

UNLOCKING THE FULL POTENTIAL

Corporate Presentation | Wyoming | May 2018



PENINSULA
ENERGY LIMITED



ASX:PEN

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Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Please note that Production Targets within this presentation are based on a proportion of inferred resources. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resource or that the production target itself will be realised.

Competent Person Statement

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves at Peninsula's Lance Projects is based on information compiled by Mr. Jim Guiling. Mr. Guiling is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (Member of Mining and Metallurgy Society of America and SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr. Guiling is Principal of independent consultants World Industrial Minerals. Mr. Guiling has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Guiling consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves at Peninsula's Karoo projects is based on information compiled by Mr. George van der Walt. Mr van der Walt is a Member of the South African Council for Natural Scientific Professions (SACNASP)). Mr van der Walt is a Geological Consultant and Director of Geoconsult International (Pty) Ltd. Mr van der Walt has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. van der Walt consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

World Class Management

- Experienced technical, financial and commercial team
- Generating improving quarter over quarter results

Large Scale Project

- Long-life Lance Project in USA advanced to production stage
- The Lance Project contains resources of 53.5 mlbs of U3O8¹

Scalable Production

- Lance is licensed to produce up to 3m pounds per annum
- 'Game Changing' low pH lixiviant initiative

Financial Strength

- Strong cash position with reliable income generation
- Spending discipline

Valuable Contract Book

- Long-Term Sales contracts underpin Peninsula's business
- Average uranium sales price US\$51-53 per pound until 2030

Board

John Harrison , Non-Executive Chairman	<i>Capital Markets</i>
Wayne Heili , Managing Director & CEO	<i>Exec. Leadership & Technical</i>
David Coyne , Finance Director & CFO	<i>Finance & Risk Management</i>
Harrison (Hink) Barker , Non-Executive Director	<i>Nuclear Fuel Markets</i>
Evgenij Iorich , Non-Executive Director	<i>Buy Side Capital Markets</i>
Mark Wheatley , Non-Executive Director	<i>Mining CEO & ISR Technical</i>

World Class Management

Ralph Knode	<i>CEO USA</i>
David Hofeling	<i>CFO USA</i>
Mike Brost	<i>VP Geology USA</i>
Jay Douthit	<i>VP Operations USA</i>
Mike Griffin	<i>VP Permitting, Regulatory & Environment USA</i>
Willie Bezuidenhout	<i>CEO South Africa</i>

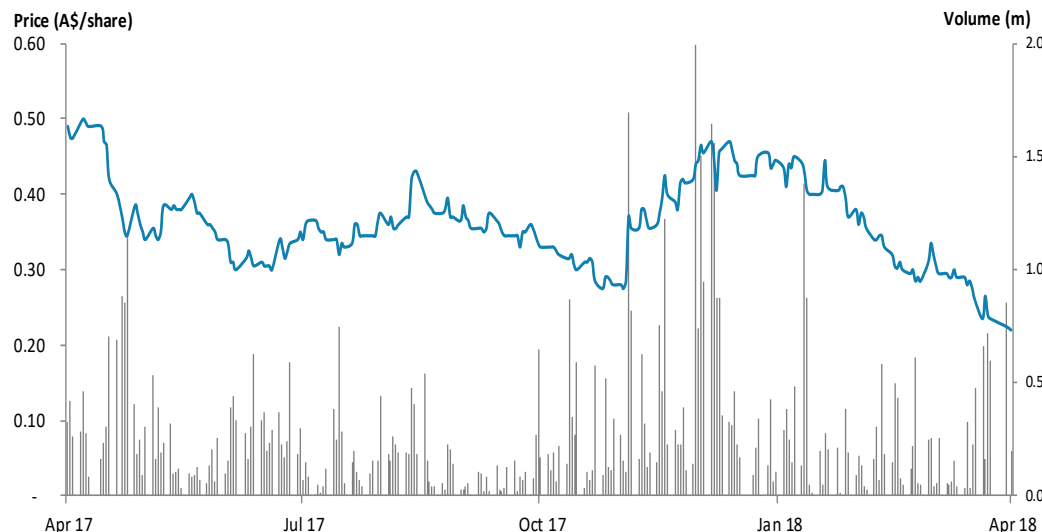
Corporate Overview

Capital Structure

Shares on issue*	232m
Share price (4-Apr-18)	A\$0.230
Market capitalisation (4-Apr-18)	A\$53m
Enterprise Value (4-Apr-18)	A\$52m
Cash and Security Deposits (31-Mar-18)	US\$28.7m

Share Price & Volume History

Ticker: ASX:PEN



Shareholding*

Holding (%)



RESOURCE
CAPITAL FUNDS

22.1%

GLOBAL X

12.7%



PALA

11.4%

BLACKROCK

4.8%



2.5%

Top 20 Shareholders

65.3%

Research Coverage

BMO Capital Markets

Alex Pearce

Numis

Justin Chan

VIII Capital

Dave Talbot

H.C. Wainwright & Co.

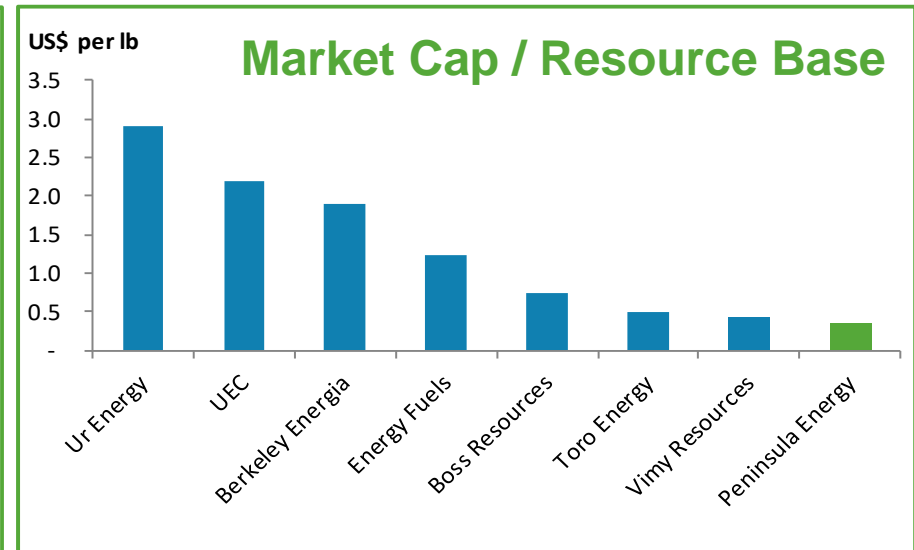
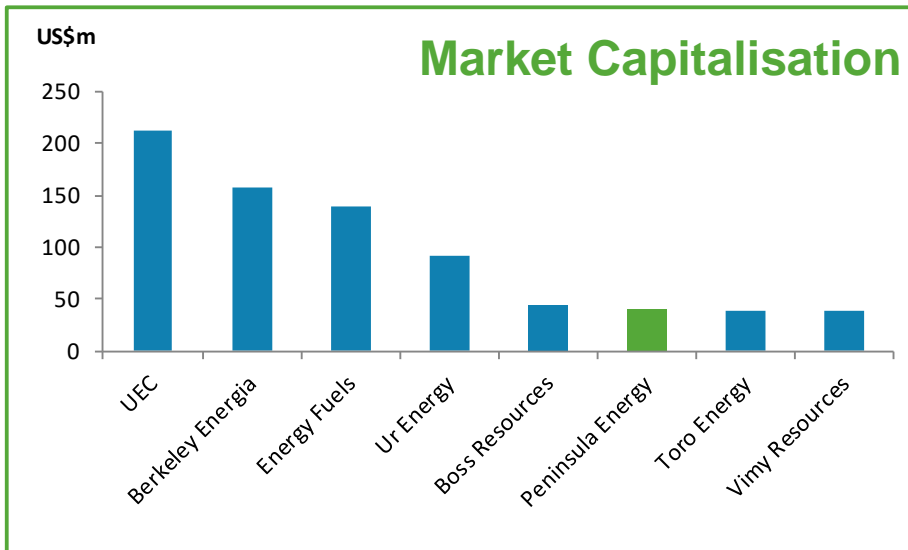
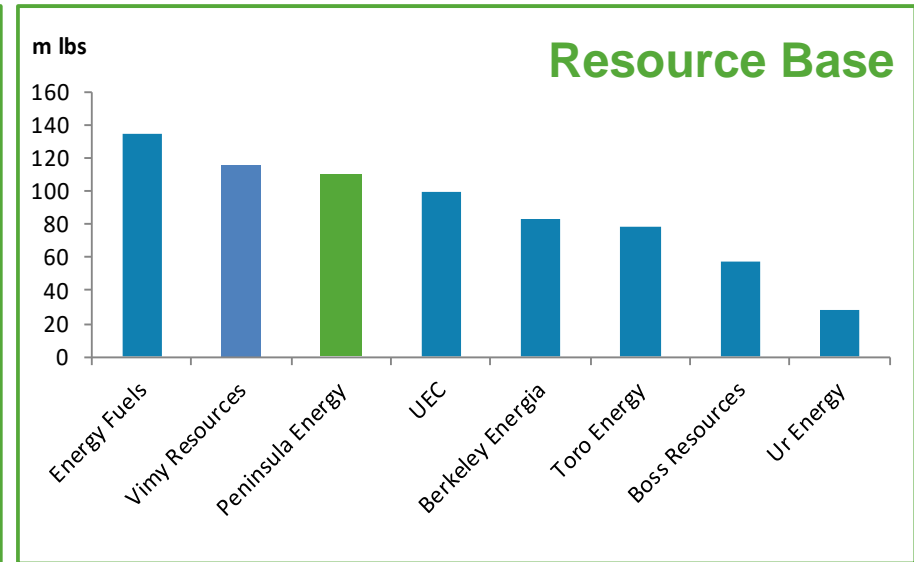
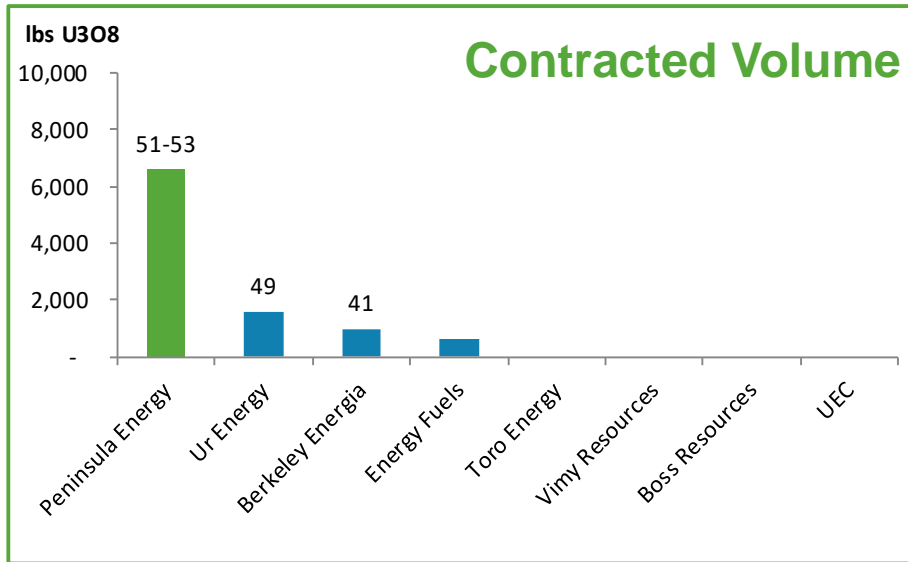
Heiko Ihle

Roth Capital Partners

Joe Reagor

*Undiluted as at 4 April 2018

Peer Comparison



Note: Market capitalisations are as at 4 April 2018

- **Develop and operate long-life, low-cost production assets underpinned by long-term product sales contracts**

Sales & Marketing

- Valuable long term sales contracts provide financial foundation
 - Source of current cash revenues

Core Assets

- Optimize current alkaline ISR production operations at Lance

Step Change for Lance

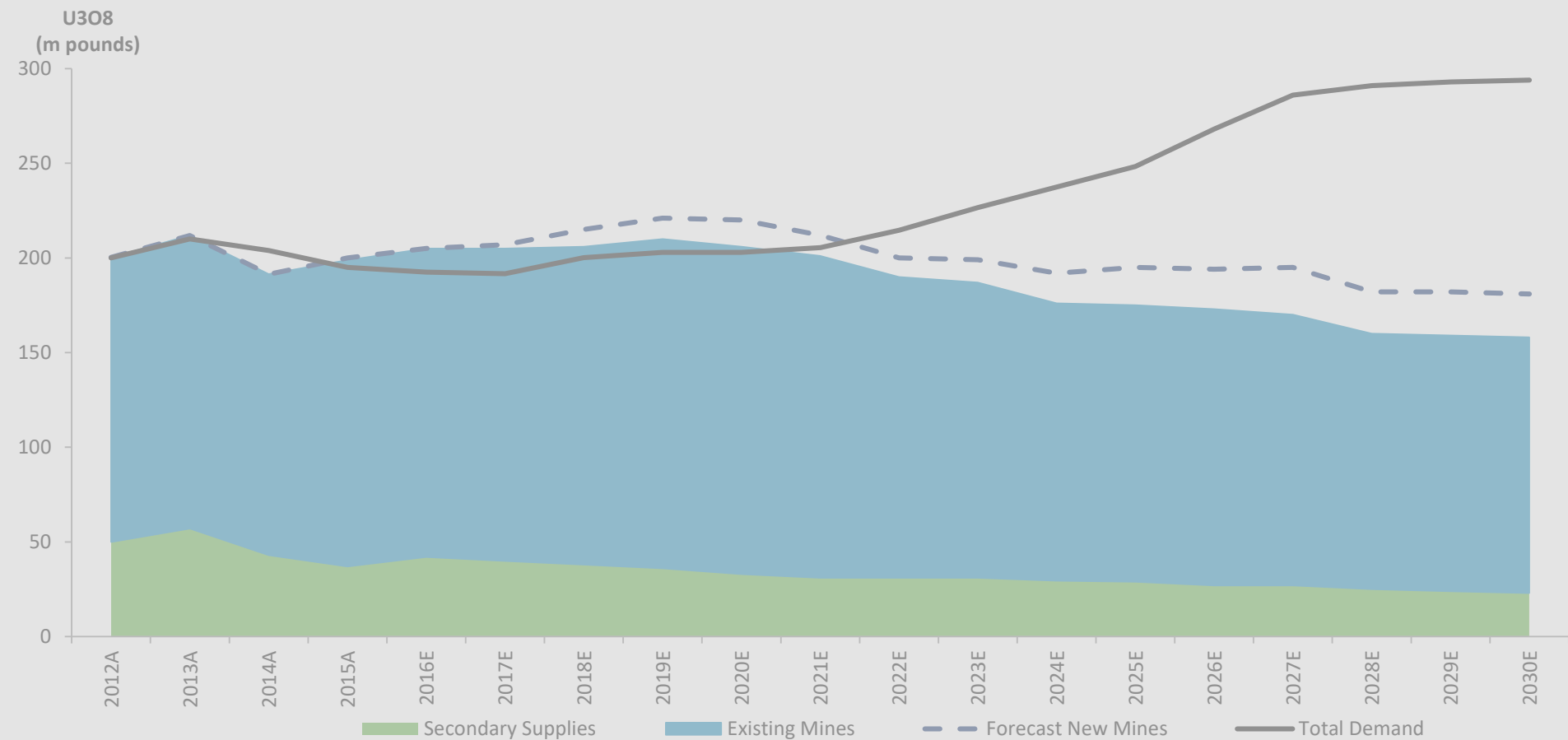
- Convert to low pH ISR operations in 2019/2020
- License amendments submitted in early April 2018

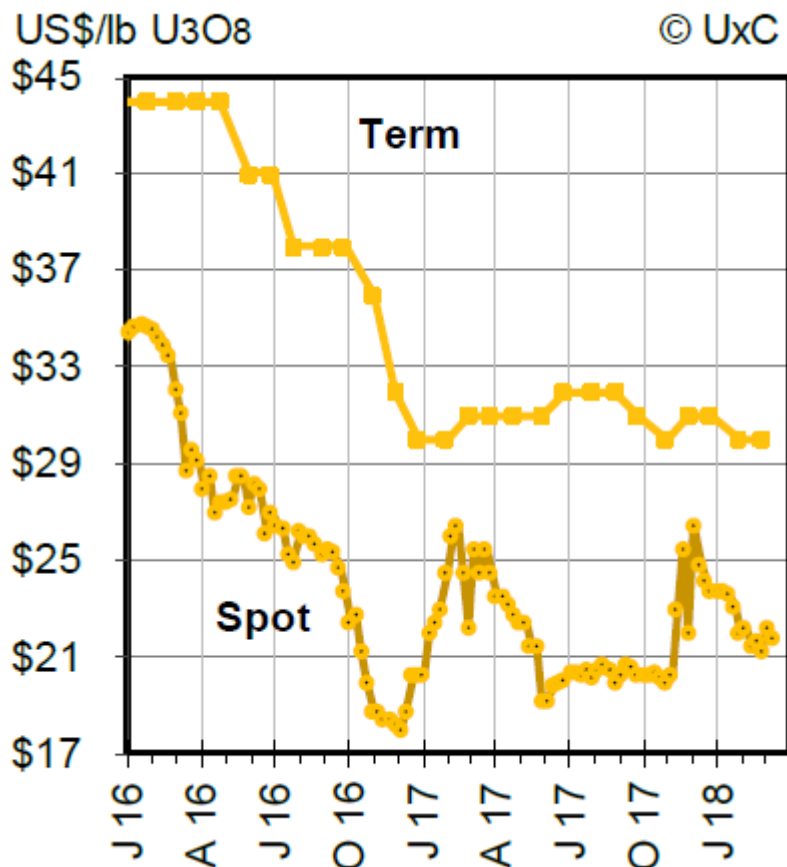
Other Assets

- Karoo project
- Evaluate synergistic growth opportunities

- **2020 Vision: Peninsula capitalising on uranium market rebound with 1st quartile cost base at Lance ISR Project**

The Uranium Market



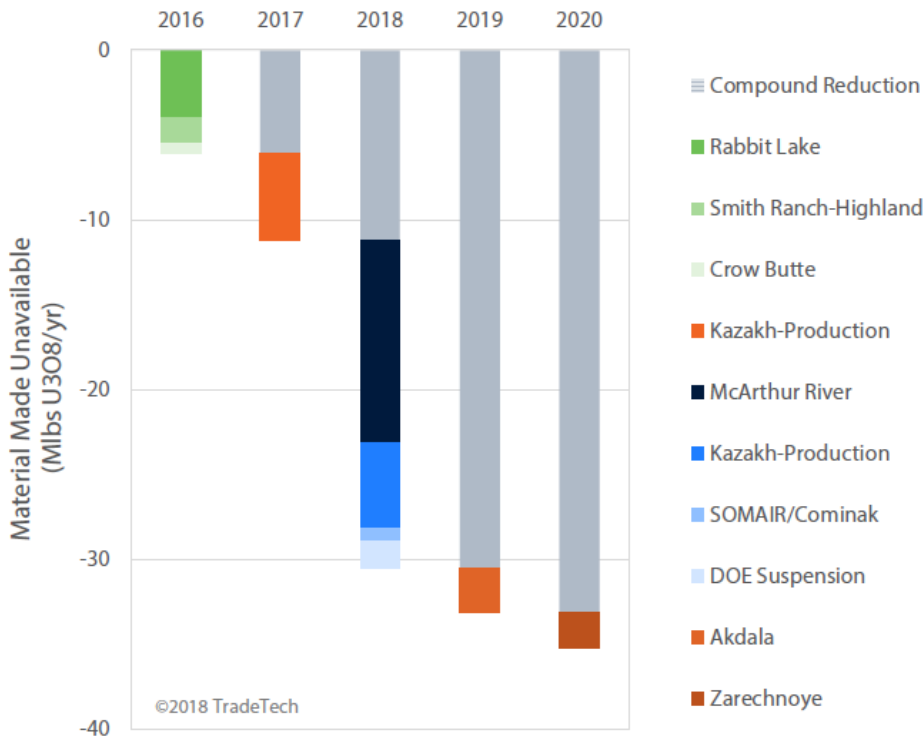


Uranium Market Insight

- Market is currently oversupplied
- Production restraint is occurring
- Term price has been flat
- Future utility demand projections remain positive

Market rebalancing is occurring now

Source: The Ux Consulting Company, LLC



Source: TradeTech

Supply: Production restraint has become a common theme

- The big miners continue reducing production target levels

Demand: The need for carbon-free nuclear power remains strong

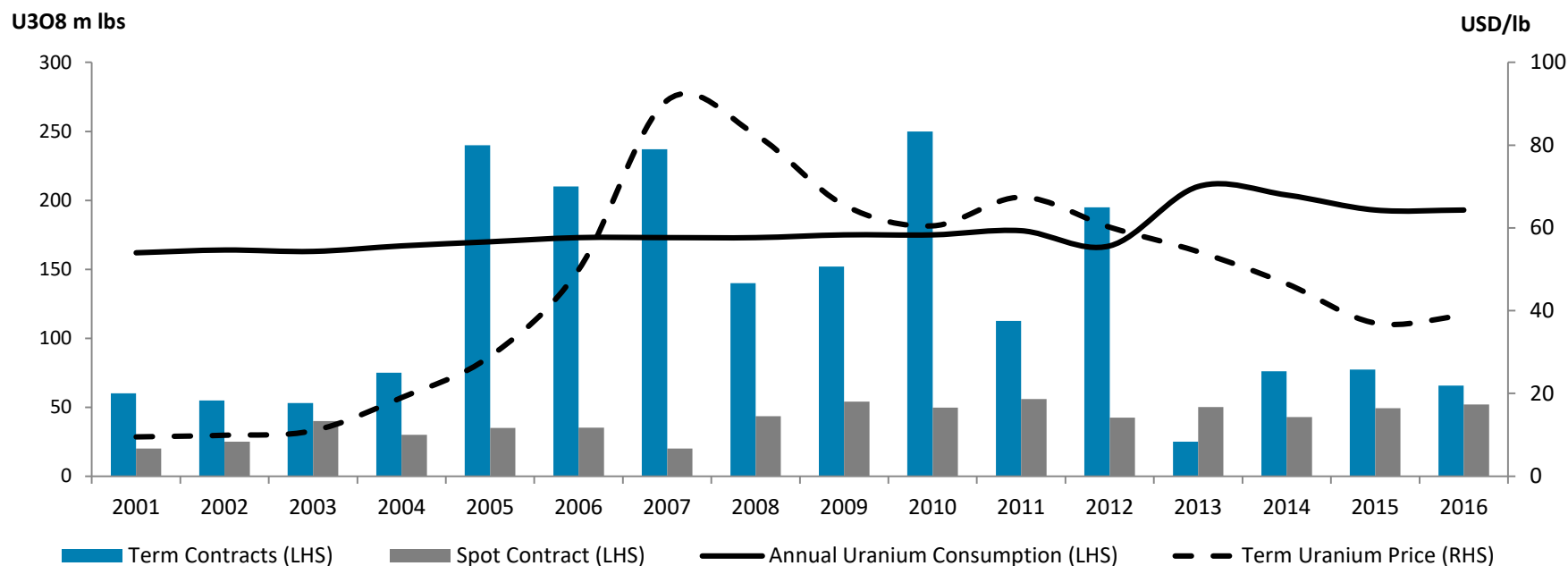
- Demand forecasts continue to show growth through and beyond 2030
- Over 800 million lbs U₃O₈ of uncovered demand over the next 10 years

US Produced uranium could soon trade at a premium

- Unfair Trade petition filed with US Department of Commerce

- Utilities have been avoiding the term market since 2012

Term and Spot Market Contract Volumes



Source: UxC, Trade Tech, US Energy Information Administration; EurAtom Supply Agency

A large number of last decade's term contracts are now rolling off

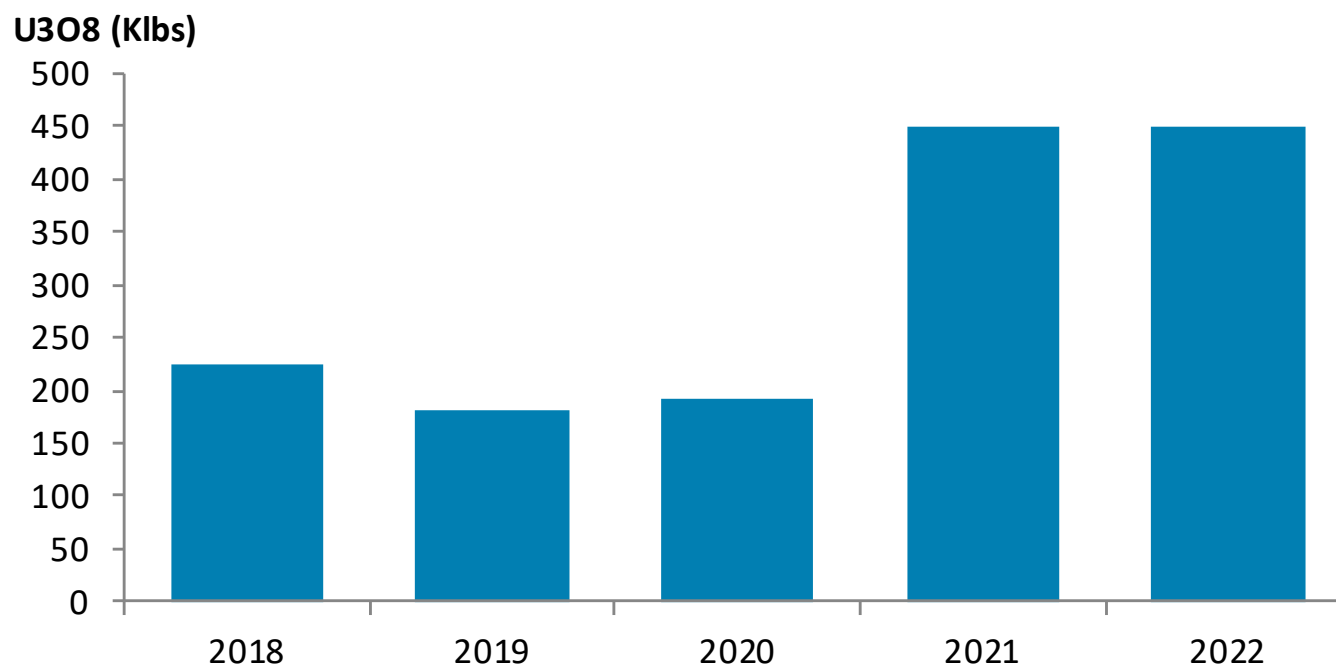
Uranium Sales & Marketing



Substantial Long Term Sales Contracts

- Long term sales contracts underpin Peninsula's business
- CY2018 forecast deliveries of 225,000 lbs of U3O8
 - ✓ Additional \$19M cash revenue in CY2018 from contract transactions

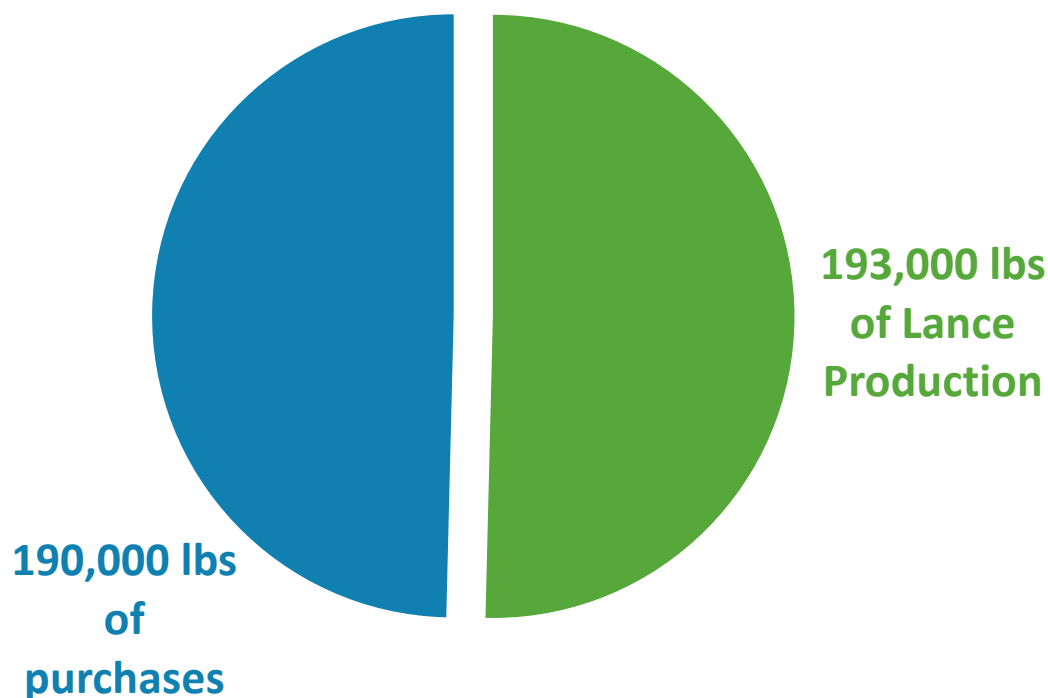
5-Year Sales Profile ⁽¹⁾



(1) Committed deliveries only and excludes optional delivery quantities that customers may elect from 2021 onwards.

- Maximizing returns by blending production with spot purchases
 - 2017 deliveries were filled by Lance production and purchases
- Remaining deliveries for 2018 through 2020 have flexible origin clauses allowing seller optionality

2017 Product Sales Composition



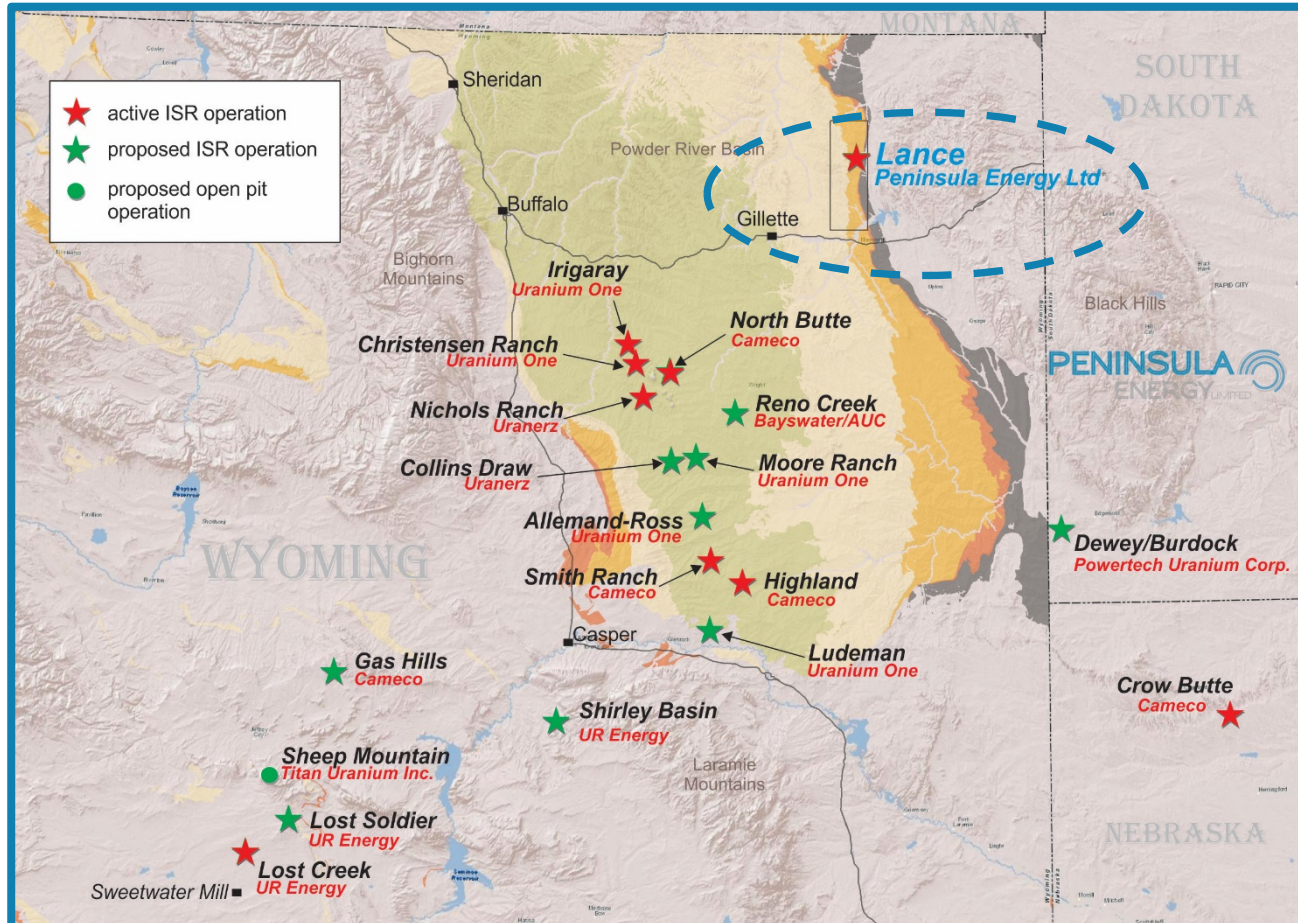
- **US\$19 million (net) generated through contract transaction**
 - Advances cash receipts from future dates to present
 - Reduces delivery obligations during Lance transition process
- **Significant contract portfolio carries through year 2030**
 - Up to 6.5 million pounds U_3O_8 remaining under contract through 2030
 - 4.6 million pounds U_3O_8 committed deliveries through 2030
 - Up to 1.9 million pounds U_3O_8 optional at customer election between 2021 and 2026
 - Term contracts weighted price between **US\$51-53/lb** U_3O_8
 - Next scheduled sale: First week of October 2018

Lance ISR Project | Wyoming, USA

A photograph of an industrial facility, likely a water treatment plant, featuring large black and white pipes, structural steel beams, and red-handled valves. The text "Lance ISR Project | Wyoming, USA" is overlaid in blue on a semi-transparent white banner.

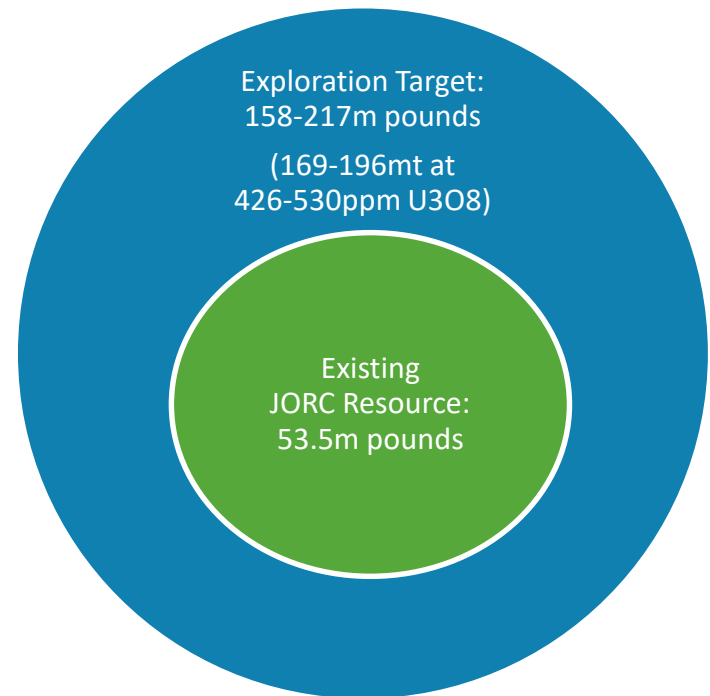
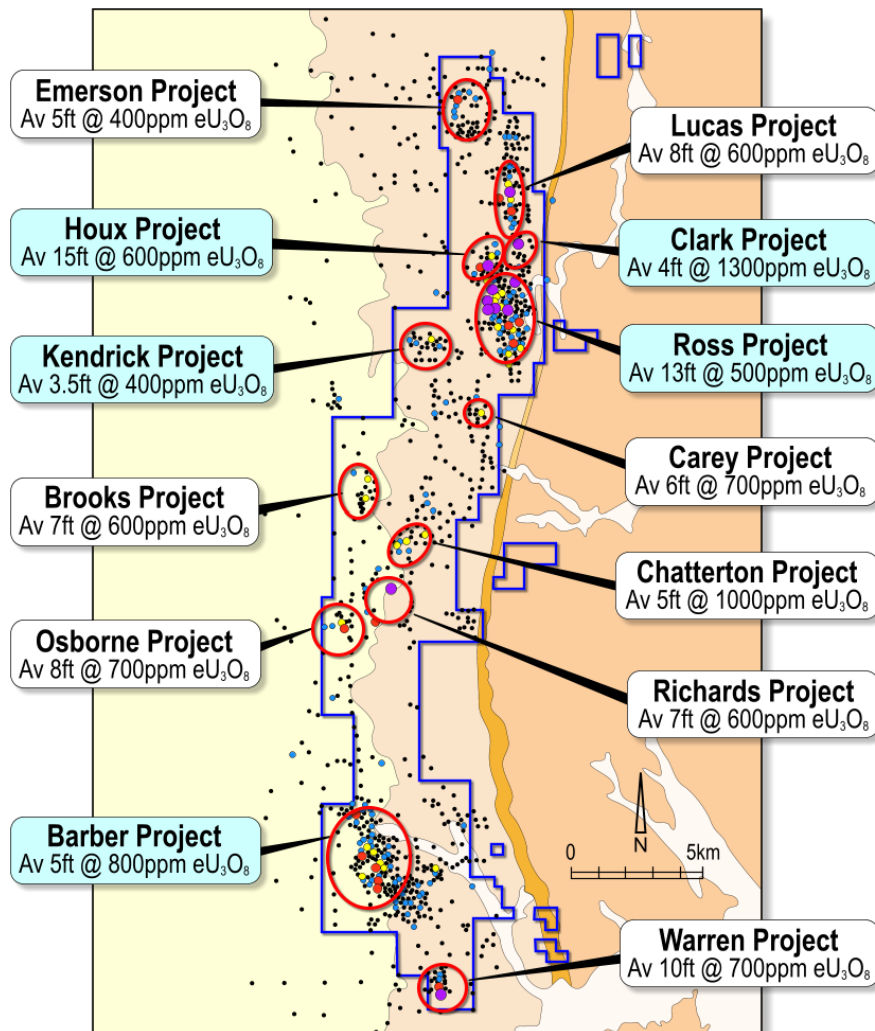
Premier Uranium Jurisdiction

- Wyoming is a premier uranium extraction jurisdiction, hosting multiple active ISR operations



Large Scale Resource: +20 years mine life

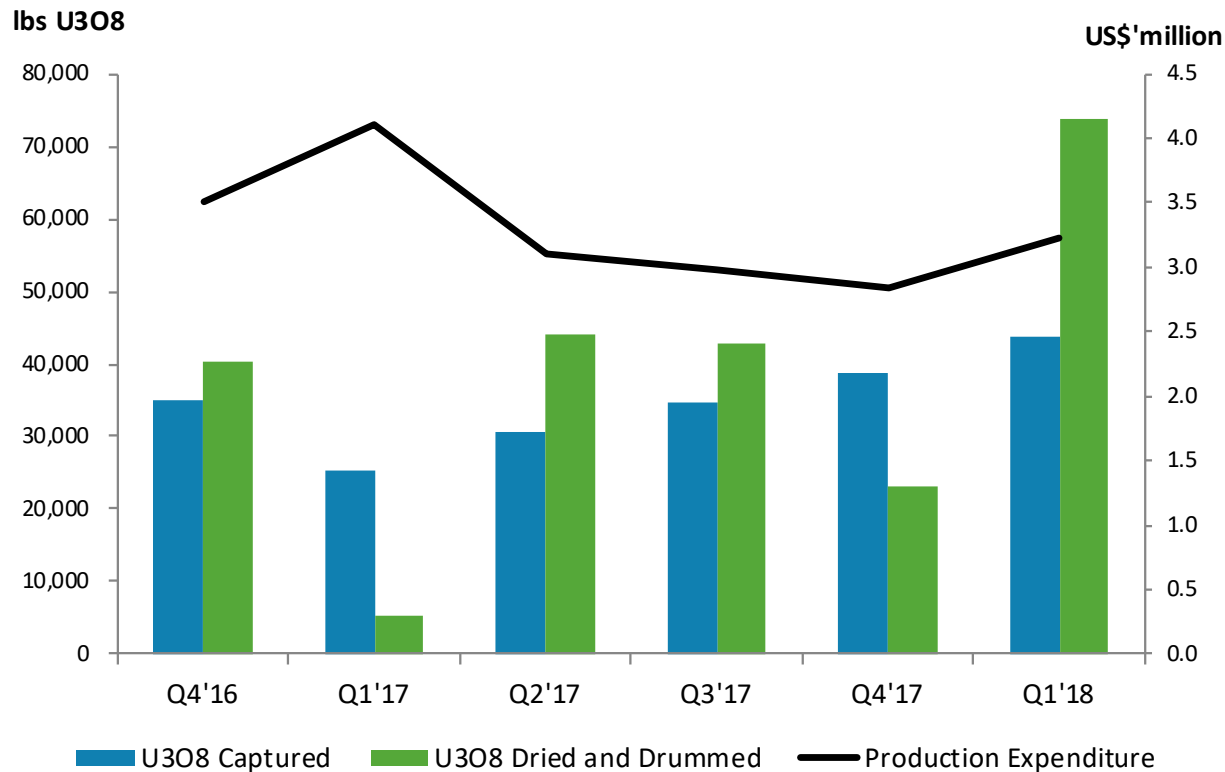
- 53.5m lbs JORC (2012) compliant resource base¹ (50.7Mt at 473ppm U₃O₈) offers long mine life with existing infrastructure



Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer Appendix 3.

- **Consistent Q over Q production growth**
 - Production rate above 480 pounds day for quarter ended 31 March 2018

Quarterly Production and Expenditure



The Potential

- ✓ Transform the Lance Project cost profile in line with the global industry leading uranium ISR projects
- ✓ Higher extraction rates and recovery rates

The Basis

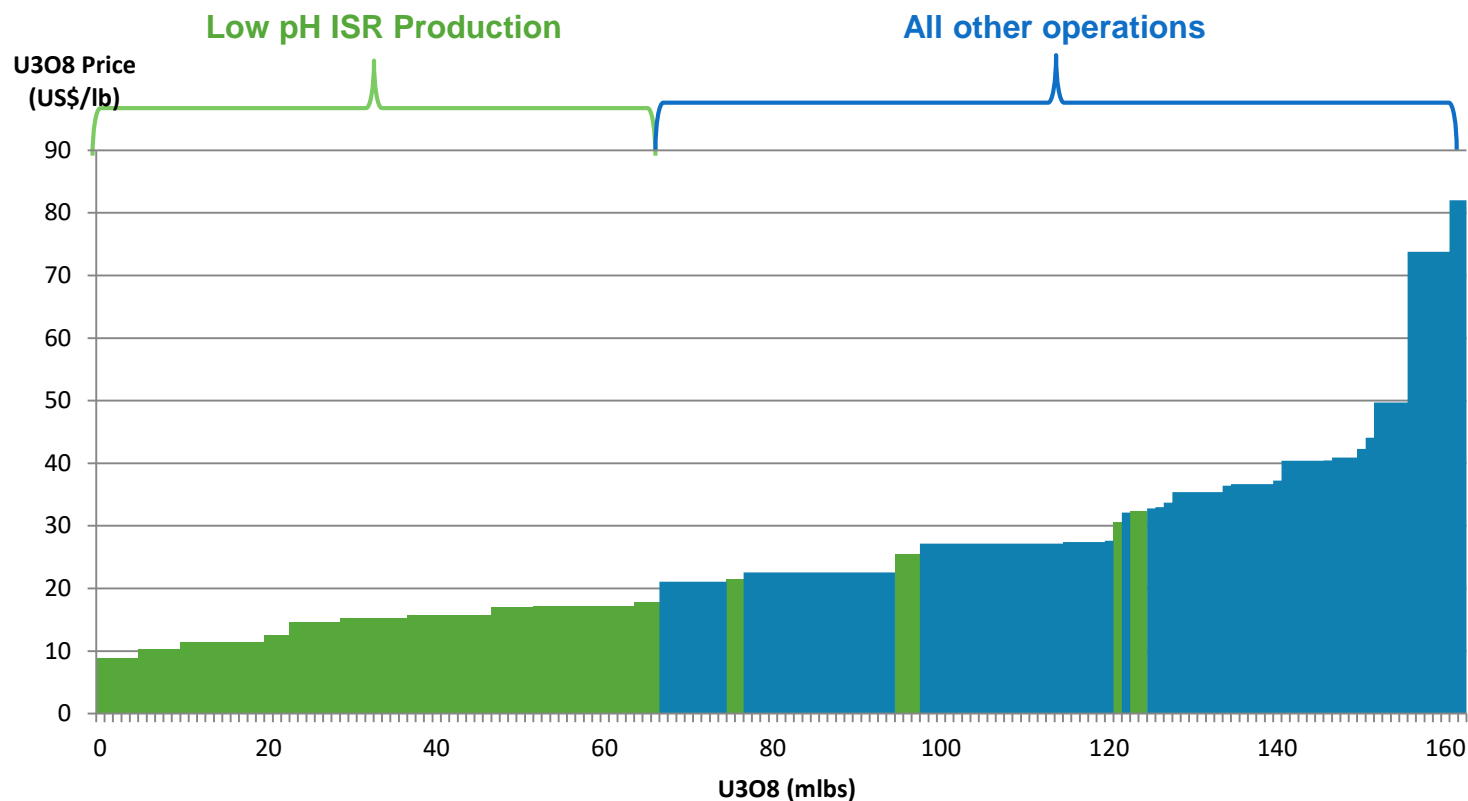
- ✓ Extremely positive testing results using low pH solutions
- ✓ Low pH ISR White Paper

The Plan

- ✓ Amendment of the current permit and licences
- ✓ Continue alkaline ISR operations through transition
- ✓ Update original Feasibility Study for low pH parameters

Low pH ISR Leads the Way

- All 1st quartile uranium operations globally are in-situ recovery (ISR) facilities that utilize a low pH lixiviant
- 96% of the uranium recovered by ISR methods worldwide in 2015 came from facilities using low pH solutions (WNA 2017)



Data Source: UxC

Timeline for Low pH ISR Transformation

2017

2018

2019

2020

Alkaline ISR Operations

On-going Laboratory
Test Work

Engineering Studies

Regulatory Approval
Process

Design
Revision

Low pH Operations

1. CAPEX and OPEX

- CAPEX and OPEX studies initiated
- Study to outline Lance Project life-of-mine economics underway
- Changing process chemistry, not the underlying processes
 - Only minor facility modifications are required with minimal capital spend needed to change the process chemistry

2. Ongoing Production Operations and Sales Revenue

- 9 operational header houses support ongoing production operations
- Product sales agreements generate cash inflow during the transition period
- Reducing sustaining capital spending for the short-term

High Potential

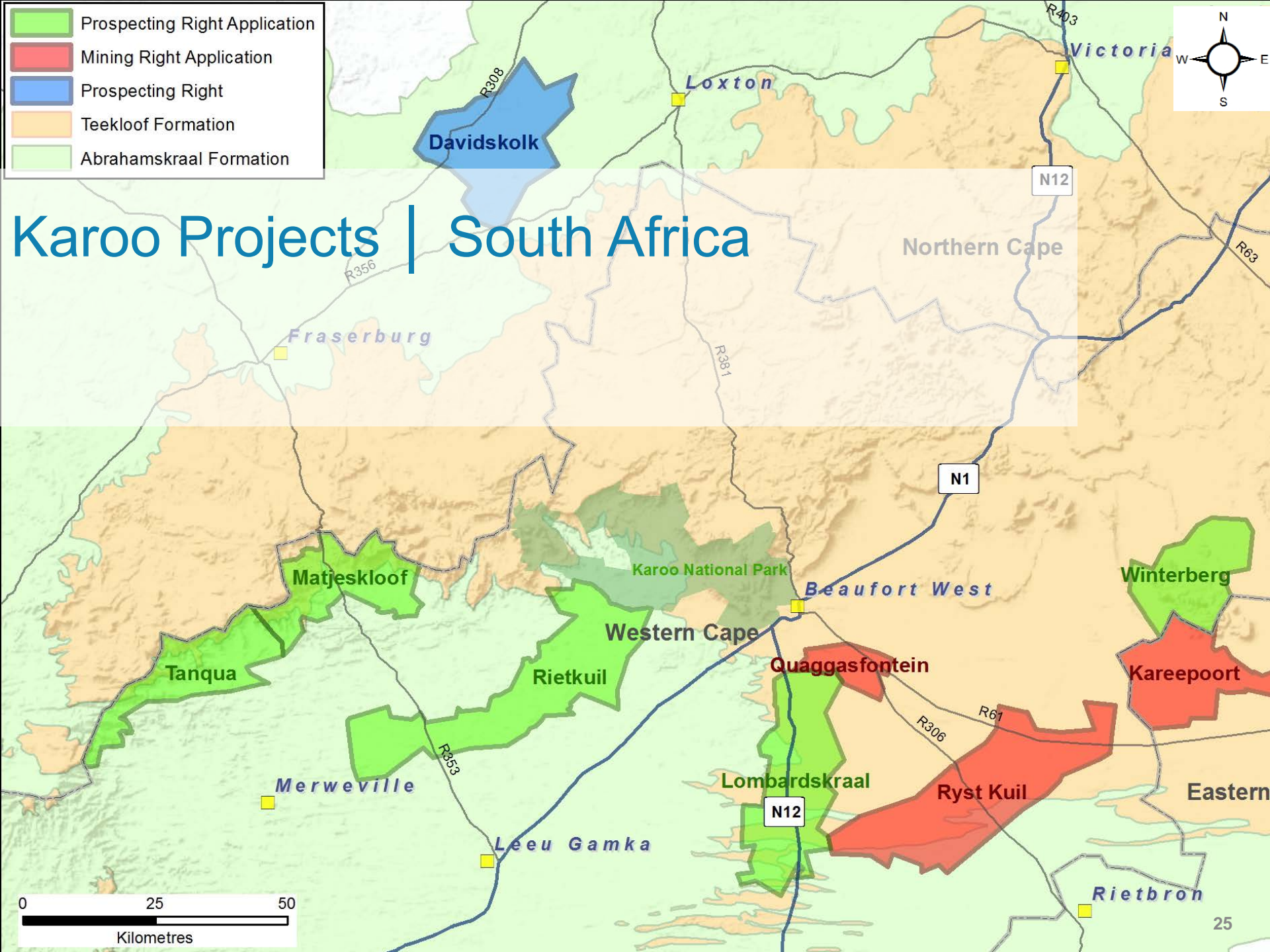
- ✓ Lance Project holds a large scale uranium resource
- ✓ Potential to transform the performance and cost profile using low pH ISR process

Short Timeline

- ✓ Permit and licence amendments in under two years
- ✓ Continued alkaline ISR operations until permitted

Low Capital Cost

- ✓ CAPEX for minor modifications = Minimal
- ✓ Production and sales contracts underpin funding



- All development and progression activities suspended

Divestment Status

- ✓ No satisfactory offers made to Peninsula during sale process
- ✓ Reflects market view of hard rock uranium assets today

Retention Option

- ✓ Fully explored by Peninsula
- ✓ Cost of retention rights in SA is prohibitively expensive

Next Steps

- ✓ Fulfil restoration and rehabilitation obligations
- ✓ Seek consent to divest freehold farm land to fund rehabilitation

Conclusion



World Class Management

- Experienced technical, financial and commercial team
- Generating improving quarter over quarter results

Large Scale Project

- Long-life Lance Project in USA
- The Lance Project contains resources of 53.5 mlbs of U3O8¹

Scalable Production

- Lance is licensed to produce up to 3m pounds per annum
- 'Game Changing' low pH lixiviant initiative

Financial Strength

- Strong cash position with reliable income generation
- Spending discipline

Valuable Contract Book

- Long-Term sales contracts underpin Peninsula's business
- Annual product sales scheduled through 2030

Contact Details

REGISTERED OFFICE

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Australia

www.pel.net.au
info@pel.net.au

FURTHER INFORMATION

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David Coyne Finance Director / CFO +61 8 9200 4403

Appendix 1 - Lance JORC Resource

Classification	Tonnes (million)	U3O8(kg)	Grade (ppm U3O8)	U3O8(lbs)
Measured	3.7	2.0	489	4.3
Indicated	10.0	5.1	466	12.7
Inferred	37	17.5	463	36.5
Total	50.7	24.6	473	53.5

¹JORC Table 1 included in an announcement to the ASX released on 27th March 2014: "Company Presentation – Mines and Money Hong Kong". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates 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 been materially modified from the original market announcement.

Appendix 2 - Karoo JORC Resource

JORC Compliant Resource March 2014

Classification	Cut-off: eU3O8(ppm)	Tonnes (million)	eU3O8 (ppm)	eU3O8 (million lbs)
Indicated	600	8.0	1,242	21.9
Inferred	600	15.3	1,038	35
Total	600	23.3	1,108	56.9

Classification	Sector	Cut-Off: eU3O8 (ppm)	Tonnes (million)	eU3O8 (ppm)	eU3O8 (million lbs)
Indicated	Eastern	600	7.1	1,206	18.7
	Western	600	0.9	1,657	3.2
Inferred	Eastern	600	11.8	1,046	27.2
	Western	600	3.5	1,019	7.8
Total		600	23.3	1,108	56.9

Note: Totals may not sum exactly due to rounding

2JORC Table 1 included in announcement to the ASX released on 11th March 2014 : "13% Resource Expansion and Upgrade at Karoo Projects". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this presentation and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Appendix 3 - Lance Exploration Target

Additional Disclosure

Exploration Target

The Lance Projects cover a significant proportion of the Powder River Basin Cretaceous sandstones of Wyoming, which are believed to represent an Exploration Target of between 158 and 217mlbs U_3O_8 which includes 54mlbs of existing JORC (2012) Code compliant resource.

Lance Projects Exploration Target (including the existing JORC (2012) Code Compliant Resource)

Exploration Target	Tonnes (million)		Grade (ppm eU_3O_8)		eU_3O_8 (mlbs)	
	From	To	From	To	From	To
Total	169	196	426	530	158	217

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Basis of Exploration Target

Exploration Target is based on a combination of Exploration Results and on proposed exploration programs.

Exploration Results

Approximately 7,500 drillholes, of which over 2,500 have been drilled and PFN logged since 2009. The data from these holes has been used to determine a JORC (2012) Code compliant resource and to extrapolate between areas of limited drilling but still within the mineralised trends.

Proposed Exploration Programs

The Company has minerals rights and surface access rights to 122.2 square kilometres and 107.8 square kilometres respectively. This package covers the most prospective mineralised redox /roll front trends that have a cumulative strike length of over 300km. The Company intends to continue exploration over this ground with drilling in order to validate the exploration target and convert to resources.

Appendix 3 - Lance Exploration Target

Additional Disclosure

Basis of Grade and Tonnage Range Determination

With a database of approximately 7,500 drillholes together with several decades of geological research the level of exploration activity on which the Exploration Target is based, is considered to be high.

The known Lance resources are located in the upper Lance Formation and in the lower Fox Hills horizons in which roll fronts have been identified over a cumulative length of over 300kms. These horizons have only been partially explored and towards the south (Barber area) the lower unit of the Fox Hills has not been systematically tested. Along these channels JORC-compliant resources have been estimated in localised areas in which reliable drilling data is available. The zones between the JORC (2012) Code compliant resource areas form the Exploration Target because of the following:

- Continuity of the prospective sandstone established by geological mapping and regional drilling
- Historic estimates of mineralisation based on drilling which has not yet been validated by Peninsula

The Exploration Target is based on a combination of:

- A tonnage calculation that incorporates the total cumulative prospective strike length of the identified redox fronts multiplied by the average width, thicknesses as determined in the resource estimate,
- The grade range represents the lowest resource area grades and highest resource area grades

Summary of the Relevant Exploration Data Available and the Nature of the Results

For a comprehensive description of drilling information readers are referred to JORC Table 1 at the end of this presentation.

Proposed Exploration Activities Designed To Test Validity of the Exploration Target

Over the life of mine ongoing exploration drilling is proposed to expand the JORC (2012) Code compliant resource within the Exploration Target areas. This initial program will be focussed on the Kendrick area. Exploration activities will mostly comprise geophysical logging of additional drillholes.

Lance Projects Competent Person Statement

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