valued at the prevailing spot price of US\$32.5/lb and AUD:USD of 0.75 as at 21<sup>st</sup> June 2021

## SHARE PRICE PERFORMANCE



## KEY METRICS

	Shares (M)	Value (A\$M)
Ordinary Shares	2,278	
<b>Market Capitalisation (A\$0.16/sh)</b>		<b>365</b>
Physical Uranium <sup>1</sup>		54
Cash (21 <sup>st</sup> June 2021)		20
<b>Enterprise Value</b>		<b>291</b>



# BOSS ENERGY - BOARD OF DIRECTORS

Highly credentialed team with a proven track record in the uranium industry



**Peter O'Connor**

Non-Executive Chairman

Mr O'Connor has extensive global experience in the funds management industry and has worked with public and private companies in developed and emerging economies. He was co-founder, director and deputy chairman of IMS Selection Management Ltd, which had \$10 billion under management or advice from 1998-2008. Following this, he was deputy chairman of FundQuest UK Ltd, with \$10 billion under management.

Mr O'Connor was a Non-Executive Director of ASX 100 company Northern Star Resources Ltd (ASX: NST) from 2012 to 2021, during which NST grew its market cap significantly to >\$10 billion. He is also a Non-Executive Director of Blue Ocean Monitoring Limited.



**Duncan Craib**

Managing Director & CEO

Mr Craib (CA) has held senior executive roles with international mining operations in Australia, United Kingdom, Namibia, and China. For the past 14 years Mr Craib's career has been dedicated to the uranium industry.

Prior to commencing with Boss Energy, Mr Craib served as Finance Director to Swakop Uranium Ltd and was heavily involved in the US\$2.5 billion development and construction of its world class Husab uranium mine in Namibia. Its principal shareholder CGN, is the largest nuclear power operator in China and largest nuclear power constructor world-wide. Husab was commissioned in 2016, upon which Mr Craib was recruited to join Boss Energy.



**Bryn Jones**

Technical Director

Adelaide-based Mr Jones (MMinEng) is an industrial chemist and a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM), with more than 20 years of experience in the Australian uranium industry. He has worked in all aspects of the mining cycle, particularly in uranium in-situ recovery (ISR) and mine development and production.

Mr Jones spent nearly 10 years in roles with ISR uranium producer Heathgate Resources, the owner and operator of the Beverley Uranium Mine in South Australia, Australia's only other producing ISR uranium mine. Mr Jones was previously the Chief Operating Officer of Laramide Resources (ASX/TSX: LAM). Laramide has a portfolio of uranium US-based assets, and Australian project interests.



**Wyatt Buck**

Non-Executive Director

Mr Buck's Uranium experience began with Cameco Corporation, where he was employed for 15 years between 1991-2006 in various roles, culminating as GM of the McArthur River Uranium Mine and Key Lake Mill, the largest Uranium mining operation in the world.

Mr Buck held senior operational roles with Paladin Energy Ltd (ASX: PDN) as General Manager and Managing Director of the Langer Heinrich Uranium Project in Namibia. From 2009 to 2011, Mr Buck was Executive GM Operations at Paladin with direct operational responsibility for its Langer Heinrich and Kayelekera Uranium projects. From 2011, Mr Buck acted as Operations Director with First Quantum Minerals (TSX: FM), overseeing mining operations in Finland, Spain, Turkey, Australia and Mauritania.



**Dudley Kingsnorth**

Non-Executive Director

Mr Kingsnorth (FAusIMM) has extensive executive experience in the international mining sector including positions with Bechtel, Alcoa, Shell (Billiton), Rio Tinto, Ashton Mining and Greenbushes. His career includes a focus on comprehensive management of process development, project feasibility studies and project development through to successful mine start-up that is fully cognisant of market demands.



# BOSS ENERGY - CORPORATE SUMMARY

An institutional grade uranium developer providing leveraged exposure to the uranium sector



Australia's next uranium producer, permitted to produce and export up to 3.3Mlb U<sub>3</sub>O<sub>8</sub>



Strategic 1.25Mlb physical uranium inventory providing financial strength and offtake flexibility



Experienced Board and Management team with a proven track record of delivering results



Strong ESG credentials and participant in the global push towards a green energy future



Clear pathway to production and cashflow associated with the re-start of Honeymoon



Positive uranium thematic offers significant upside and leverage to the uranium price





# APPENDIX

## THE CASE FOR NUCLEAR





# URANIUM MARKET FUNDAMENTALS

Multiple macroeconomic factors converging in support of a near term price recovery



**The uranium recovery is near**

After an extended period of low prices



**Net zero carbon Emissions**

Stimulating global growth



**Increasing electrification**

Global government policies committed to change



**Lack of alternatives**

To provide clean, reliable, base load power



**US\$60/lb incentive price**

Required for majority of new mines to be viable



**Inventories have fallen rapidly**

COVID production impacts, strategic purchases and demand growth impacts



**Primary production is declining**

>45Mlb U<sub>3</sub>O<sub>8</sub> p.a. removed since 2016



**Demand for uranium is rising**

Strong nuclear power growth; China 70GW by 2025



**Utility & fuel buyer engagement is growing**

Considered a lead indicator for broader demand



**Strong outlook for nuclear**

Procurement of 1.4Blb U<sub>3</sub>O<sub>8</sub> <10yrs



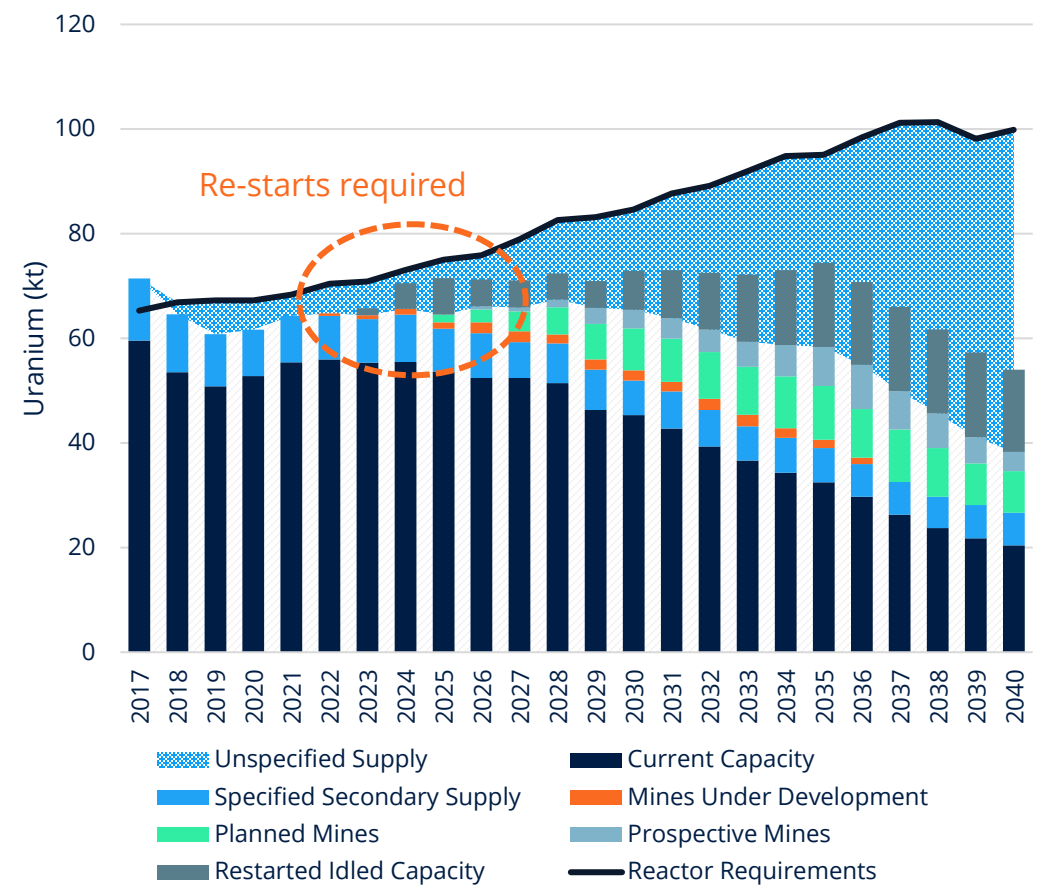
# COMPELLING URANIUM MARKET FUNDAMENTALS

Re-start projects are required to be online by 2023-2024 to fill a looming supply shortage



- OPPORTUNITY**
  - Strong fundamentals supporting a positive price outlook
  - 2020 supply deficit estimated at 50-60Mlb (total demand less global production)<sup>1</sup>
  - Global stockpiles available for energy use are dwindling<sup>1</sup>
  - Lack of viable alternatives to provide massive amounts of clean and reliable power
- RISING DEMAND**
  - Demand has exceeded global production in almost every year since 1990
  - Highest nuclear power growth in past 25 years<sup>1</sup>
  - 442 operable reactors in 31 countries
  - 53 units under construction
  - 98 reactors planned
  - 326 reactors proposed
- TIGHTENING SUPPLY**
  - Dramatic cuts to global uranium supply in past 12 months<sup>2</sup>
  - Denison Mines Corp., Uranium Energy Corp., Yellow Cake plc, Uranium Participation Corp. and Boss have collectively committed to purchase ~9Mlbs in 2021 to hold as strategic investment<sup>2</sup>
  - Increased activity in utility supply contract enquiries
- BARRIERS TO ENTRY**
  - US\$60/lb incentive price required for majority of new uranium production to be economically viable<sup>1</sup>
  - US\$40/lb incentive price required for majority of idled mines to restart<sup>1</sup>
  - Lack of funding for new exploration
  - Permitting requirements increasingly difficult with long lead time

World Nuclear Association - Reference (Base) Scenario<sup>3</sup>



<sup>1</sup> Sourced from UxC, TradeTech and World Nuclear Association publications  
<sup>2</sup> Quantities sourced from various Company announcements  
<sup>3</sup> Sourced from World Nuclear Association at <https://world-nuclear.org/our-association/publications/global-trends-reports/nuclear-fuel-report.aspx>

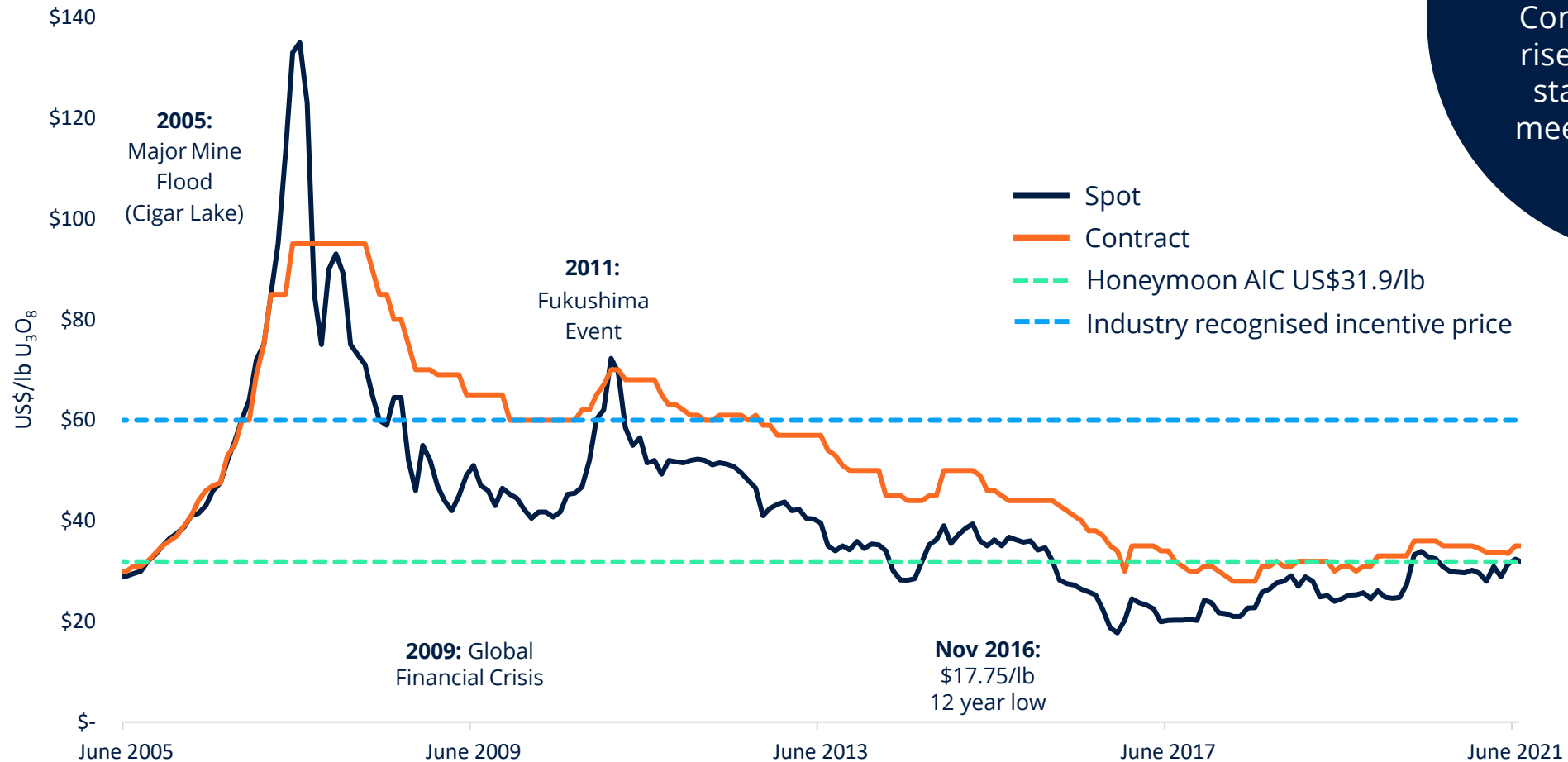




# URANIUM PRICE HISTORY

Early signs of recovery with utilities returning to the contract market

**Low uranium prices have curtailed supply.**  
Contract prices must rise to incentivise re-start production to meet known demand



Source: TradeTech, Numerco, UxC, LLC: [www.uxc.com](http://www.uxc.com)





# HONEYMOON RESTART PROJECT

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