



Delivering the **clean**
energy of the future

Corporate Presentation – December 2022



Forward Looking Statements

Information Contained in this Presentation

This presentation is a summary description of NexGen Energy Ltd. ("**NexGen**" or the "**Company**") and its business and does not purport to be complete. This presentation is not, and in no circumstances is to be construed as a prospectus, advertisement or a public offering of securities. No securities regulatory authority or similar authority has reviewed or in any way passed upon the document or the merits of the Company's securities and any representation to the contrary is an offence.

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Forward-Looking Information

The information contained herein contains "forward-looking statements" within the meaning of applicable United States securities laws and regulations and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to mineral reserve and mineral resource estimates, the 2021 Arrow Deposit, Rook I Project and estimates of uranium production, grade and long-term average uranium prices, anticipated effects of completed drill results on the Rook I Project, planned work programs, completion of further site investigations and engineering work to support basic engineering of the project and expected outcomes. Generally, but not always, forward-looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment that, based on certain estimates and assumptions, the mineral resources described can be profitably produced in the future.

Forward-looking information and statements are based on the then current expectations, beliefs, assumptions, estimates and forecasts about NexGen's business and the industry and markets in which it operates. Forward-looking information and statements are made based upon numerous assumptions, including among others, that the mineral reserve and resources estimates and the key assumptions and parameters on which such estimates are based are as set out in this presentation and the technical report for the property, the results of planned exploration activities are as anticipated, the price and market supply of uranium, the cost of planned exploration activities, that financing will be available if and when needed and on reasonable terms, that third party contractors, equipment, supplies and governmental and other approvals required to conduct NexGen's planned exploration activities will be available on reasonable terms and in a timely manner and that general business and economic conditions will not change in a material adverse manner. Although the assumptions made by the Company in providing forward looking information or making forward looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate in the future.

Forward-looking information and statements also involve known and unknown risks and uncertainties and other

factors, which may cause actual results, performances and achievements of NexGen to differ materially from any projections of results, performances and achievements of NexGen expressed or implied by such forward-looking information or statements, including, among others, the existence of negative operating cash flow and dependence on third party financing, uncertainty of the availability of additional financing, the risk that pending assay results will not confirm previously announced preliminary results, conclusions of economic valuations, the risk that actual results of exploration activities will be different than anticipated, the cost of labour, equipment or materials will increase more than expected, that the future price of uranium will decline or otherwise not rise to an economic level, the appeal of alternate sources of energy to uranium-produced energy, that the Canadian dollar will strengthen against the U.S. dollar, that mineral resources and reserves are not as estimated, that actual costs or actual results of reclamation activities are greater than expected, that changes in project parameters and plans continue to be refined and may result in increased costs, of unexpected variations in mineral resources and reserves, grade or recovery rates or other risks generally associated with mining, unanticipated delays in obtaining governmental, regulatory or First Nations approvals, risks related to First Nations title and consultation, reliance upon key management and other personnel, deficiencies in the Company's title to its properties, uninsurable risks, failure to manage conflicts of interest, failure to obtain or maintain required permits and licences, risks related to changes in laws, regulations, policy and public perception, as well as those factors or other risks as more fully described in NexGen's Annual Information Form dated February 25, 2022 filed with the securities commissions of all of the provinces of Canada except Quebec and in NexGen's 40-F filed with the United States Securities and Exchange Commission, which are available on SEDAR at www.sedar.com and Edgar at www.sec.gov.

This presentation includes Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and the Mineral Resources estimates are made in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the requirements of the Securities and Exchange Commission ("SEC") set the SEC's rules that are applicable to domestic United States reporting companies. Consequently, Mineral Reserves and Mineral Resources information included in this presentation is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or statements or implied by forward-looking information or statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Readers are cautioned not to place undue reliance on forward-looking information or statements due to the inherent uncertainty thereof. There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.

NexGen | Highlights



- Strategic generational asset;
- Deliver sustainable long-term benefits to stakeholders;
- Restore Canada as a global leader in the delivery of clean-energy fuel.



- Highly experienced management team with proven track record of mining success;
- Value creation culture through a unique elite standards approach;
- Rapid growth will elevate NexGen among the top 15 mining companies in the world.



- Strong and well-respected shareholder base including CEF Holdings (Li Ka Shing) and Queens Road Capital;
- Voting support agreements in place with over 25% of shareholder base;
- \$137M in the treasury.



- Back end of licensing and permitting phase of project;
- Feasibility Study phase that is substantiated by 7 years of continuous technical and environmental assessment;
- Opportune moment in cycle as valuation suggests ideal time in industry.



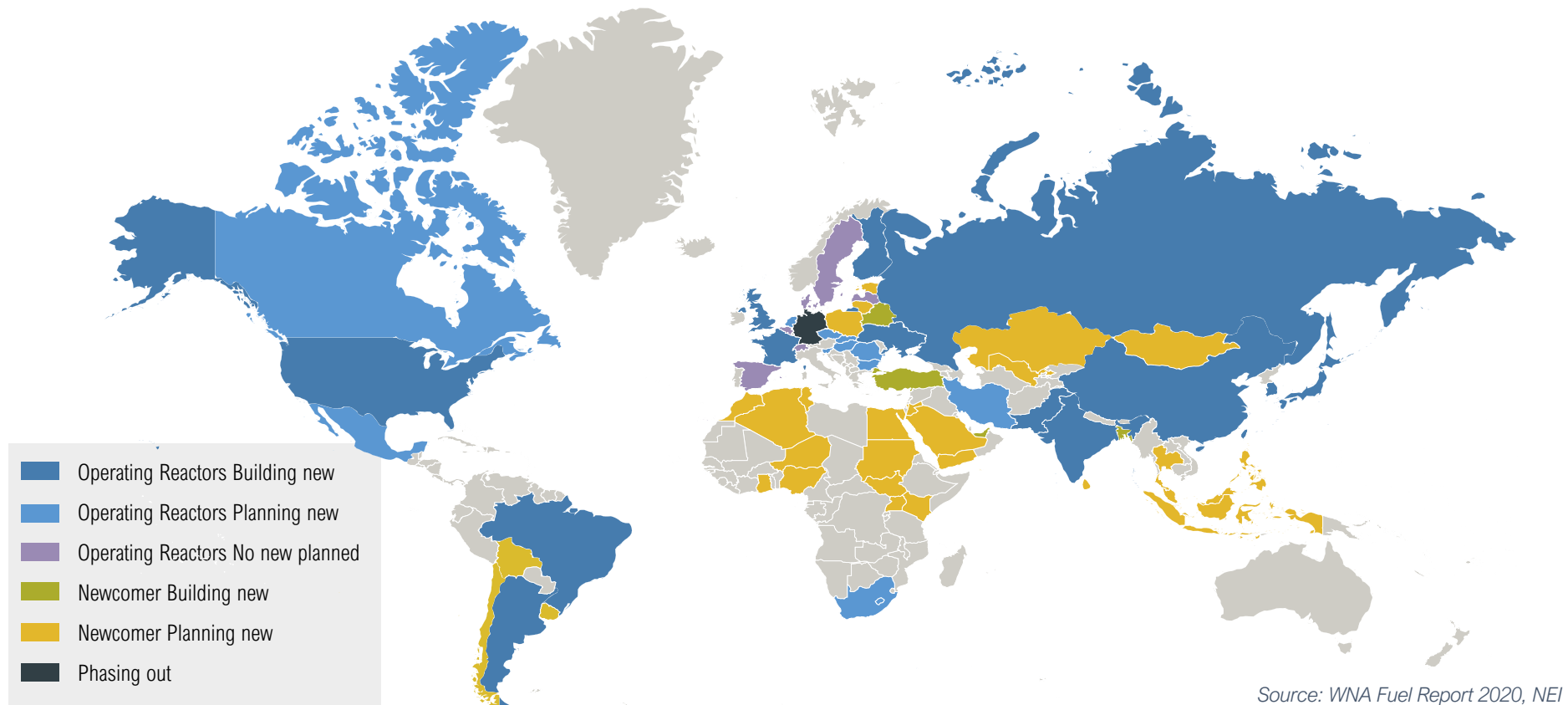
Green Global Electrification

Uranium 101

■ Key developed markets, including the USA, UK, France have all announced plans to ensure their nuclear fleet continues to operate well into the future as well as provide huge policy support for new nuclear builds (both conventional and SMRs).

■ Emerging markets continue to be drivers of new nuclear energy demand globally including China, India, Russia, UAE, Saudi Arabia, Turkey, etc.

■ China is the fastest growing market for nuclear power planning to build 150 plants over the next 15 years more than the rest of the world built over the prior 40 years.



Source: WNA Fuel Report 2020, NEI

Uranium 101

Highly concentrated uranium supply as a result of a

+10 year bear market

resulting in systemic underinvestment.



90% of uranium

is consumed by countries with no uranium production – highly susceptible to geopolitical risks.

The largest demand market is the USA

99

reactors

accounting for

30%

worldwide

generating

55%

of the US clean energy capacity

- Significantly, the US reactors run at full capacity 92% of the time delivering solid grid security in an increasingly unstable global world (cyber threats, etc.)

“Nuclear is ideal for dealing with climate change, because it is the only carbon-free, scalable energy source that’s available 24 hours a day,”

Bill Gates



Want to Make a Real Difference?

Tesla produces

1M EVs annually

(only 350,000 are truly
'green' by charging power
source)

The Market
Capitalization of
Tesla is

US\$850 Bn

The uranium mining
industry fuels
reactors globally
which removes

over
500,000,000

car-equivalents of
CO2 per year.

The Market Capitalization of
uranium mining industry is

US\$40 Bn

(~5% of Tesla's market cap)



NexGen Energy alone will
eliminate

~70,000,000

car-equivalents of CO2
per year.

The World Embracing Nuclear Energy



Hopefully, it is now extremely obvious that Europe should restart dormant nuclear power stations and increase power output of existing ones.

This is **critical** to national and international security.



China's Climate Goals Hinge on a \$440B Nuclear Buildout



Japan turns back to nuclear power in significant policy shift as fuel prices soar



Illinois approves \$700 million in subsidies to Exelon, prevents nuclear plant closures

Live news updates: French utility group EDF to restart all nuclear reactors this winter



Inflation Reduction Act
- Tax credits for existing and new reactors
- Loan guarantees for new reactors



Elon Musk says he's 'pro-nuclear' power and is 'surprised by some of the public sentiment' against it

Bloomberg

EU Commission Recognizes Importance of Nuclear Power in Green Revolution



Korea Pares Back Renewables as It Taps Nuclear for Climate Goal
▪ Renewable energy share will fall to 21.5% under revised plan
▪ Nuclear share set to increase to almost one-third by 2030



Morrison ministers lay groundwork for nuclear energy election plan

Uranium miner NexGen Energy strikes gold with ASX listing

THE AUSTRALIAN

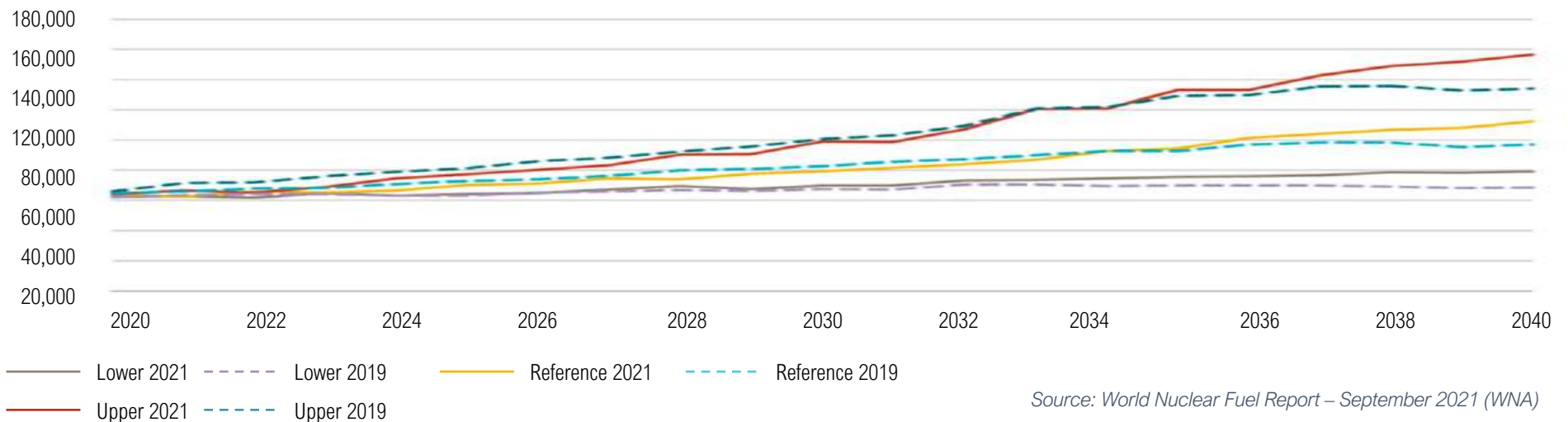
A Paradigm Shift

Fundamental Demand Factors

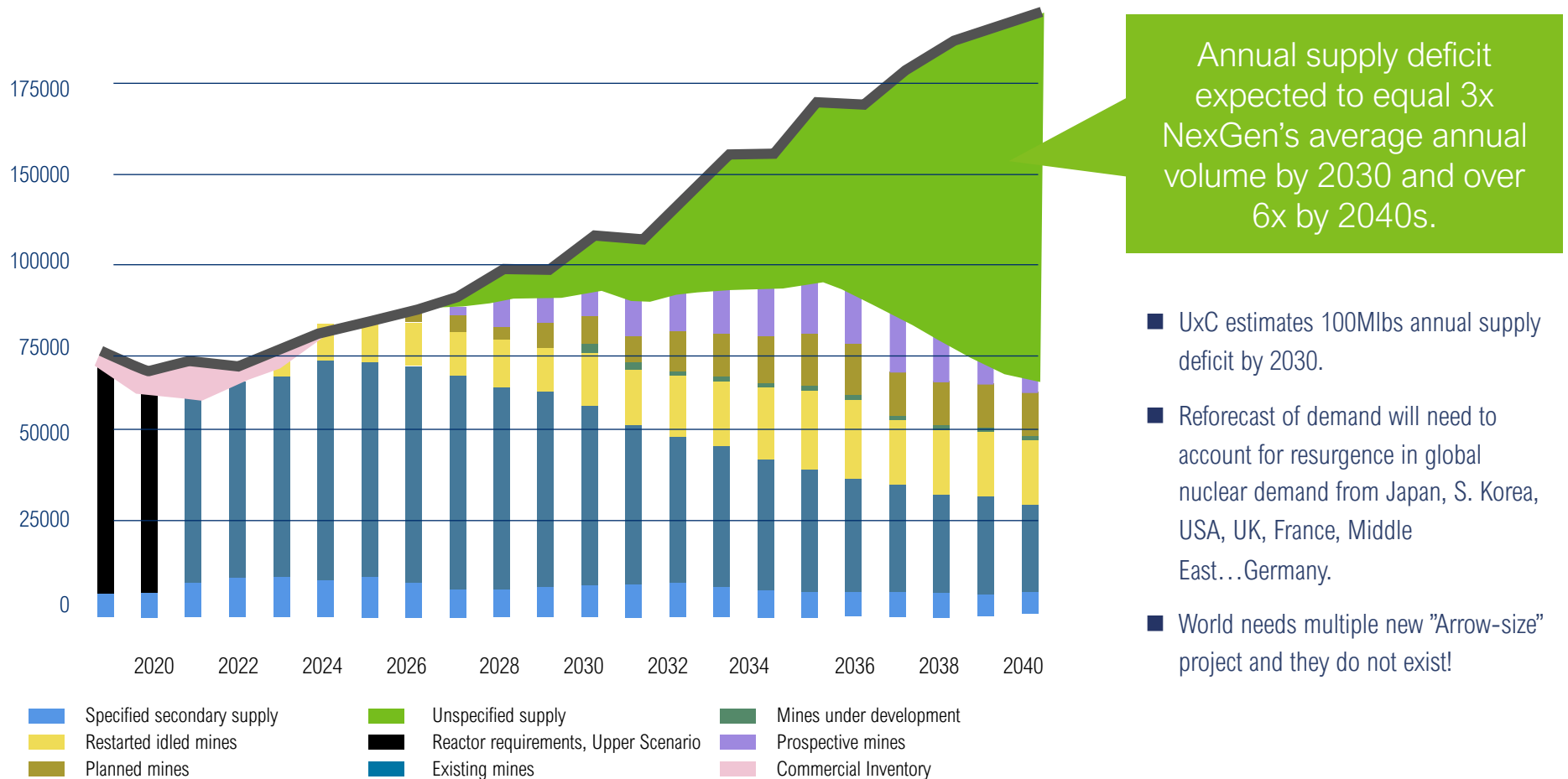
- Global energy transition to meaningfully address global warming has resulted in significant new investment in nuclear demand.
- Policy now supportive of nuclear energy which have created positive demand 'shocks' (most notably in the US, Korea, France, Japan and the UK).
- **Sprott Physical Uranium Trust (SPUT)** – on pace for +100Mlbs annual rate of consumption (half of annual global uranium demand).
- **Inventory restocking** – market has been drawing inventory levels down for 10 years and is now understocked.
- **Utility Contracting** – last contracting cycle ended in 2011. Uncovered requirements at highest levels on record.

Fundamental Supply Factors

- Extreme underinvestment in uranium sector for over 10 years.
- No incentive provided to explore, develop, permit, construct or operate uranium mines.
- Mines depleted during this bear cycle resulting in even fewer remedies to strong growing demand.
- Global inventories have been relied on heavily since 2016 when uranium mines started to shut (including: McArthur River, Rabbit Lake, Ranger, Cominak, US ISR, etc.) most of which is depleted.
- Average global uranium head grade is ~0.50% U3O8 and average all-in 'economic' cost of the industry requires >50% rise in prices from current levels.
- Security of supply will be paramount of the utilities attempt to incentivize new supply which cannot respond quickly, no matter the uranium price.



Simple Resolution



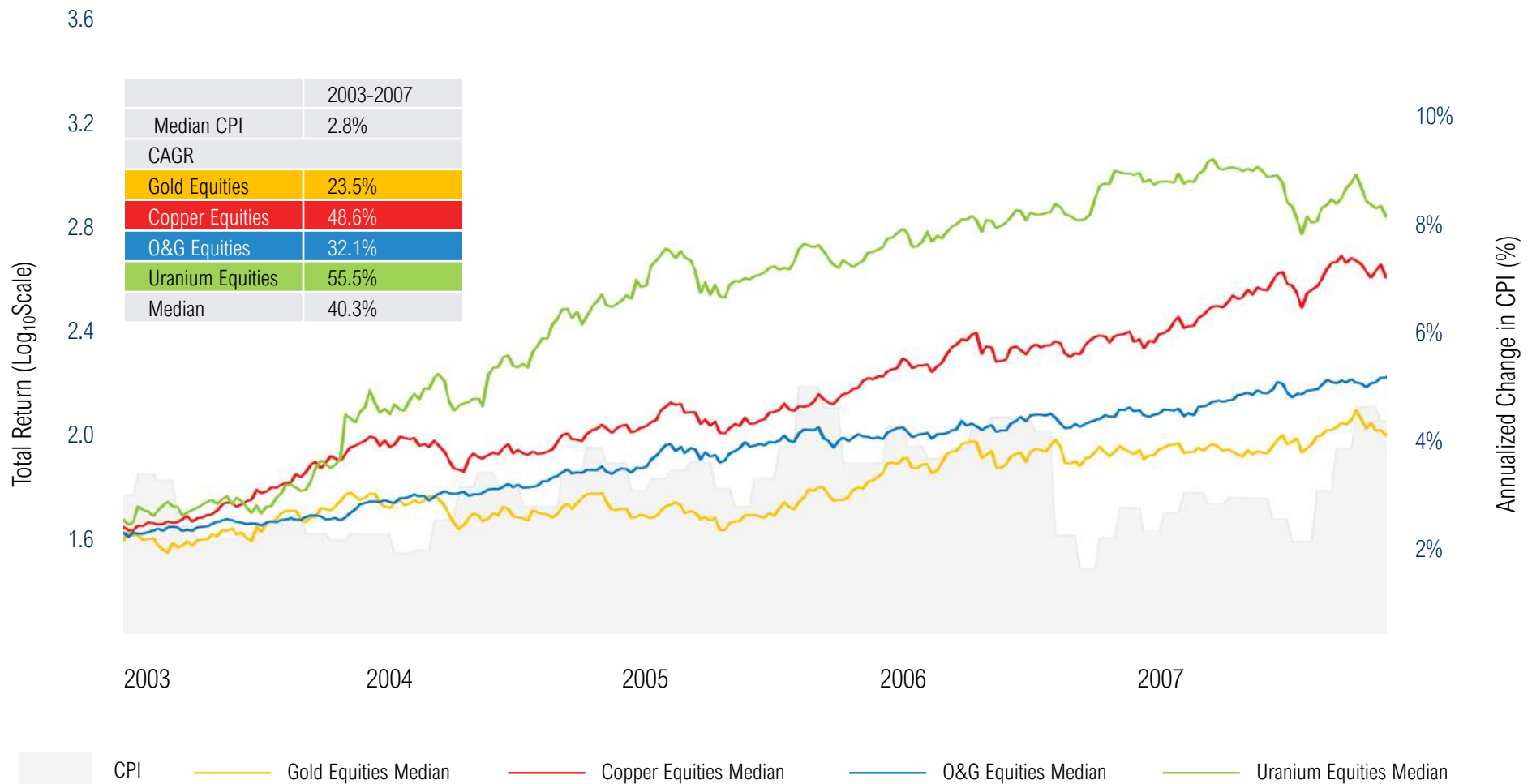
The result will be sustainably high uranium prices



Source: World Nuclear Fuel Report – September 2021 (WNA)

Commodity Equities Vs. Inflation

Uranium equities have historically outperformed during periods of high inflation



Source: BMO Capital Markets

The Elite Arrow Project



Strategic Tier One Asset

Low Cost & Environmentally Elite

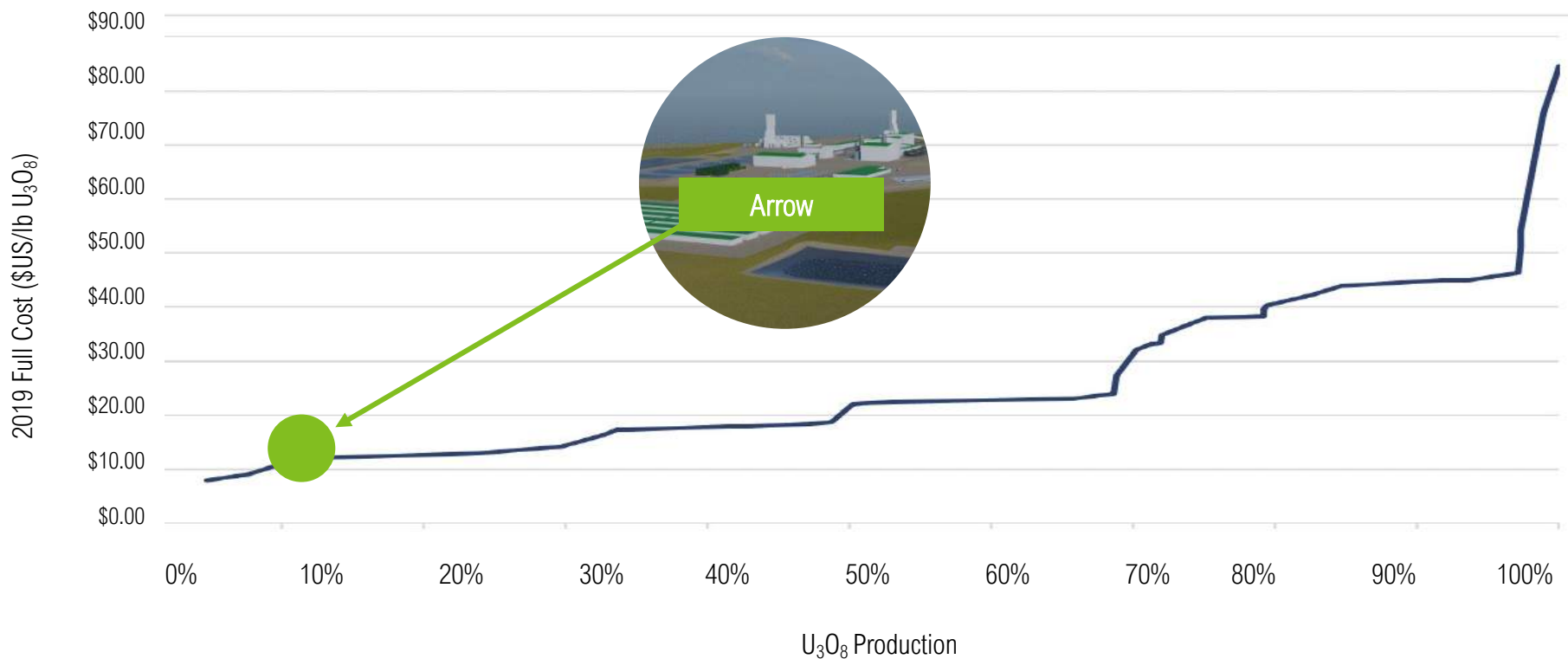
- Production costs at the bottom of the global cost curve incorporating a new elite standard for environmental mine management.

Long-Life

- Multi-decade project featuring active and ongoing decommissioning with complete production flexibility in light of market conditions during operations. Permitting for 24-year operating life.

Jurisdiction

- Saskatchewan consistently ranked amongst the world's best mining jurisdictions with leading environmental and social practices.



Source: UxC

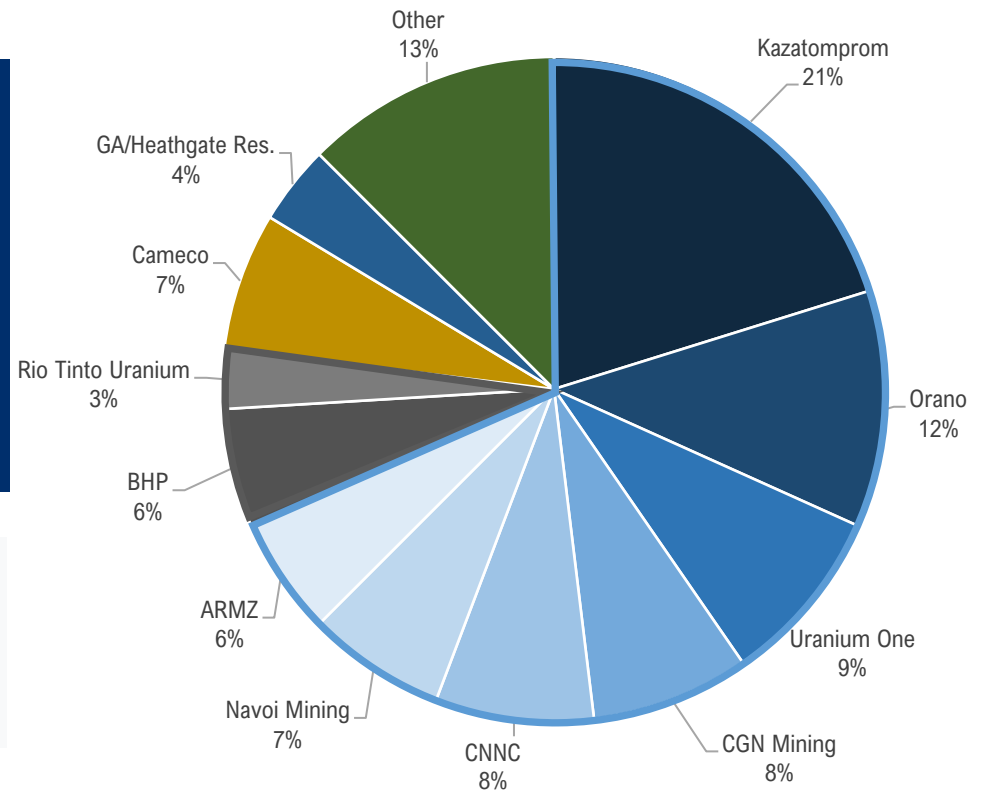
Strategically Significant

Limited Uranium Investment Opportunities

- 71% of production is from state owned/controlled companies
- 9% of production is from major, diversified mining companies
- 13%+ of production is from small scale producers or non-public companies
- Cameco is currently the only major uranium pureplay that is not state owned/controlled
- Most of the world's uranium production is by companies with limited or no access to retail investors

Rook I's planned production of 30M lbs could represent 15-20% of global production, providing an unincumbered investment opportunity

Uranium Production by Company, 2020 (Source: UxC)



NexGen Mineral Resources and Reserves

2021 FS Mineral Resources				
Classification	Zone	Tonnage (k Tonnes)	Grade (% U ₃ O ₈)	Contained Metal (Mlb U ₃ O ₈)
Measured	A2 LG	920	0.79	16.0
	A2 HG	441	16.65	161.9
	A3 LG	821	1.75	31.7
Measured Total		2,183	4.35	209.6
Indicated	A2 LG	700	0.79	12.2
	A2 HG	56	9.92	12.3
	A3 LG	815	1.26	22.7
Indicated Total		1,572	1.36	47.1
Measured & Indicated	A2 LG	1,620	0.79	28.1
	A2 HG	497	15.9	174.2
	A3 LG	1,637	1.51	54.4
Measured & Indicated Total		3,754	3.10	256.7
Inferred	A1 LG	1,557	0.69	23.7
	A2 LG	863	0.61	11.5
	A2 HG	3	10.95	0.6
	A3 LG	1,207	1.12	29.8
	A4 LG	769	0.89	15.0
Inferred Total		4,399	0.83	80.7

2021 FS Probable Mineral Reserves			
Zone	Tonnage (k Tonnes)	Grade (% U ₃ O ₈)	Contained Metal (Mlb U ₃ O ₈)
A2	2,594	3.32	190.0
A3	1,982	1.13	49.5
Probable Reserves Total	4,575	2.37	239.6

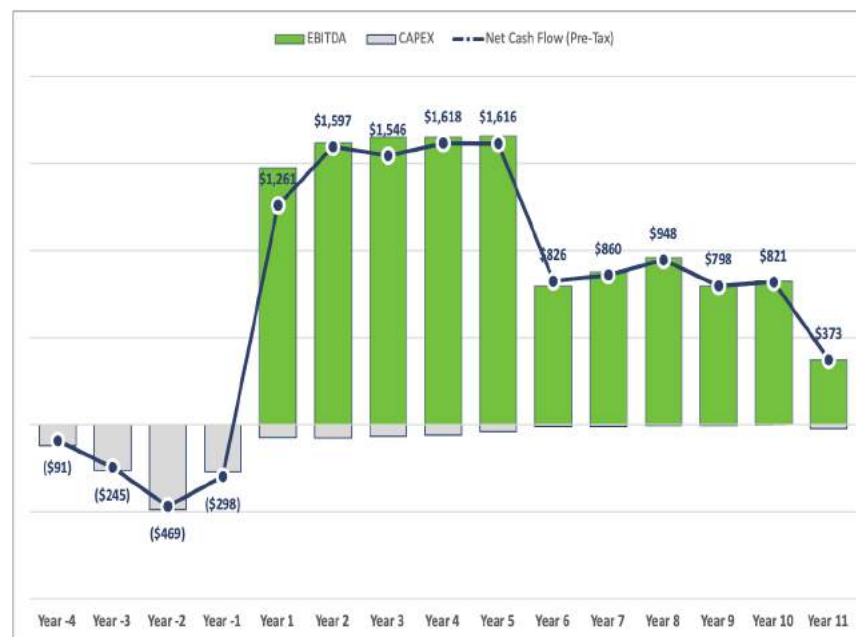
Source: NI 43-101 Technical Report on Feasibility Study

Strategic, Robust and Environmentally Elite

The Rook I Project is the **largest development-stage uranium deposit** in the world. The Project has advanced through a Preliminary Economic Assessment ("PEA") in 2017¹, a Pre-feasibility Study ("PFS") in 2018² and now a Feasibility Study ("FS")³.

FS (\$ CAD) ⁴		
U ₃ O ₈ Price used in Economic Model	\$USD 50/lb (base case)	\$USD 60/lb ⁽⁵⁾
After-Tax NPV @ 8%	\$3.47 Billion	\$4.40 Billion
After-Tax Internal Rate of Return (IRR)	52.4%	59.5%
After-Tax Payback	0.9 Year	0.8 Year
Pre-Commitment Early Works Capital	\$158 Million	\$158 Million
Project Execution Capital	\$1,142 Million	\$1,142 Million
Total Initial Capital Costs ("CAPEX")	\$1,300 Million	\$1,300 Million
Average Annual Production (Year 1-5)	28.8 M lbs U ₃ O ₈	28.8 M lbs U ₃ O ₈
Average Annual After-Tax Net Cash Flow (Years 1-5)	\$1,038 Million	\$1,255 Million
Average Annual Production (Life of Mine)	21.7 M lbs U ₃ O ₈	21.7 M lbs U ₃ O ₈
Average Annual After-Tax Net Cash Flow (Life of Mine)	\$763 Million	\$929 Million
Nominal Mill Capacity	1,300 tonnes per day	1,300 tonnes per day
Average Annual Mill Feed Grade	2.37% U ₃ O ₈	2.37% U ₃ O ₈
Mine Life	10.7 Years	10.7 Years
Average Annual Operating Cost ("OPEX", Life of Mine)	\$ 7.58 (US \$5.69)/lbs U ₃ O ₈	\$7.58 (US \$5.69)/lbs U ₃ O ₈

EBITDA Profile (C\$ MM)



The Rook I Project is being permitted for a 24-year mine life.

1. Technical report on the Preliminary Economic Assessment of the Arrow deposit, Rook I Property, province of Saskatchewan, Canada (RPA, 2017).

2. Arrow deposit, Rook I Project, Saskatchewan, NI 43-101 technical report on Pre-Feasibility Study (Wood, 2018).

3. Arrow Deposit, Rook I Project, Saskatchewan, NI 43-101 Technical Report on Feasibility Study (Stantec, Wood, RPA, Golder, 2021). "Feasibility Study", and "FS"

4. FS analysis is based on CAD \$1.00 = US \$0.75.

5. For illustrative purposes, an alternative to the Base Case using \$60/lb U₃O₈ is shown. See "Economic Results" for further discussion on the sensitivity analysis in the Feasibility Study.

Arrow Resilient Economics: Uranium Price Sensitivity

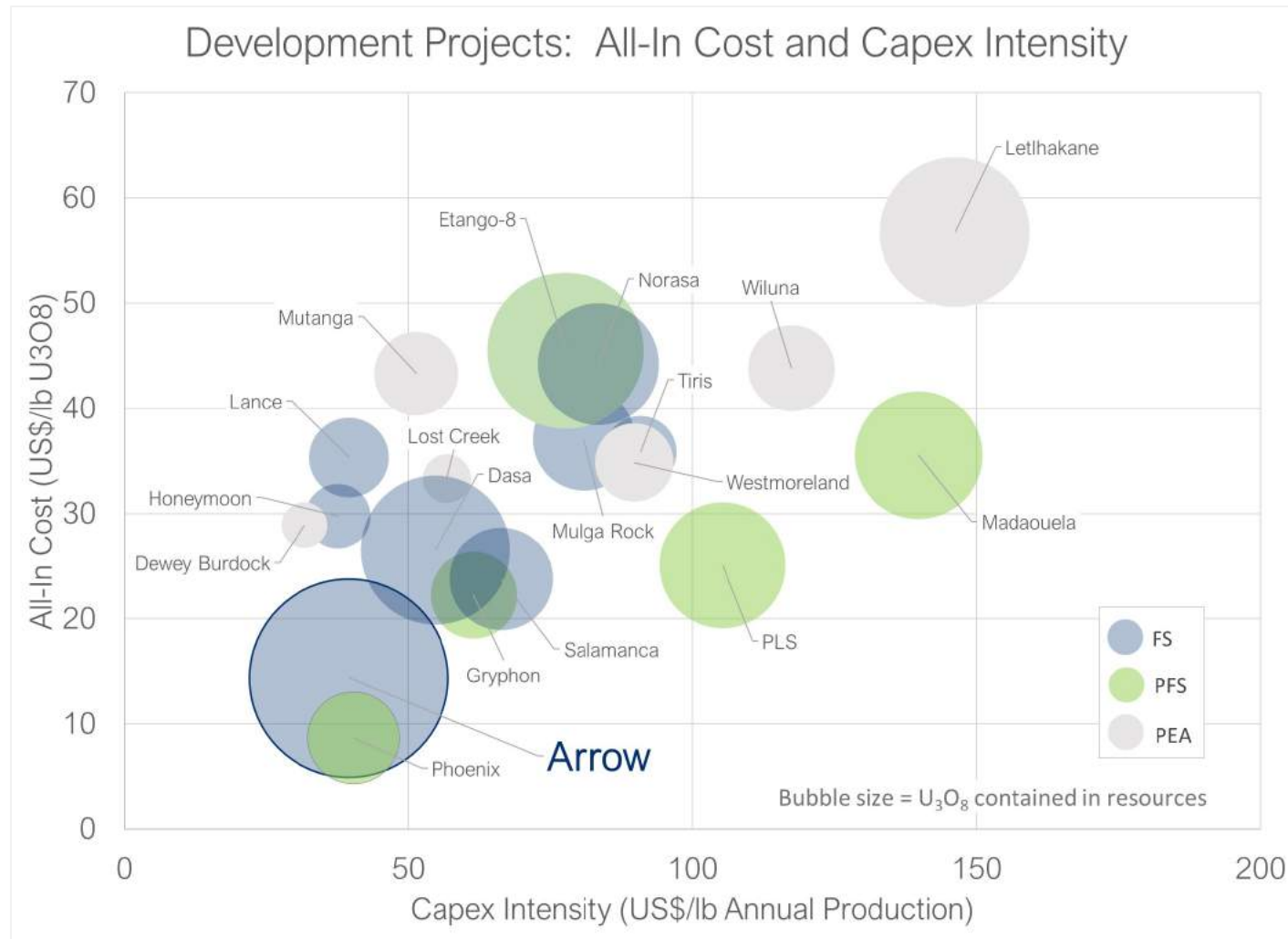
Uranium Price (\$ USD/lb U ₃ O ₈)	After-Tax NPV ₈	After-Tax IRR	Avg. Annual EBITDA ¹ (Years 1-5 production)
\$150/lb U ₃ O ₈	CAD \$12.80 Billion	101.8%	\$5.18 Billion
\$100/lb U ₃ O ₈	CAD \$8.13 Billion	81.6%	\$3.39 Billion
\$75/lb U₃O₈	CAD \$5.80 Billion	68.7%	\$2.50 Billion
\$60/lb U ₃ O ₈	CAD \$4.40 Billion	59.5%	\$1.97 Billion
\$50/lb U ₃ O ₈ (Base Case)	CAD \$3.47 Billion	52.4%	\$1.61 Billion
\$40/lb U ₃ O ₈	CAD \$2.53 Billion	44.0%	\$1.25 Billion

1. Average EBITDA figures based on Years 1 - 5 of production.

2. The economic model in the Feasibility Study was subjected to a sensitivity analysis to determine the effects of changing metals prices, grade, metal recovery, exchange rate, OPEX, CAPEX, labour and reagent costs. The NPV is most sensitive to metals prices, grade, metal recovery, and exchange rate. The sensitivity of the after-tax NPV and IRR are summarized in the above table using the price of uranium as the dependent variable.



Rook I (Arrow) in Context – Large, Low Cost, Low Capex

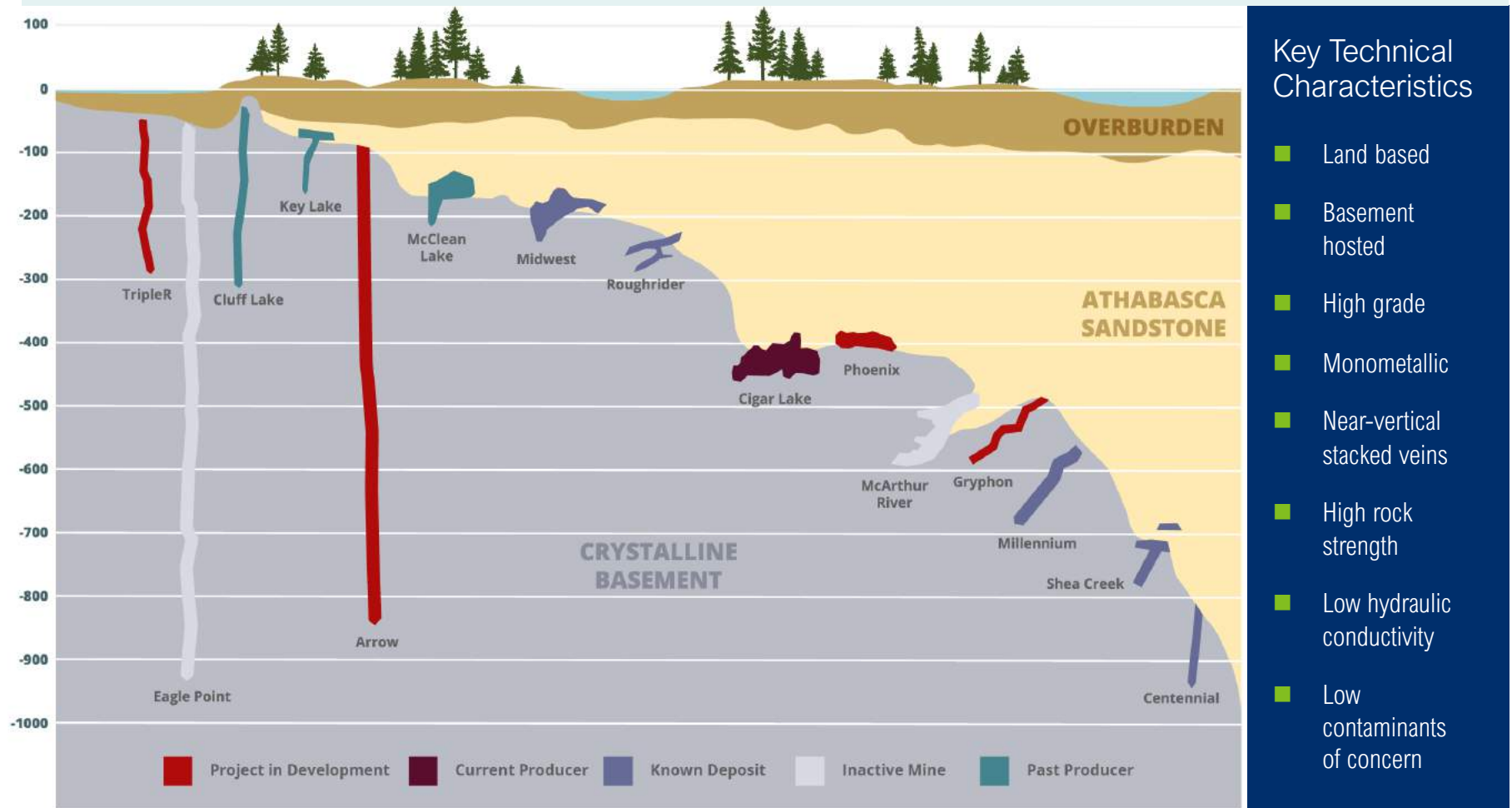


The Rook I Project is the largest development stage uranium project with the lowest capital intensity compared to peers

Source: Company reports.
Exchange rates: USD/CAD 0.75, USD/AUD 0.70.
Arrow capex excludes pre-commitment early works of C\$158 million.

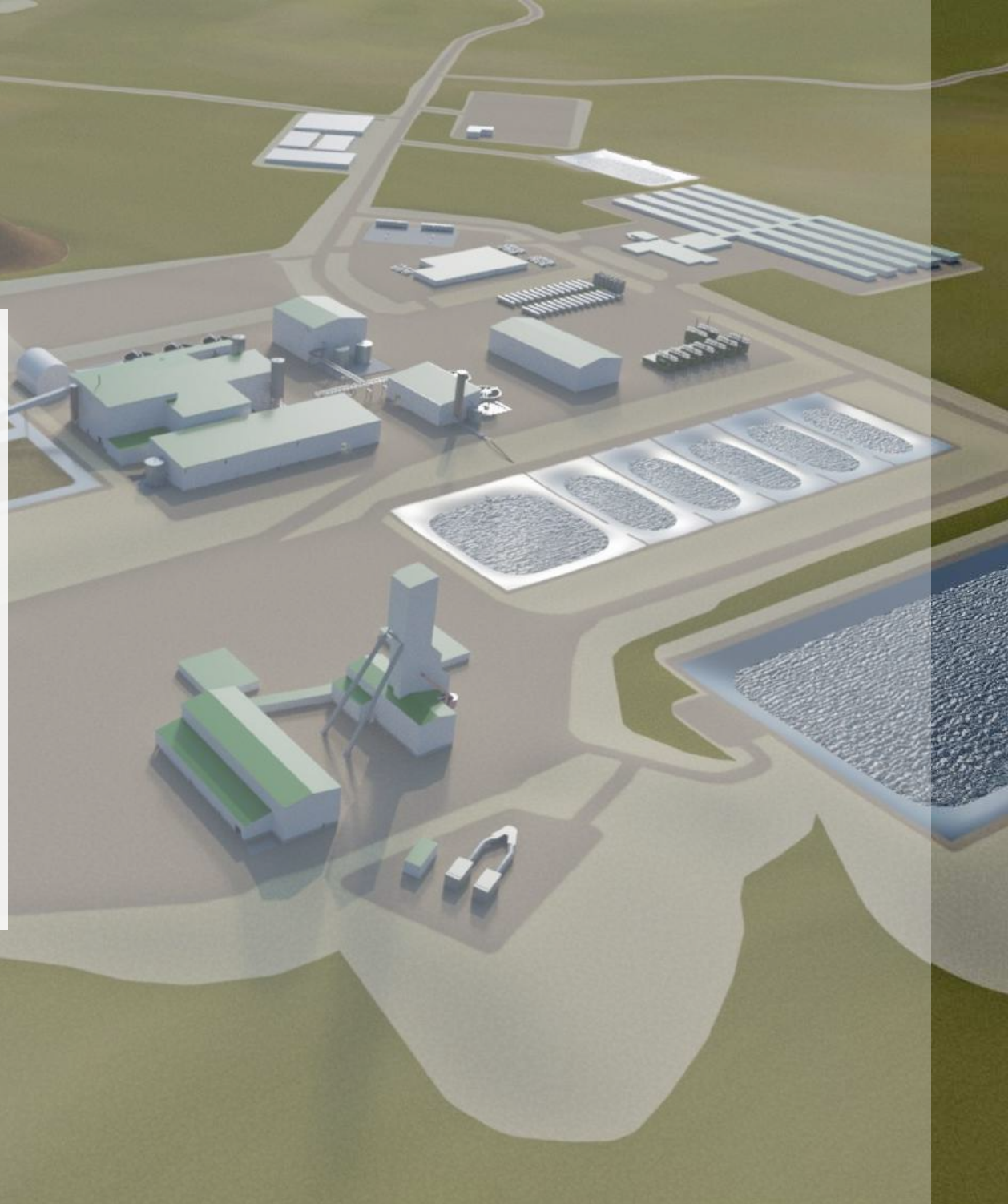
A Naturally De-risked Technical Setting

The characteristics of the Arrow deposit are conducive to conventional low-cost bulk mining methods and best-in-class tailings and environmental mine management. The natural geological setting of the deposit eliminates the requirement for complex, costly and technically challenging engineering designs.

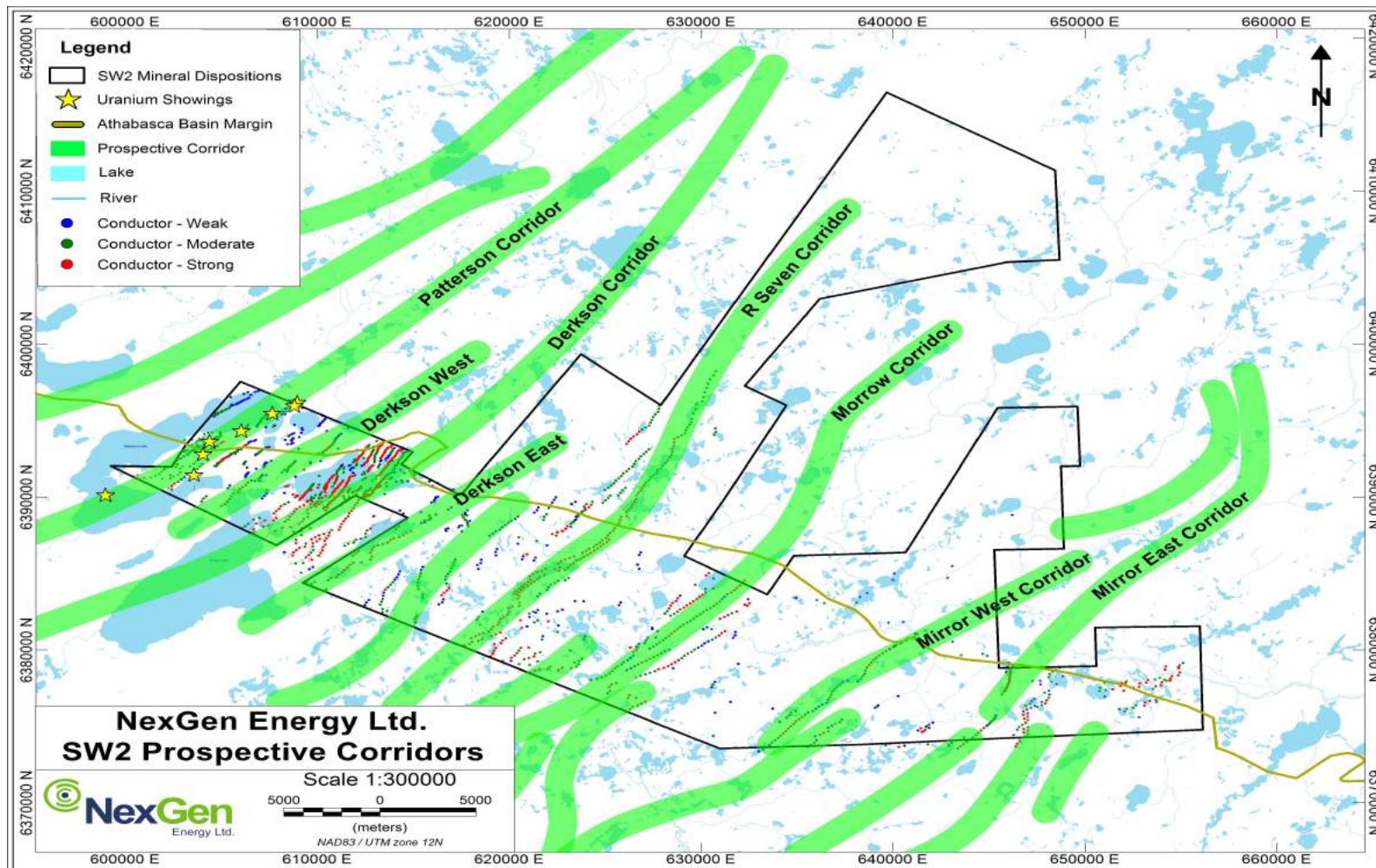


Conventional Low Risk Mining and Processing

- Conventional longhole stoping combined with transverse stoping in ultra high-grade zones.
- Shaft access combined with internal ramps.
- Average LOM ore production rate of 1,207 tpd producing peak production of 30Mlbs U3O8 per annum.
- Predictable and low risk process flow sheet.
- Ore sorting and storage, grinding, acid leaching, CCD, solvent extraction achieving 97.6% overall mill recovery.
- Elite environmental performance.



Grassroots Discovery Potential – 2022 Underway!



Regional Target Areas showing VTEM and ZTEM Picks, known uranium occurrences (yellow stars and DER-04), gravity low outlines (dashed lines), Athabasca Basin margin (yellow line), underlain by regional magnetic susceptibility.



NexGen
Energy Ltd.

Catalysts & Capital Structure

2022 - 23 Priorities

Impact Benefit Agreement with
Clearwater River Dene Nation
("CRDN").

1

Submission of the
Environmental Impact
Statement (EIS).

2

3

Acceptance of the
Environmental Impact
Statement (EIS).

4

Regional Exploration
Drilling Targeting Brand
New Discoveries –
ongoing.

5

Geotechnical
Confirmation
Program.

2022 - 23 Priorities

6

EIS Public Comment
Period closes
October 2022

7

2021 Sustainability
Report.

8

Completion
of FEED.

9

Completion of final
Licensing Documents.

10

Commencement of
Detailed Engineering.

Capital Structure



Shareholders



■ Institutional: 74% ■ Retail: 26%

- CEF Holdings (Li Ka-Shing) *voting support*
- Queens Road Capital *voting support*
- Mega Uranium
- Kopernik Global
- Segra Capital
- CQS LLC
- Falcon Edge Capital
- Old West Investment
- Janus Henderson
- Sachem Cove

(1) Inclusion of the potential debenture conversion of the US\$15M 2020 Debenture converted to CAD on November 30, 2022 FX rate of 1.3508 at the conversion price of \$2.34 would bring the number of fully diluted shares to 534,830,681.

(2) Traded on the TSX, NYSE and ASX

(3) Based on IsoEnergy market capitalization as of November 30, 2022

(4) Cash balance is as per September 30, 2022 Financial Statements with respect to NexGen ownership only.

NexGen Analyst Coverage



Executive Leadership Team



Leigh Curyer
Chief Executive Officer, President & Director

- Founder of NexGen Energy and Chartered Accountant with years 20+ years of experience in the uranium mining sector having raised over \$650M in equity
- Former CFO of Southern Cross Resources where he led the permitting and feasibility study work on the Honeymoon ISL uranium project in South Australia
- Former Corporate Development at Accord Nuclear Resource Management assessing global uranium projects for First Reserve Corporation



Travis McPherson
SVP, Corporate Development

- 13+ years of experience in the mining sector helping to raise over \$550M for NexGen since inception.
- Former head of Corporate Development for a TSX-listed gold producer playing an integral part in a number of mandates including corporate strategy, financing, engagement, permitting, engineering, and construction.
- Started his career in the natural resource group of a boutique Canadian investment bank.



Harpreet Dhaliwal CPA
Chief Financial Officer

- Mining executive with 12+ years of experience in accounting management and financial stewardship.
- Prior to joining NexGen, Harpreet served as the Chief Financial Officer at Leagold Mining.



Gillian McCombie
VP, Human Resources

- Strategic HR Professional with 24+ years of experience in mining industry
- International experience in talent management, strategic recruiting, policies and procedures and international service.
- Former VP of HR with Capstone Mining



Tony George, P.Eng
Technical Advisor

- Mining Engineer with over 25+ years of experience in operations, project management and construction of mining projects.
- International experience in project development from feasibility to mine construction.



Kevin Small
SVP, Engineering and Operations

- Mining engineer with more than 30+ years experience across operations, projects, and technical services, including experience in both underground and shaft sinking.
- Most recently spearheaded the turnaround strategy at Jerritt Canyon in Nevada.
- Has been in consulting and operations roles since 2014, working with such clients as St. Andrew's Goldfields, Kirkland Lake (at Taylor Mine), RNC Minerals, Jerritt Canyon and Sprott.



Mary Fraser
VP, Communications

- Strategic communications professional with 25+ years of experience with global brands
- Including high-profile media relations, corporate communications and community engagement.
- Worked in a number of sectors to lead organizations through communications strategies specific to rapid global growth.

NexGen Executive team spans the entire mining cycle including experience in permitting, project financing, construction and operations.

Board of Directors



Christopher McFadden
(Chairman)

- Lawyer with 20+ years of experience in exploration and mining
- Commercial General Manager for Rio Tinto



Richard Patricio

- Lawyer with 15+ years capital markets experience
- CEO and President of Mega Uranium



Trevor J. Thiele

- Chartered Accountant with 30+ years of experience in capital markets
- CFO of major Australian Agribusinesses (Elders and Viterro)



Brad Wall

- 14th Premier of Saskatchewan
- 20+ years of experience in provincial politics, energy sector and infrastructure investment



Sybil Veenman

- Lawyer and ex-Barrick Gold SVP and General Counsel
- Board member of Royal Gold, IAMGOLD and Noront Resources



Karri Howlett CFA, C.Dir

- Current President of RESPECT Consulting a Saskatchewan-based geosciences and engineering consultancy
- Board member of SaskPower and Chair of Safety, Environment and Social Responsibility Committee



Warren Gilman

- Chairman and CEO of Queens Road Capital
- Mining engineer with 30+ years of experience as a deal maker in the metals and mining sector.
- Founder of CIBC Global Mining team in Toronto in 1988
- Served as an advisor to largest mining companies around the world: BHP, Rio Tinto and many others
- From 2011, Mr. Gilman led CEF Holdings Ltd., a global mining investment company, owned 50% by CIBC and 50% by CK Hutchison Holdings Ltd.



Don J. Roberts

- Leading financial executive and Chartered Accountant, with 30+ years of experience.
- 23-year career in Hong Kong as Group Deputy CFO with CK Hutchison Holdings, a conglomerate and Fortune 500 company with operations in 40 countries.
- Board member of CK Asset Holdings, SK life Sciences Int'l, HK Electric Investments all listed in Hong Kong, and Queen's Road Capital Investments listed on the Toronto Exchange.

Advisory Board

Charles Scorer Special Advisor Uranium Marketing

- Served as the Chief Executive Officer of Accord Nuclear Resources in partnership with First Reserve Corporation.
- 25+ years of commercial and operation experience in uranium and global nuclear fuel market.
- Former Chief Executive Officer of London based nuclear fuel trading company, Nufcor International Limited.

Andrew Browne Technical Advisor

- Former Geologist with over 30+ years of experience in exploration and mining geology globally.
- Former operator of a private geoscientific consultancy practice – specializing in global uranium projects.



contact

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