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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 Guilinger. Mr. Guilinger 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. Guilinger is Principal of independent consultants World Industrial Minerals. Mr. Guilinger 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. Guilinger to the 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 Australian Institute of Mining and Metallurgy (AusIMM) and 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.

Cautionary Note Regarding United States Security Laws



This presentation does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the securities of Peninsula Energy Limited, in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction. The securities of Peninsula Energy Limited have not been and will not be registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), or any state securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, "U.S. persons," as such term is defined in Regulation S under the U.S. Securities Act, unless an exemption from such registration is available.

This presentation was prepared in accordance with Australian standards which differ in some respects from United States standards. As a public company in Australia, we report estimates of "measured," "indicated" and "inferred" mineral resources, which are terms that are recognized and required by the 2012 Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, or JORC, and also the ASX. These definitions differ from the definitions in Industry Guide 7 under the U.S. Securities Act. In particular, Industry Guide 7 applies different standards in order to classify mineralization as a reserve. Under Industry Guide 7, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Under Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority. Readers are cautioned that any discussion of reserves or resource estimates contained in this presentation do not contain any information about deposits that would qualify as reserves under SEC rules and Industry Guide 7. It is important to note that resources are different from, and should not be construed as, reserves in any case and it should not be assumed that any part of the resources discussed in this presentation that are categorized as undiscovered or prospective resources according to Australian standards will ever be considered "reserves" under applicable U.S. standards. It should not be assumed that all or any part of a resource (if it exists) will be discovered or be economically or legally extractable.

Presentation Summary





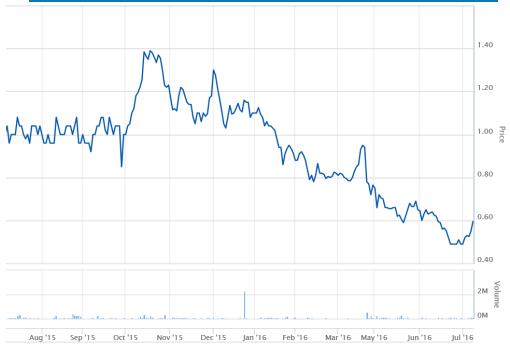
Corporate Overview



Capital Structure	
Shares on issue	176m
Share price	\$0.60
Market capitalisation	\$105m
Cash Undrawn Inventory Finance	\$7.6m \$16m

Shareholding*	% holding
Resource Capital Fund VI	21.6%
Pala Investments	12.1%
BlackRock Funds	7.9%
J P Morgan	4.8%
Global-X	4.8%
AREVA	3.3%
Acorn Capital	2.9%
Top 20 Shareholders	64.0%

1 year share price & volume history



Research coverage

RFC Ambrian Dundee Capital Markets Pareto Patersons Rodman & Renshaw

CAPITAL FUNDS, J.P.Morgan

Jim Taylor Dave Talbot Rhys Bradley Simon Tonkin Heiko Ihle

AREVA

PALA

* Undiluted as at 29th February 2016

BLACKROCK

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Business Plan



Peninsula's plan is to be a uranium producer with multiple sources of supply in established mining economies with low cost, long life mines backed up by a well-recognized sales arm dealing directly with utilities

Start operations in the Lance ISR project in Wyoming

Expand relationships with US and European utilities

Advance DFS on the Karoo uranium project in South Africa

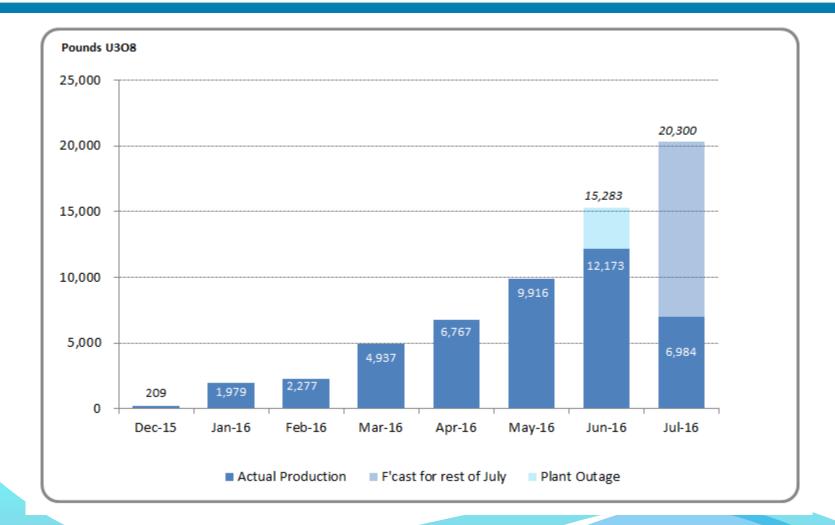
Acquire one of several Australian or Canadian uranium projects

- Effective production commenced in March 2016
 - · Construction completed on-schedule and on-budget
 - Building to 2.3mlbs U₃O₈ per annum;
 - Acquire satellite deposit (plant capacity licensed for 3mlbs pa).
 - Utilities are seeking security of supply through diversity of supply suppliers with multiple sources of low cost, long life uranium located in diverse and secure mining locations are preferred suppliers
- Peninsula has spent the last 5 years marketing directly to the large US and European utilities to
 - · Build knowledge of our plans and projects and establish trust and confidence in our management;
 - Successfully establish Peninsula as a preferred supplier: long life, low cost mines in USA, South Africa and Australia or Canada (planned); and
 - Successfully entered into Long Term Contracts;
- Complete DFS and reserve drilling at Karoo Projects, South Africa and build a mine by 2019.
 - Investment term sheet signed 8th May 2015; DD completed during H2 2015; earn-in percentage and JOA ongoing;
 - Complete Reserve drilling ; complete DFS and build 3- 4mlbs U₃O₈ per annum
- Acquire one of several projects identified in Australia or Canada
- Goal is to be a significant uranium producer from diverse sources by early 2020's

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. The estimated mineral resources underpinning the production targets relating to the Lance Projects have been prepared by Jim Guilinger and for the Karoo Projects by Mr George van Der Walt, Competent Persons as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The basis of the Production Targets within this presentation are included in a presentation released on 27th March 2014 "Company Presentation – Mines and Money Hong Kong" for the Lance Projects. "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 production targets continue to apply and have not been materially modified from the original market announcement

Monthly Production





Note: Adjusted June 2016 production represents production to 30 June including estimated loss of production during 7 day outage for main trunkline flange failure based on achieved production rates.

Performance to Date



Key Performance Metrics

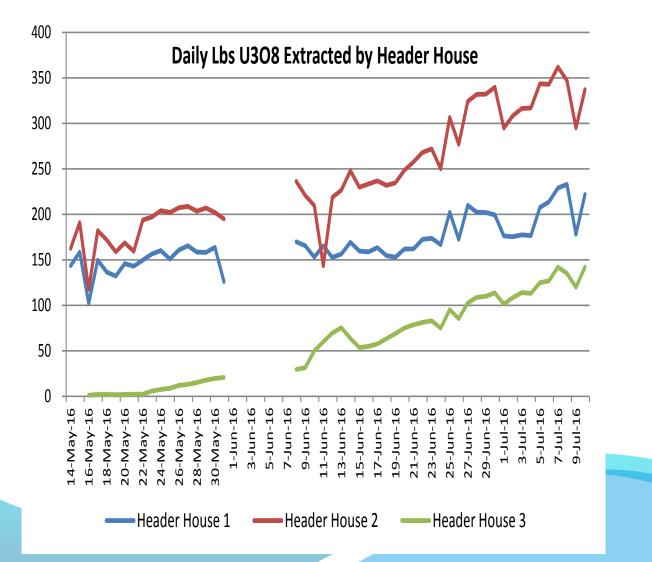
- Delivered 16,000 lbs U₃O₈ to converter in May 2016
- Delivered105,000 lbs U3O8 to utilities in 1H, 2016
- 8.2m lbs U3O8 now under contract; WAP \$55/lb; Projected Revenue US\$445,000,000
- 200,000 to 300,000 lbs U₃O₈ production forecast for CY2016
- Current production levels support Stage one 700,000 lbs U3O8 p.a. production by H1 2017

Wellfields

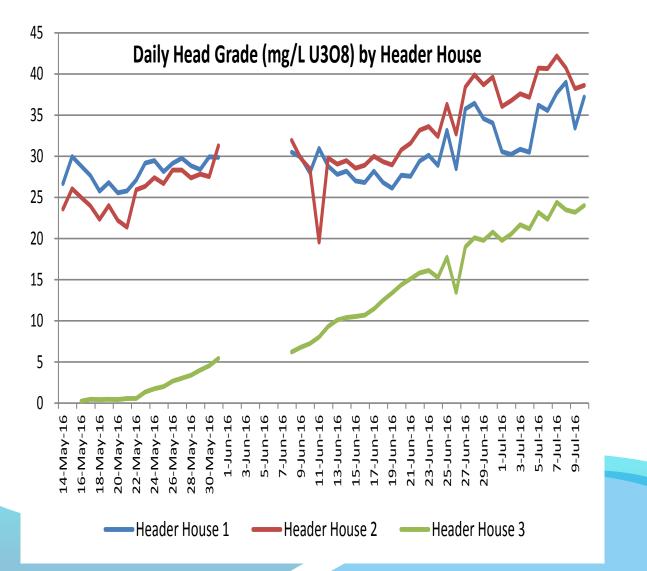
- Ore body permeability is good, average for Header houses 1 & 2 better than 20 GPM
- Ore body leachability is demonstrated
- Header houses 1 & 2 combined operation exceeding forecasts
- Header houses 3 & 4 now online and ramping up
- Header house 5 being constructed with 5-7 to be installed by year end (Stage 1: 7 Header houses)
- Header houses 1 & 2 now producing uranium at 105% of steady state target rates
- Production for July 2016 estimated at 20,300lbs U3O8
- Uranium production rising steadily

Performance to Date









Operating Performance to Date



Central Processing Plant

- Operating to design specification
- Capture rate of uranium on resin in ion exchange columns is exceeding expectations (recoveries show 7.5 lbs uranium per cu.ft. resin vs forecast of 6 lbs/cu.ft.)
- Average U₃O₈ grade in fluid leaving the CPP is less than 1.00 mg/L

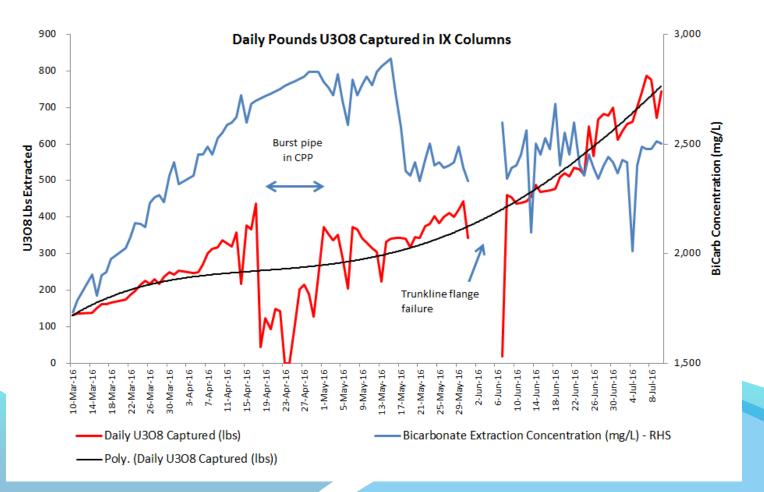
Deep Disposal Well

- 168,000 gallons of potassium chloride buffer solution were injected into the DDW prior to the start of operations
- Flow rates ranged between 80 and 120gpm a phenomenal rate and orders of magnitude better than all other operators in Wyoming
- Each DDW costs around US\$3 million potential at Lance to defer timing for additional DDWs and reduce the total number needed over life of mine

Stage 1 Operating Performance to Date

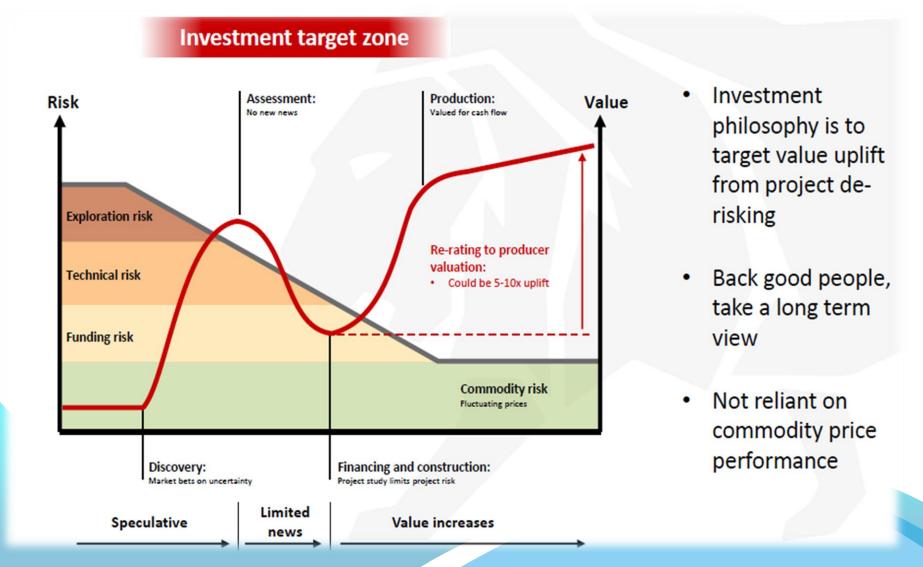


- · Consistent flow rates have confirmed permeability
- Targeted injection rate of NaCO2 at header house units 1 & 2 first achieved on 10 March 2016
- U3O8 recovery increased 600% over 17 weeks (133lbs 786lbs per day; header house units 1 and 2 now exceeding 100% of stage 1 steady state production) and continuing to increase



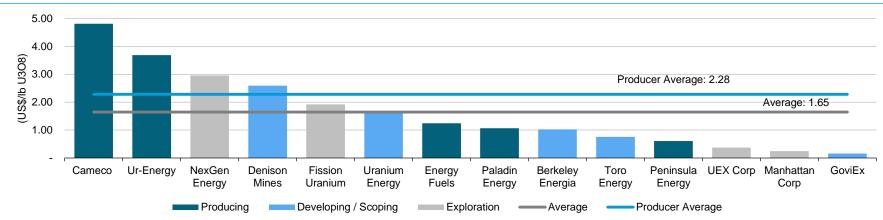
Project Development - Valuation Curve





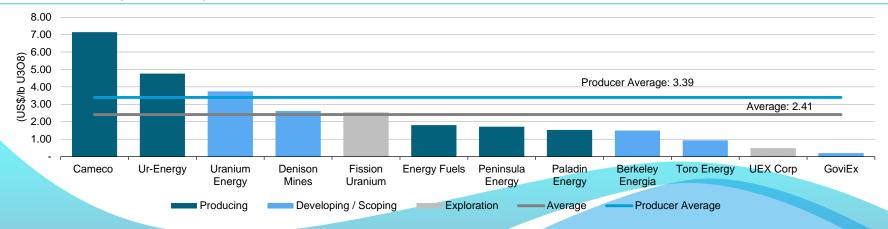
Undervalued on a resource basis





EV / Total Resource (US\$/lb U3O8)

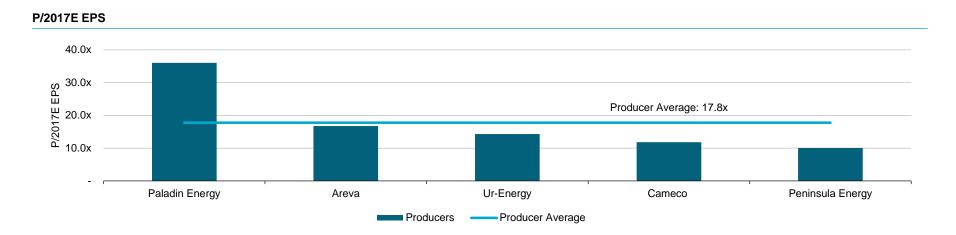
EV / M&I Resource (US\$/Ib U3O8)



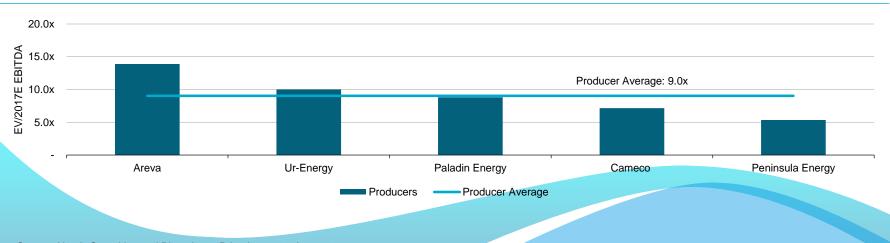
Source: Numis Securities and Bloomberg; Priced as at 23 June 2016

Trading below peers on a cash flow basis





P/2017E EBITDA

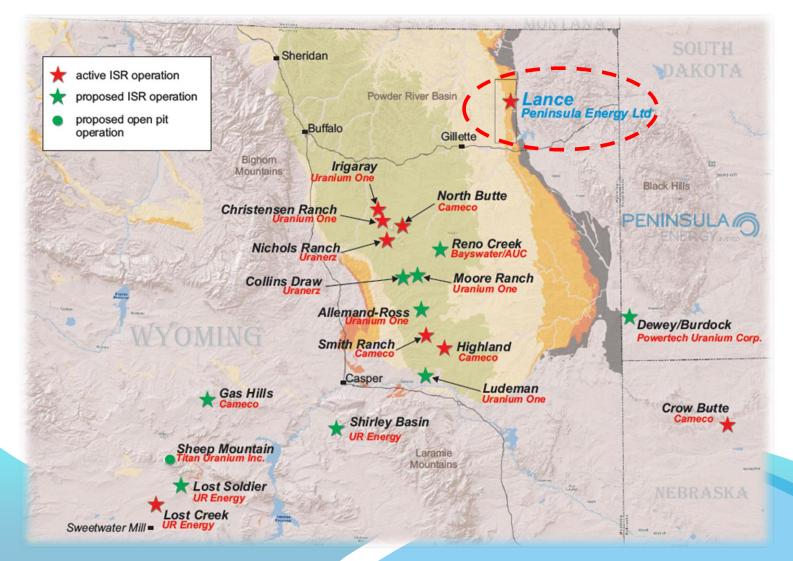


Source: Numis Securities and Bloomberg; Priced as at 23 June 2016

Uranium Mining in Wyoming



Wyoming very supportive of uranium extraction – multiple ISR operations in region





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Peninsula team has extensive experience in mine development & uranium sales

Gus Simpson Managing Director/CEO

Ralph Knode CEO North America

David Coyne Chief Financial Officer

Willie Bezuidenhout CEO South Africa

Harrison Barker Director Sales & Marketing

Laurent Odeh VP Sales & Marketing

Mike Griffin VP Permitting, Regulatory and Environmental Compliance

Mike Brost VP Geology North America

Jan Fajgl VP Production

Ben Schiffer - WWC Engineering Lead Permitting Consultant

Brian Pile - TREC Project Manager-Design Engineers & EPC contractors Strong strategic leader, 9 years working in aspects of the uranium business, extensive background in resources, corporate finance and management; 25 years' experience in USA, Asia, Africa and Australia

Senior management geologist /engineer; 30 years' experience with Cameco and Uranium One in ISR mine development and operation in USA, Central Asia and Australia

CPA accountant and experienced mineral production CFO; 25 years' cross border experience in Australia, Asia and USA

9 year's uranium experience in Africa and Australia; previously Vice President Business Development for Uranium One

Over 40 years of fossil and nuclear fuel commercial and technical responsibilities. Between 1992-2015 he was the manager responsible for Dominion's procurement of nuclear fuel and related processing steps. He brings an extensive knowledge of power utility fuel needs and processes

15 years commercial and business development experience in the mining sector, including responsibility for Rio Tinto uranium sales in Europe and South Africa

Extensive experience in Health Physics, permitting and compliance with Cameco and Uranium One in North America, Central Asia and Australia

Senior uranium geologist ; 30+ years' experience in uranium roll front exploration and well field planning, design and operation with US subsidiary of Cameco

Mining engineer with over 25 years' experience in managing uranium field operations, mine engineering and hydrology in the United States, Czechoslovakia and Kazakhstan.

Over 30 years' operating experience in all facets of the Wyoming regulatory and permitting process (www.wwcengineering.com)

Senior construction engineer with leading US engineering firm in design and construction management of ISR facilities in North America (www.treccorp.com)



Strong economics: IRR of 36% and average cash cost US\$29.16/lb

Key financial metrics ¹		Progressive cost improvement	US\$/lb
Unlevered NPV 8%	US\$288m	All-in Sustaining Costs ³	
Cashflow positive	H1 2017		
IRR	36%	Feasibility Study (Apr 12)	\$36.60
Stage 1 CAPEX ²	US\$33m		Ļ
		Optimisation Study (Mar 13)	\$34.80
1 st Quartile All-in Costs @ 2.3mlbs p.a.	US\$/lb		L
Royalties and indirect taxes	\$6.28	Wellfield Optimisation (Jul 13)	\$30.65
Operating costs	\$11.48		
Restoration and closure costs	\$2.07	Scalable Plant (Oct 14)	\$29.16
Ongoing wellfield development costs	\$9.33		
Total ongoing cash costs	\$29.16		

 US\$54/lb is the present value of average prices used between 2015 and 2024 (existing sales contract and forecast new sales contracts yet to be entered into), escalated at the minimum industry standard escalation rate. Post-2024, a present value price of US\$60/lb (consistent with uranium industry consensus) is applied over the remaining life of mine. Financial Metrics calculated in October 2014.

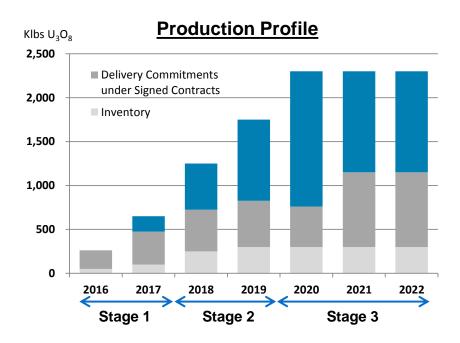
2. Stage 1 CAPEX inclusive of 10% cost contingency; excludes OPEX and working capital during commissioning

3. Unescalated, 2014\$

The basis of the Production and Financial Information within this presentation is included in a presentation to 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 production and financial information 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

Production and Cost Profile





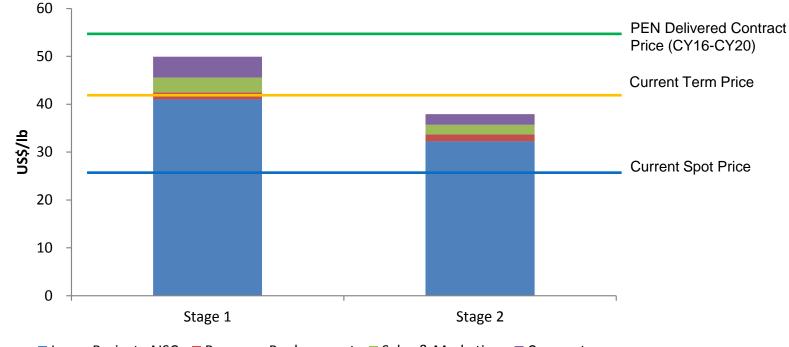
- Ramp-up of U₃O₈ production to coincide with tightening uranium market
- CAPEX Stage 1 US\$33m; Stage 2 US\$35m;
 Stage 3 US\$78m



- Toll treatment for Stage 1 minimises up-front capital and commissioning risk
- Significant reduction in Stage 2 and 3 operating costs as a result of:
 - toll treating being brought in-house
 - greater economies of scale

All-in Costs per Pound U₃O₈



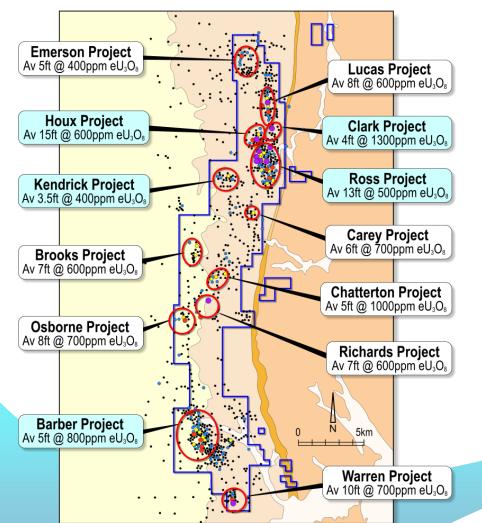


■ Lance Projects AISC ■ Resource Replacement ■ Sales & Marketing ■ Corporate

- Lance Projects All-in Sustaining Cash Cost reduces from \$41 to \$31-32/lb end toll milling agreement and greater economies of scale
- Gross Sales & Marketing costs increase marginally but not in same proportion as production increase; Gross Corporate costs unchanged – net effect is a reduction of close to 50% on a \$/lb basis

Lance – Exploration Target

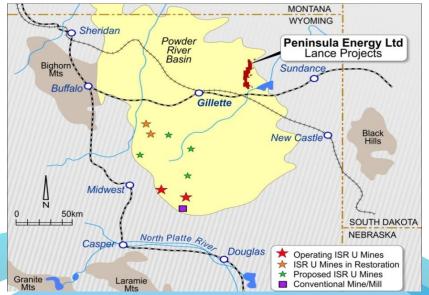




Large Resource potential: 70+ years mine life

- Current JORC-2012 Compliant Resource 53.7mlbs U3O8
 (51.2Mt at 476ppm U3O8) (refer Appendix 3)
- 13 historic resources
- 22 roll fronts extend for a combined linear strike length of 194 miles (312km)
- Exploration Target 158-217mlbs U₃O₈ (169-196mt at 426-530ppm U3O8) inclusive of 54mlbs JORC Resource

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.





Exploration Target

The Lance Projects cover a significant proportion of the Powder River Basin 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.

Exploration Target	Tonnes (million)		Grade (ppm eU ₃ O ₈)		eU ₃ O ₈ (mlbs)	
			Fro			
Range	From	То	m	То	From	То
Total	169	196	426	530	158	217

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

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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.



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

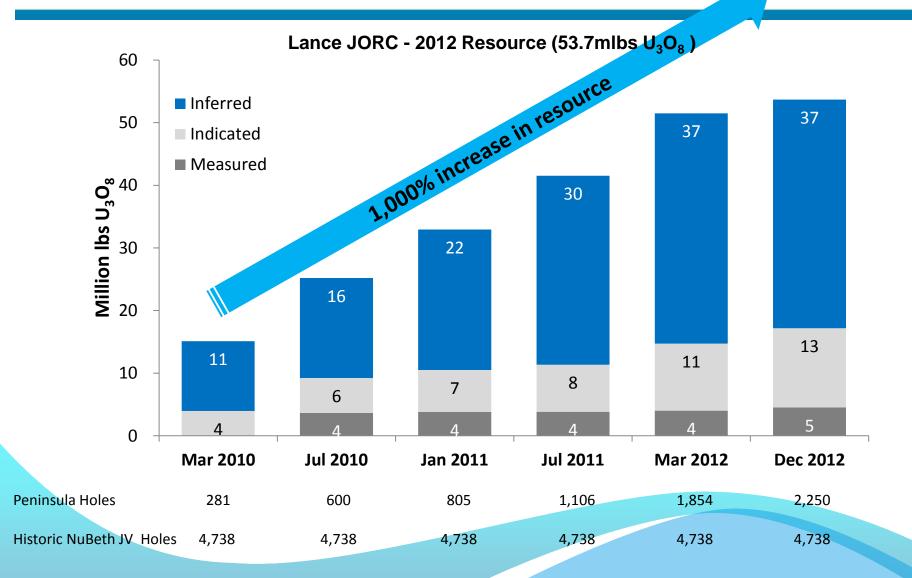
Over the life of mine ongoing exploration drilling is proposed to expand the JORC (2012) Code compliant resource within the Exploration Target areas. This initial program will be focussed on the Kendrick area. Exploration activities will mostly comprise geophysical logging of additional drillholes.

Lance Projects Competent Person Statement

The information in this presentation that relates to Exploration Targets, Exploration Results and Exploration Potential at the Lance Projects is based on information compiled by Mr. Jim Guilinger. Mr. Guilinger 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. Guilinger is Principal of independent consultants World Industrial Minerals. Mr. Guilinger 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. Guilinger consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

Rapid Resource Growth at Lance





Resource grown from 5mlbs to 54mlbs U3O8 in 4 years: Delineation cost ~\$2/lb. (Est.)



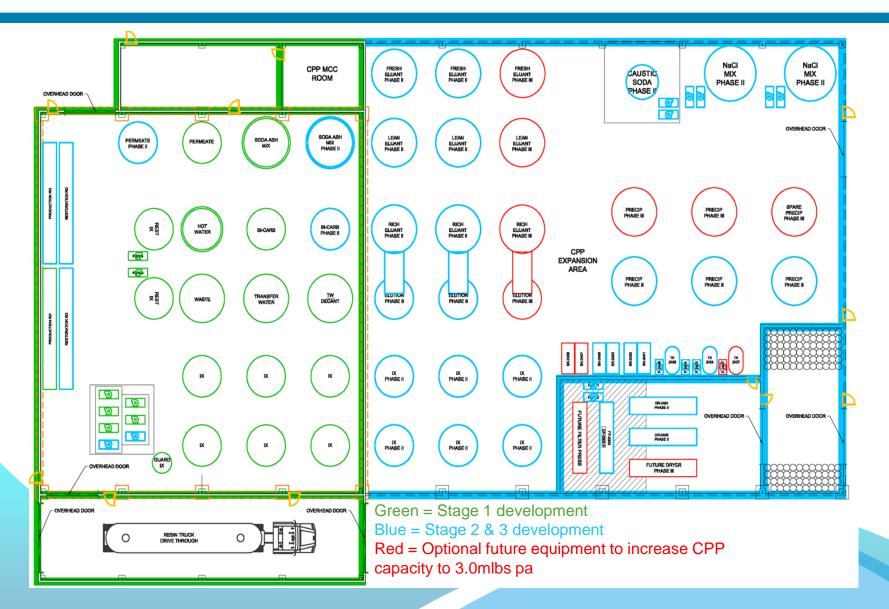
- Lance Projects JORC 2012 Code compliant 54 million lb U₃O₈ resource base and licenced to produce up to 3 million lbs. p.a., allows the ability to increase production quickly
 - No pre-stripping or mining development required
 - Production wells access the ore body directly at rate of approx.1 well/drilling rig/2 day
 - Processing plant comprised of parallel production arrays that are duplicated for each stage
- Nature of ISR lends itself to scalable expansion
 - Scalable development plan for Lance Projects based on Equity funding for Stage 1 production rate up to 700,000 lbs U₃O₈ p.a. over H1, 2016 – H1, 2017
 - Stage 2 development plan based on mixed funding and construction in H2 2016 with additional production of 500,000 lbs U_3O_8 p.a. over H2, 2017 2018 (1,200,000 lbs)
 - Stage 3 development plan based on debt funding and construction in H2, 2018 H2, 2019 with additional production of 1,100,000 lbs U_3O_8 p.a. H2, 2019 onwards (2,300,000lbs)

Development plan designed to get into production at a meaningful rate with reduced capital investment using equity followed by debt funded expansion as market allows

• Market conditions will be the determining factor in the timing of Stage 3

Scalable Plant Layout





Sales and Marketing Strategy



Strategy

- Align Peninsula with major utilities requirements
- Progressively commit production to term contracts
- Optimise revenue & reduce pricing risk

Peninsula Uranium Limited (UK)

- Peninsula has established Peninsula Uranium Limited (PUL), a dedicated uranium sales and marketing company based in the UK
- Peninsula MD/CEO has a hands-on and direct management role within PUL
- PUL is responsible for arranging and administering all sales of uranium concentrate produced by Peninsula

Term Contract Status

- 1,000,000 lbs U_3O_8 contracted in Feb 2011 for 2016 2020 delivery
- Up to 1,112,000 lbs U₃O₈ contracted in December 2014 for 2016 2025 delivery
- 1,935,000 lbs U_3O_8 contracted in February 2015 for 2016 2024 delivery
- 4,000,000 lbs U_3O_8 contracted with European utility for 2016 2024 delivery
- Projected revenue from existing contracts is up to US\$445 million

• Requests for Product (RFP's) reported by Trade Tech week ending 3 June 2016

- Non-US utility evaluating offers for 2 reloads of EUP or contained uranium for delivery commencing in 2017
- Non US utility, seeking 300,000 pounds for delivery in 2018 to 2020, continues to evaluate offers.
- Non-US utility, evaluating offers for 14.0M lbs U3O8 equivalent for delivery in the 2016-2029 period.
- Non-US utility has issued an RFP for U3O8 to be delivered in the 2017-2019
- Non-US utility awaits offers for 1.0M lbs U3O8 to be delivered between 2023 and 2027.
- Non-US utility is expected to issue a RFP in June for up to six reloads of UF6 and/or EUP with initial delivery beginning in 2017.
- Several US utilities are expected to enter the term uranium market in the coming weeks

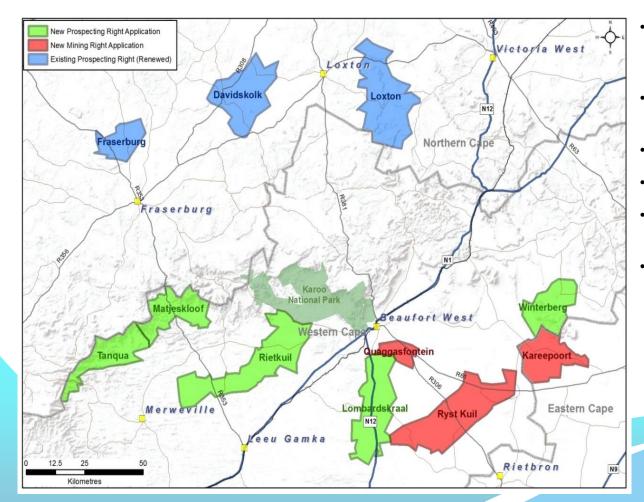
Weighted average prices for Term contracts between 2016 - 2030 is US\$55 per pound U₃O₈

Karoo Projects Overview



JORC (2012) Compliant resource 56.9m lbs eU_3O_8 at 1,108ppm (23.3Mt at 1,108ppm)

(refer Appendix 4)



- Located in the Karoo region of RSA, approx. 400km to 600km E-NE of Cape Town
- Known uranium and molybdenum mineralised province
- 4,650 km² over Permian sandstones
- 322 km² of freehold land
- Freehold land covers majority of historic mineralisation
- Ownership:
 - Peninsula 74%
 - BEE Partners 26%



Positive Karoo scoping study; Pre-Feasibility study well advanced

- Scoping Study completed on Karoo Eastern Sector Projects in South Africa
 - Combined open cast and decline mining
 - Acid processing route is the most efficient and cost effective
 - Decision to proceed to Pre-Feasibility Study
 - Significant resource expansion likely
- Pre-Feasibility Study well advanced
- Targeting commencement of mining in 2019
- Significant upside potential Karoo Western Sector Projects not included in Scoping Study
- Exploration target size 250-350mlbs U_3O_8 (126-133Mt at 900-1200ppm U_3O_8)
- Key to Multiple Source Sales Strategy

The Karoo Scoping Study referred to in this presentation is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.

Karoo Exploration Target Additional Disclosure



Basis of the Exploration Target

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

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.

Exploration Results

The database currently contains 9,343 historic holes, of which 7,230 have been used to determine the JORC (2012) Code compliant Mineral Resource and subsequent update and to extrapolate between areas of limited drilling still within the mineralised trends. Many of the remaining collar positions are for historic holes that are not within the current resource areas or are inaccessible (filled in over time). For a comprehensive description of drilling information readers are referred to the JORC Table 1 declaration included in the announcement released to ASX on 11 March 2014 titled "13% Resource Expansion and Upgrade at Karoo Projects".

Proposed Exploration Programs

Peninsula has prospecting rights to 7,550 square kilometres of ground. This package covers the most prospective mineralised trend that have a cumulative strike length of 23km. Peninsula intends to continue exploration over this ground using airborne radiometric data, geological mapping and prospecting together with follow up drilling with the intention of locating additional material for future mining and processing.

Basis of Grade and Tonnage Range Determination

With a database of 9,343 drill holes together with several thousand historic holes not yet located and entered into the database, and several decades of geological research and surface exploration, the level of exploration knowledge on which the Exploration Target is based is considered to be high.

The current Karoo resources are located on two well-defined sedimentary channels that each extends for at least 100 kms along strike. These channels have, according to historic records, been tested both recently and historically by in excess of 10,000 exploration drill holes representing 1.6 million metres of drilling. Along these channels JORC (2012) Code compliant resources have been estimated in localised areas in which reliable drilling data is available. The zones between the JORC-compliant resources 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 current JORC (2012) Code compliant resource of the Ryst Kuil channel alone, which represents the most completely drilled portion of the resources, comprises 18.5mt at 1,105ppm eU3O8.



This resource tonnage is distributed over a cumulative strike length of 23km representing approximately 0.80 million tonnes/km. The Exploration Target is based on a combination of:

- the total cumulative prospective strike length of the undrilled sections of the channel multiplied by the demonstrated tonnage/km, combined with,
- the areas of known mineralisation for which historic estimates exists but are not included in the JORC-compliant resource
- 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 included in announcement to the ASX 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.

Proposed Exploration Activities Designed To Test Validity of the Exploration Target

Over the next 3-5 years ongoing exploration drilling is proposed to expand the JORC (2012) Code compliant resource within the Exploration Target areas. This initial 3-5 years program will be focussed on the Eastern Sector RystKuil channel. Exploration activities will mostly comprise geophysical logging and geochemical sampling of additional drillholes, ground-based prospecting and geological mapping.

Testing of the Western Sector Exploration Target, utilising the same exploration techniques, areas will commence during following 5-10 year time frame.

Karoo Projects Competent Person Statement

The information in this presentation that relates to Exploration Targets, Exploration Results and Exploration Potential 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 Australian Institute of Mining and Metallurgy and is a member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (The South African Council of Natural Scientific Professions, Geological Society of South Africa). Mr van der Walt is a Director of Geoconsult International. 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 their information in the form and context in which it appears.



- Peninsula is producing uranium at the Lance Projects
- The Company has a low risk, clear path to production expansion
- Significant production volume in Term contracts
- Est. US\$17.50 per pound margin over all-in costs @ Stage 2 steady state production
- Strong financial support from first-tier shareholder base
- Karoo offers second production centre with diversity of supply and jurisdiction
- Tightening supply and new demand expected to lift the whole uranium sector
- Commencement of production resulted in a strong re-valuation
- Steady news flow over 2016 2017 expected to deliver strong re-valuation
- Steady state production expected to deliver strong re-valuation

Major sector re-rating expected due to uranium supply contraction combined with increased new demand and utility contracting

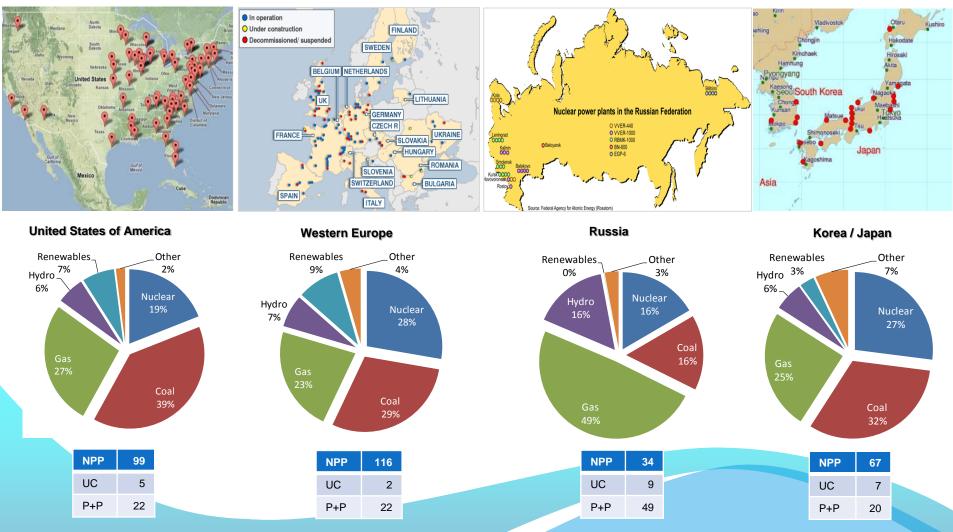


APPENDICES



Appendix 1 - Nuclear Provides Significant Baseload in Developed Nations



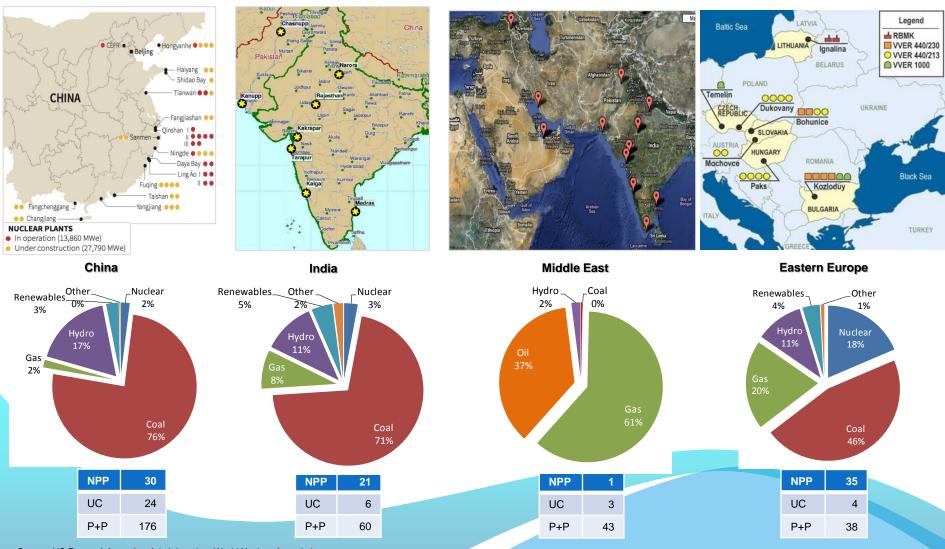


Source: US Energy Information Administration: World Nuclear Association

NPP = Nuclear Power Plant; UC = Nuclear Power Plant Under Construction; P+P = Nuclear Power Plants Planned and Proposed

Disproportionate Mix of CO₂ producing Fossil Fuels in Developing Nations





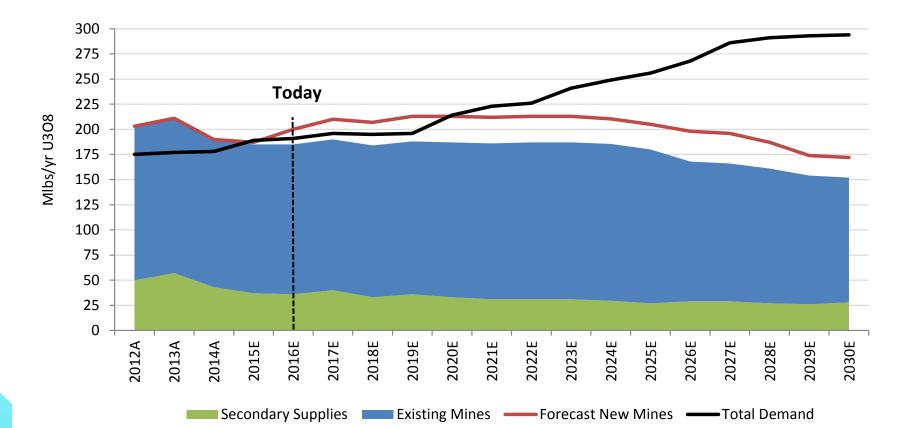
Source: US Energy Information Administration: World Nuclear Association

NPP = Nuclear Power Plant; UC = Nuclear Power Plant Under Construction; P+P = Nuclear Power Plants Planned and Proposed

Uranium Supply/Demand - Today







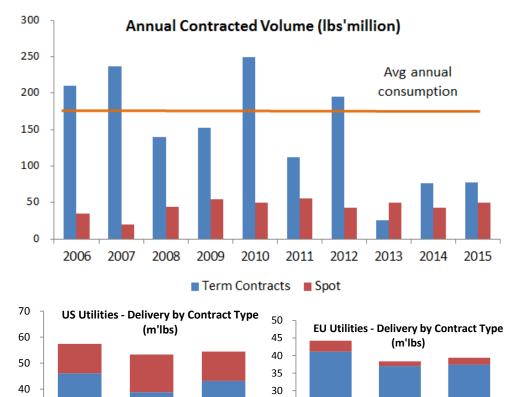
Source: UxC, WNA, IAEA, NIW, Raymond James Ltd.



Near Term	Long Term
Many reasons to expect price increase in 2016/17:	Expected \$60 plus Term contract price during 2017-19 :
- Return of utility contracting	- Reasonable risk-adjusted return
 India – strategic reserve established 	required for new projects well in advance of shortfall
 ConverDyn lawsuit vs DOE 	- China construction – domestic
 Producer M&A – Energy Fuels/Uranerz; URI/Anatolia 	- China construction – export
- China strategic stakes – Paladin,	- Strong global demand growth
Fission, Nexgen	 Declining secondary supplies
- Japanese restarts	- Significant deficit at decade's end

US & EU Utility Contract & Spot Volumes





25

20

15

10

5

n

2013

2014

Term Spot

2015

- Spot price visibility attracts the attention of the investment community
- Reality is that Term market volumes far outweigh Spot volumes
- Pre-GFC and pre-Fukushima utilities committed to buy significant volumes under Term contracts over and above their strategic inventory
- Term contract activity reduced between 2H, 2012 and 2016 as utilities consume discretionary inventory
- Term contract volumes expected to increase during 2017-18 and beyond
- Requests for Product (RFP's) are appearing

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

2015

30

20

10

0

2013

2014

Term Spot

Appendix 2 – Lance Photos Drummed Lance U3O8





Loaded Resin Trailer





Ion Exchange Columns





Plant and Well Fields Commissioning





Reverse Osmosis Plant





NRC Pre-Production Inspection



Completed 25 November



Lance Stage 1 Construction Complete











Piping and valves from waste tank to DDW

Lance Stage 1 Construction Complete





Lance Stage 1 Construction Complete











Well Field Development





Well Field Development Drilling







Classification	Tonnes	Grade (ppm U3O8)	eU3O8 (Ibs)	Mineability factor	eU3O8 (Ibs)	Recovery factor	Recovered U3O8 (Ibs) 50.4%
Measured	4,142,950	495	4,520,159	0.8	3,616,128	0.8	2,892,902
Indicated	11,532,135	497	12,640,951	0.8	10,112,761	0.8	8,090,209
M+Ind	15,675,085	497	17,161,110	0.8	13,728,888		10,983,111
Inferred	35,478,033	467	36,513,114	0.6	21,907,868	0.8	17,526,295
Total	51,153,119	476	53,674,224		35,636,757		28,509,405

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.

ISR Reserves are determined after well field development drilling



JORC compliant Resource March 2014 Large resource potential – 100+ year mine life

Classification	eU3O8 (ppm) CUT-OFF	Tonnes (million)	eU3O8 (ppm)	eU3O8 (million lbs)
Indicated	600	8	1,242	21.9
Inferred	600	15.3	1,038	35
Total	600	23.3	1,108	56.9

Classification	Sector	eU3O8 (ppm) CUT-OFF	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 5 - Board of Directors



John Harrison: *Non-Executive Chairman:* Mr Harrison brings to Peninsula a wealth of experience and resource sector knowledge acquired over a 45 year career including 20 years of investment banking in London. During this time Mr Harrison has developed an extensive international contact base advising companies across a range of commodities, (including uranium) and raising more than £500m in equity capital in the process.

<u>Gus Simpson:</u> Managing Director/Chief Executive Officer: Strong strategic leader, extensive background in resources, corporate finance and management; 25 years' experience in USA, Asia, Africa and Australia. Mr Simpson has been Managing Director of Peninsula since 2007 and has lead the exploration, permitting, feasibility, financing and construction stages of development.

Harrison Barker: *Non-Executive Director:* Harrison (Hink) Barker retired June 1, 2015 from the Generation segment of Dominion Resources with over 40 years of fossil and nuclear fuel commercial and technical responsibilities. Since 1992, Mr Barker had been the manager responsible for Dominion's procurement of nuclear fuel and the related processing steps of conversion from U3O8 to UF6, enrichment of UF6, and fabrication of nuclear fuel assemblies.

Warwick Grigor: Non-Executive Director: Mr Grigor is a highly respected and experienced mining analyst, with an intimate knowledge of all market related aspects of the mining industry. He is a graduate of the Australian National University having completed degrees in law and economics. He is the previous Executive Chairman of Canaccord Genuity Australia and is now the Executive Chairman of Far East Capital, an investment and advisory firm focussed on the resources sector.

Mark Wheatley: Non-Executive Director: Mr. Wheatley is an experienced resources company CEO, Non-Executive Director and Chairman with a career spanning more than 30 years in mining and related industries. Mr. Wheatley has 10 years' experience in the uranium industry and been involved in ISR project feasibility studies, start up, production, rehabilitation and closure. His uranium experience includes the roles of Chairman and CEO of Southern Cross Resources Inc., the operator of the Honeymoon ISR uranium project and Non-Executive Director of Uranium One Inc. and Uranium Resources Inc.

<u>Richard Lockwood:</u> Non-Executive Director: Mr Lockwood has over 50 years' experience in the funds management and mining investment sectors across the United Kingdom, Australia, and South Africa. He has extensive involvement with the uranium sector and was previously a Director of AIM-listed uranium company Kalahari Minerals. Mr Lockwood is a Director of London based Arlington Group Asset Management.

Evgenij lorich: Non-Executive Director: Mr lorich is currently Vice President, Investment Team at Pala Investments Limited (Pala) and has extensive experience in the natural resources sector across a broad range of commodities with a focus on M&A opportunities, operational, financial planning and corporate structuring. Prior to joining Pala in 2006, Mr lorich was a financial manager at Mechel where his responsibilities included all aspects of budgeting and financial modelling.