

An aerial photograph of an industrial site, likely a power plant or refinery, during sunset. The sun is low on the horizon, casting a warm glow over the scene. The site features several large buildings, parking lots filled with vehicles, and various industrial structures. The surrounding area is a mix of cleared land and dense forest. A large body of water is visible in the background.

Good Energy

Delivering Clean Energy
for Generations

Corporate Presentation |
November 2025

 **NexGen**
Energy Ltd.

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.

Except where otherwise indicated, the information contained in this presentation has been prepared by NexGen and there is no representation or warranty by NexGen or any other person as to the accuracy or completeness of the information set forth herein. This presentation includes information on adjacent properties that was obtained from various publicly available sources referred to herein and the accuracy and completeness of such information has not been verified by NexGen. Except as otherwise stated, information included in this presentation is given as of the date hereof. The delivery of this presentation shall not imply that the information herein is correct as of any date after the date hereof.

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 and development activities and budgets, Canadian Nuclear Safety Commission and other approvals, 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 the 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 March 3, 2025 filed with the securities commissions of all provinces and territories of Canada and in NexGen's 40-F filed with the United States Securities and Exchange Commission, which are available on SEDAR+ at www.sedarplus.com and Edgar at www.sec.gov.

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.

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.

All material scientific and technical information in this presentation is derived from the Company's independent feasibility study (the "Rook I FS Technical Report" or the "FS") entitled "Arrow Deposit, Rook I Project, Saskatchewan, NI 43-101 Technical Report on Feasibility Study dated March 10, 2021 filed under the Company's profile on SEDAR+ at www.sedarplus.ca and on EDGAR at www.sec.gov. For details of the Rook I Project, including the key assumptions, parameters and methods used to estimate the Mineral Resources described in this Presentation, please refer to the Rook I FS Technical Report.

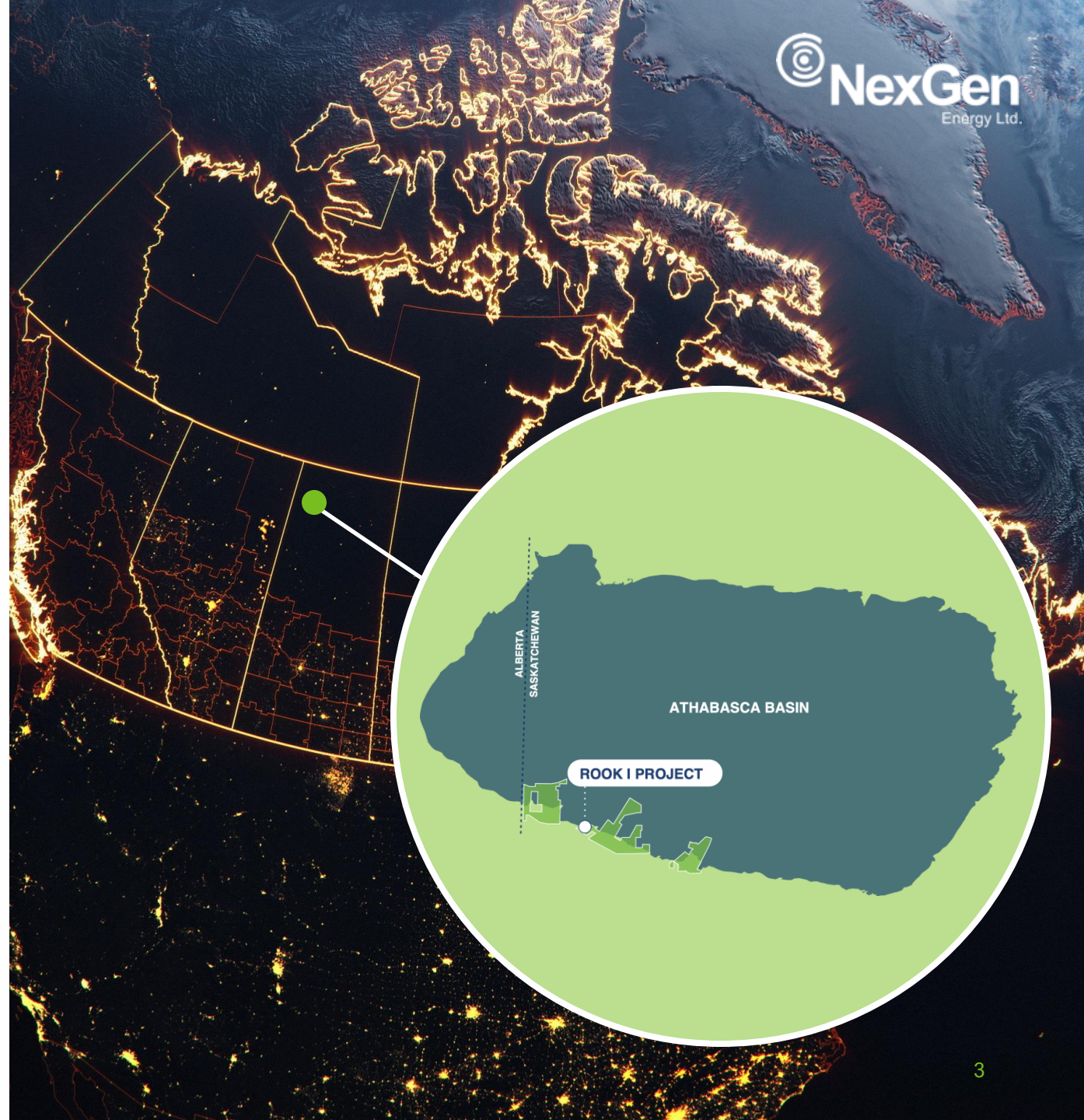
All scientific and technical information in this presentation has been reviewed and approved by Mr. Simon Allard, P.Eng, Vice President, Commercial, and Mr. Jason Craven, P.Geo., Vice President, Exploration for NexGen. Mr. Allard approved the scientific and technical information related to operational matters contained in this MD&A and Mr. Craven approved the scientific and technical information related to exploration matters. Each of Mr. Allard and Mr. Craven is a qualified person for the purposes of NI 43-101.

NexGen is advancing one of the world's most **strategic uranium assets** through its 100% owned Rook I Project, located in a Tier 1 mining jurisdiction.

NexGen's flagship, high-grade asset is the Rook I project which is positioned to have robust free cashflow¹, in addition to commanding an expansive 190,000+ hectare portfolio² in the southwest Athabasca Basin, Canada - a uranium-rich district with basement rock hosted deposits and long-life potential.

¹ Statements regarding future cash flows of the Rook I Project are subject to the various risks and assumptions as outlined in the Company's AIF, and those further described under the heading "Forward Looking Information" of this Presentation. Refer to Rook I 2021 Feasibility Study Technical Report.

² Based on NexGen's direct land position as of September 30, 2025.



NexGen:

The Right People, Right Asset, Right Time



Tier 1 Uranium Project

Simple, **conventional mining methods** with ultra-high grades, in a sovereign jurisdiction, delivering scale, high margins, and robust after-tax cash flow¹.



Build Ready, Permitting in Final Stages

Provincial Environmental Assessment approved with Federal hearings set for **November 2025 and February 2026**. With engineering and procurement well advanced, construction will begin immediately following a positive Federal approval decision.²



Leveraged to Rising Prices

Market-related contracting strategy optimizing exposure to future uranium pricing. To date, **10 million lbs sales commitments with major utilities have been awarded**³.



Robust Production

Ability to produce up to **30 million lbs annually**⁴. Arrow remains open in all directions with significant growth potential once in production.



Strategic U.S. Footprint

Exposure to high quality and large U.S. assets via major ownership interest in IsoEnergy.⁵



Local Support

Formal Indigenous Community support in Rook I's Local Priority Area through industry-leading Benefit Agreements⁵.



Generational Value Creation

Potential to produce ~20% of global supply⁶ from compact and highly sustainable conventional underground mine.⁷



Nuclear Market Tailwinds

Well positioned to benefit from accelerating global uranium demand and rising long-term prices, driven by a deepening structural supply deficit⁸.



Decades of Relevant Experience

Proven Leadership and Execution Team that has built, financed and operated globally significant mining projects.



Open Exploration

The latest discovery, Patterson Corridor East, is showing district-scale growth potential within the land package.

¹ Statements regarding future cash flows of the Rook I Project are subject to the various risks and assumptions as outlined in the Company's AIF, and those further described under the heading "Forward Looking Information" of this Presentation.

² There can be no assurance that the required permits will be obtained on the terms sought or at all. See "Forward-Looking Statements" for risks and uncertainties related to permitting and approvals.

³ Refer to August 6, 2025 Press Release for more information.

⁴ Refer to Rook I Feasibility Study Technical Report.

⁵ Refer to NexGen's most recent Management Discussion and Analysis ("MD&A").

⁶ Based on calculation of Rook I potential production from the 2021 FS and Centre for International Economics modeling.

⁷ The current mine plan and economics remain those in the 2021 Feasibility Study,

⁸ As per the WNA- World Nuclear Fuel Report 2025 – Upper Case Scenario modeling.

Nuclear Is Booming. AI Will Supercharge Demand

Uranium's Moment

70 reactors are currently under construction worldwide adding ~71 gigawatts (GW) of new capacity¹ - **a 18% increase in global nuclear capacity by 2030**. This alone will require an **additional ~36 million lbs of U₃O₈**, yet we are currently in a deficit.

That's just the start.

With over 30 countries pledging to triple nuclear capacity by 2050², from 380 GW to 1,200 GW, this **adds 800 GW of new power**.

Meanwhile, AI-driven power demand is only beginning. If this U.S demand were to be met entirely by nuclear, it would require up to **60 million lbs of uranium** annually by the end of the decade. The smarter the world gets, the more power it needs.³

The nuclear era is upon us. Got uranium?



70

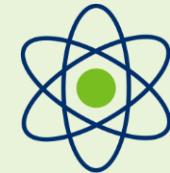
Nuclear reactors currently under construction



Adding:

~71 GW

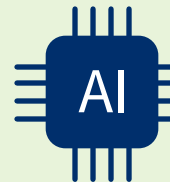
Of clean baseload energy by 2030



Requires:

36 million lbs

U₃O₈



AI surge could add an additional:

60 million lbs

U₃O₈ if U.S. AI-demand is fully powered by nuclear

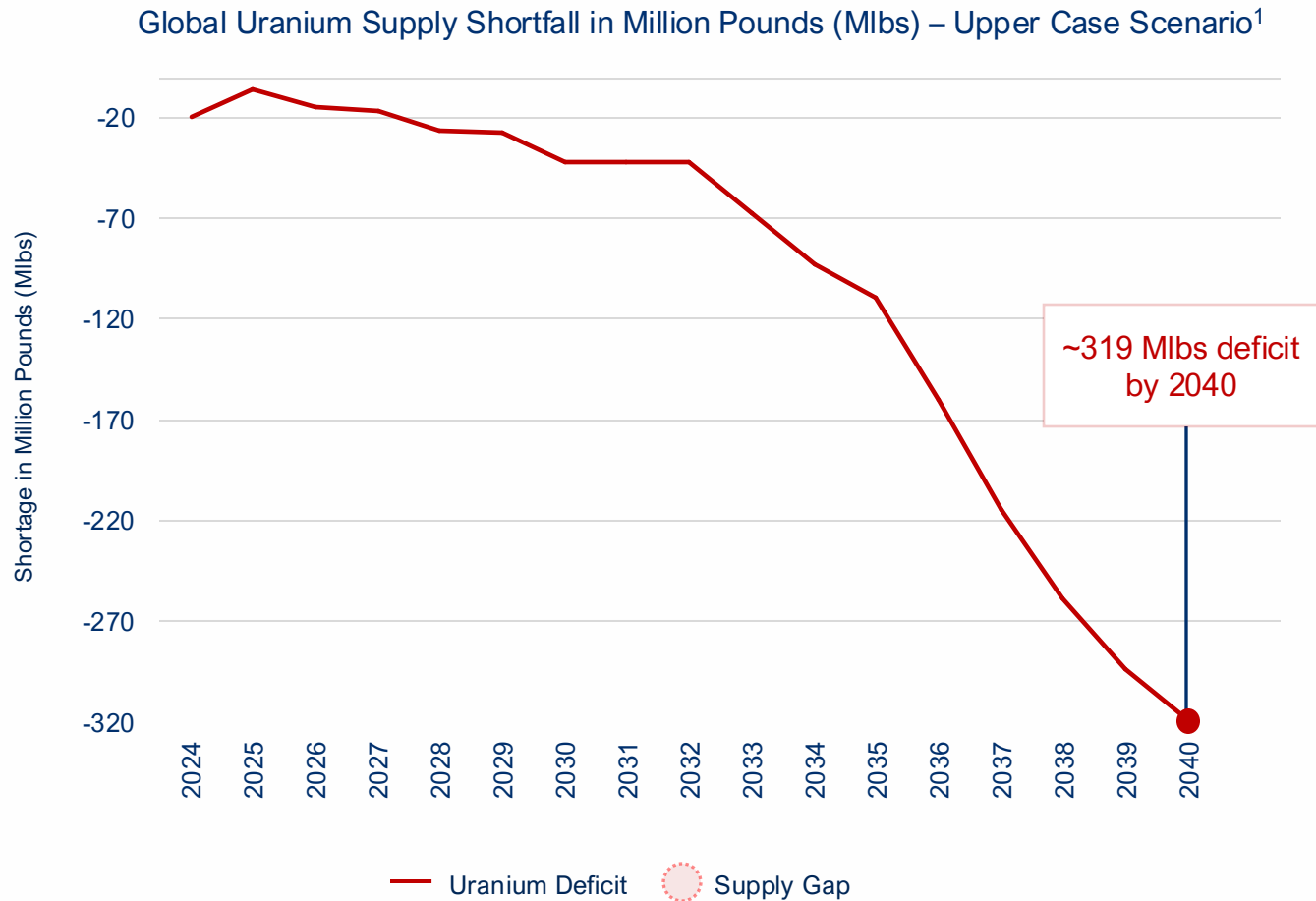
¹ IEA January 2025 - The Path to a New Era for Nuclear Energy

² WNA World Nuclear Fuel Report 2025 – September 5, 2025

³ McKinsey & Co, August 2025 - Scaling bigger, faster, cheaper data centers with smarter designs

Supply Can't Keep Up

Uranium's Moment



¹ WNA - World Nuclear Fuel Report 2025 – Upper Case scenario

² Based on Centre for International Economics modelling

By 2040, the uranium deficit is projected to reach

319 Mlbs per year²

Today, the world produces only ~160 Mlbs annually⁵, meaning global supply must double within the next 15 years to meet growing demand.

Uranium demand is surging and structurally inelastic, driven by decarbonization, electrification, AI, policies support, reactor growth and extensions.

With prices needing to rise above spot to incentivize new supply, and a typical 15 - 20 year timeline from discovery, means supply cannot respond fast enough

Higher prices - for longer - are essential to incentivize new production

Critical Supply, Foreign Reliance

Uranium's Moment

OECD*: 70% Demand¹, Only 25% Supply²

70% of demand relies on foreign, state-backed sources.

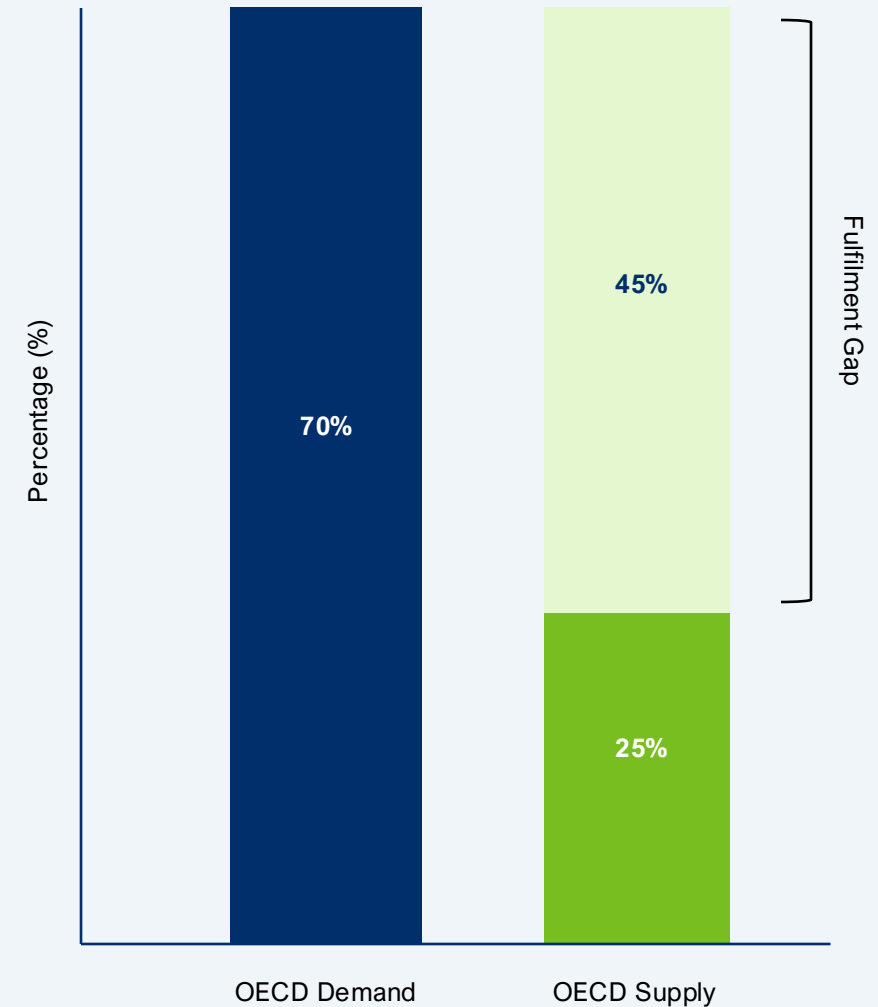
>90% of Western supply tied to long-term contracts below market pricing.

<1% Domestic production from the US, UK, and Europe.
90 million lbs+ imported annually, mostly from state-sponsored entities.

Rook I is a critical part of the answer

diversifying global supply away from
geopolitically risky sources but
...more new supply is urgently needed.

Opportunity to Fill the Gap



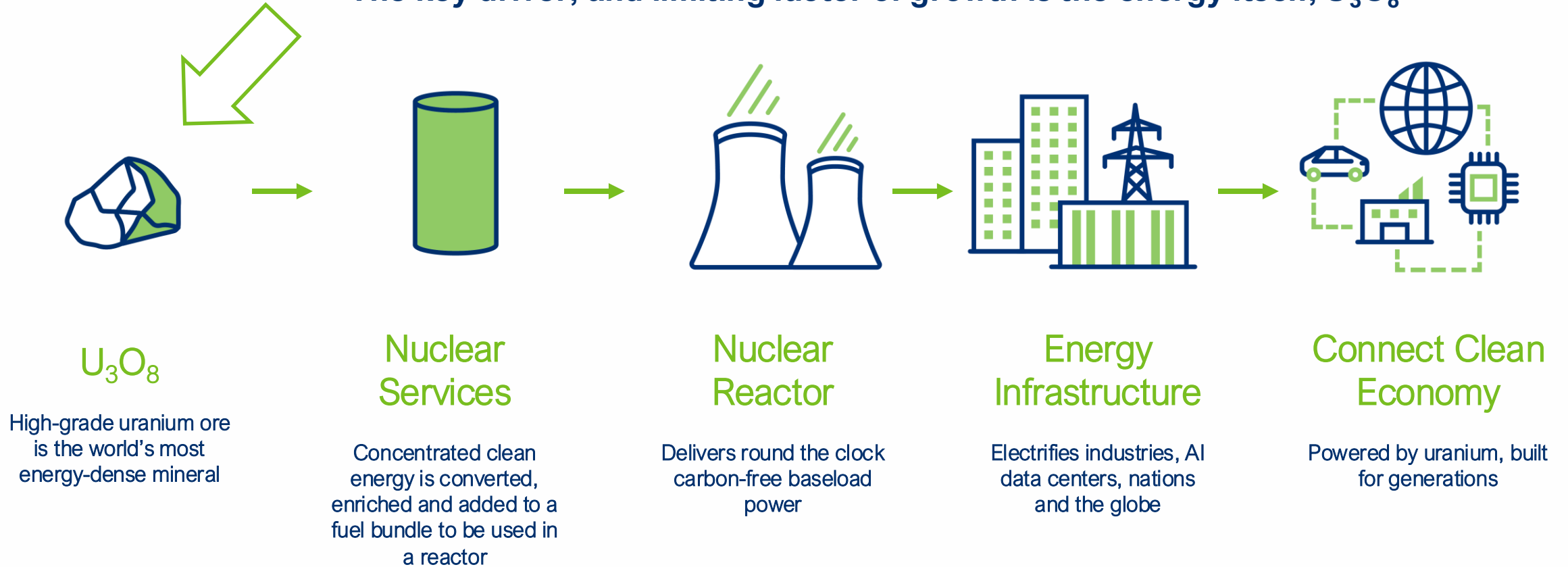
¹ OECD (Organisation for Economic Co-operation and Development) Uranium 2022, Resources, Production, Demand

² WNA - World Nuclear Fuel Report 2023 – Upper Case scenario

U_3O_8 is the Linchpin

Uranium's Moment

The key driver, and limiting factor of growth is the energy itself, U_3O_8



The Unrivaled Arrow Deposit

NexGen's Rook I Project

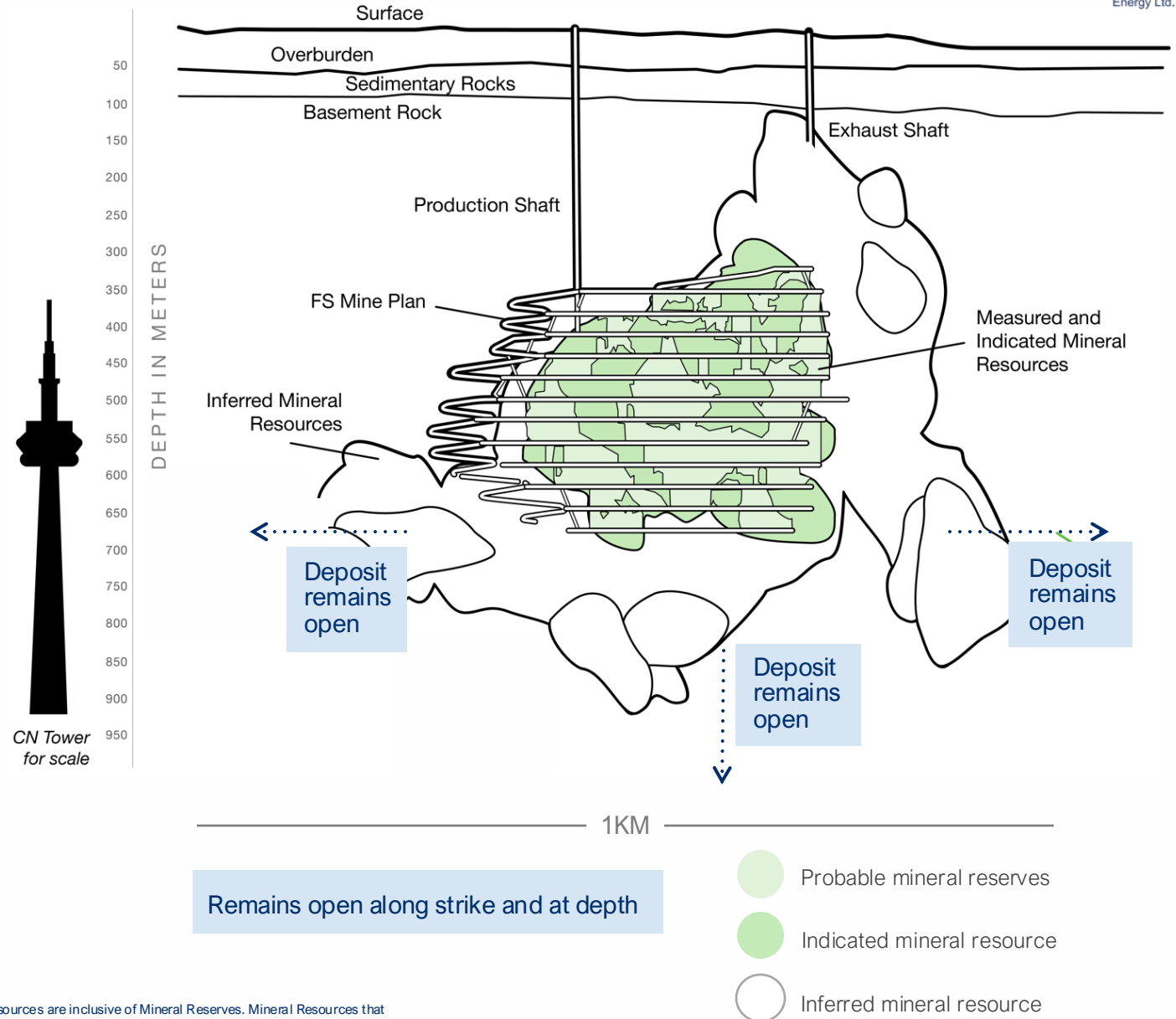
Grade and geology make this one of the most robust, economically resilient deposits in the world.

- Reserves grade 2.37% for 239.6 million lbs. Over 65%¹ of Measured & Indicated resource at 15.9% U₃O₈, **160x the global average.**^{2 & 3}
- ~300,000 m drilled into Arrow – delivering a detailed geological model. **Simple, predictable structure allows for conventional, safe, and efficient mining compared to other uranium mines**³.
- Hard rock conditions allow for **underground tailings storage** which reduce surface tailings exposure to near zero³.

Reserves and resources:

Economics based on probable reserves of 239.6 Mlbs as outlined in the 2021 Feasibility Study.

Total Measured & Indicated resource of 256.7 Mlbs (inclusive of reserves) and Inferred resource of another 80.7 Mlbs³.



¹ Additional details regarding Mineral Reserves and Mineral Resources can be found in the FS and the Appendix of this presentation. Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

² WNA – Uranium Mining Overview. September 25, 2025

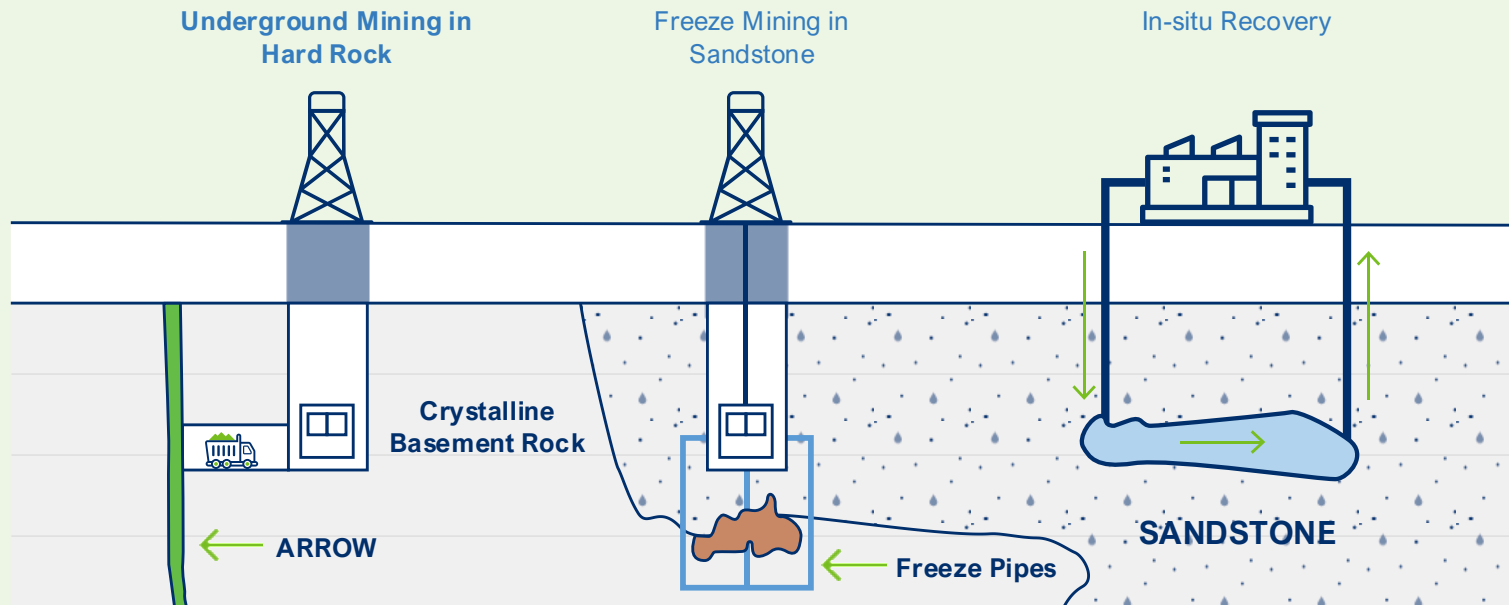
³ Rook I Feasibility Study, 2021

Conventional Mining: Arrow's Unique Advantage

Uranium Mining Methods

Uranium can be mined using several methods, dependent on the deposit's geology and grade.

Arrow's geology is rare in uranium mining, more analogous to high-grade underground gold in hard rock than typical uranium deposits. And that's a good thing. The depth, hard rock setting, and exceptionally high grades¹ **provide ideal conditions for conventional underground mining, resulting in low operating costs.**



¹ Additional details regarding the geological setting and mining methods within Arrow can be found in the 2021 Rock I FS.

Open Pit Mining

- Near-surface ore, large-scale surface digging
- Typically, **low grade** <0.5% U_3O_8
- ~20% of global production uses this method
- Highly environmentally impactful and difficult to control

Underground Mining in Hard Rock

- Competent, hard rock with minimal hydraulic activity
- Shafts and tunnels to access ore, and higher recovery rates
- Well understood, commonly used method for hard rock mines
- **Provides unique production flexibility optionality**

Arrow's Mining Method

Freeze Mining in Sandstone

- Water-saturated, unstable formations which are technically complex
- Requires continuous ground freezing years in advance
- Complex geotechnical and metallurgical characteristics
- ~20% of global production use this method

In-Situ Recovery

- Soft, wet rock (e.g., sandstone aquifers)
- **Very low-grade mines** <0.3% U_3O_8
- Complex metallurgy and recovery rate consistency
- ~60% of global production uses this method

Resilience to Economic Scenarios, Built for This Cycle¹

NexGen's Rook I Project

Sensitivities for the Rook I Project show positive NPV, cash-flow, and IRR across a variety of pricing scenarios:

Uranium Price (US\$/lb)	Feasibility Study (Q4-2020 Dollars)				Interim Trend Update (Q4-2023 Dollars)			
	Average Annual Free Cash Flow (Y1-5) (C\$ Bn)	Payback Period (Years)	IRR (%)	NPV (C\$ Billion)	Average Annual Free Cash Flow (Y1-5) (C\$ Bn)	Payback Period (Years)	IRR (%)	NPV (C\$ Billion)
\$100	2.11	0.6	81.6	8.13	2.04	1.0	46.9	6.79
\$90	1.90	0.6	76.8	7.20	1.82	1.1	43.4	5.84
\$80	1.68	0.7	71.5	6.27	1.61	1.2	39.6	4.89
\$70	1.47	0.7	65.8	5.33	1.39	1.3	35.4	3.96
\$60	1.25	0.8	59.5	4.40	1.18	1.6	30.7	3.04
\$50*	1.04	0.9	52.4	3.47	0.97	2.0	25.2	2.10
\$40	0.82	1.1	44.0	2.53	0.76	2.6	18.9	1.19
\$30	0.61	1.3	33.8	1.59	0.55	3.8	10.5	0.23

¹ Figures above are based on Probable Mineral Reserves of 239.6 million lbs U3O8, as outlined in the 2021 Feasibility Study. Exchange rate assumptions are 0.75:1 (US\$:C\$). All economic disclosure, including IRR and NPV sensitivities, is derived from the 2021 Feasibility Study. The Interim Trend Update (August 2024) is disclosed as an internally prepared trend report for cost sensitivities; it does not constitute material new scientific or technical information, nor does it alter the base case of US\$50/lb U3O8 or provide an economic analysis beyond what is included in the Feasibility Study. The Interim Trend Update is intended to illustrate the impact of cost inflation and capital refinement as the project advances toward construction readiness. As noted in the Feasibility Study, IRR and NPV are most sensitive to uranium price, grade, metal recovery, and exchange rates. Sensitivity analyses are provided for illustrative purposes only; they may not be appropriate for other uses and do not represent forecasts of uranium prices or prices at which uranium produced from the Rook I Project can be sold. Prospective investors should be aware that these disclosures are subject to risks and uncertainties, including those described under "Forward-Looking Statements" in this presentation. Actual results may differ materially due to various factors, and undue reliance should not be placed on sensitivity analyses or forward-looking information.

*2021 FS Base Case

Athabasca Basin
Saskatchewan

Path to Becoming a Top 10 World Mining Company

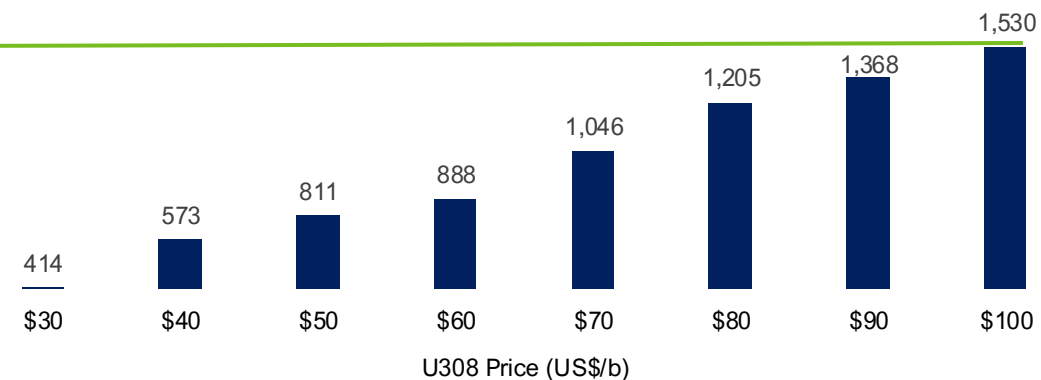
Growth

Mining Companies Ranked by 2024A FCF (Excl. Precious Metals and Steel Companies)¹

Rank	Company Name	2024A FCF (US\$M)	# of Assets (#)	# of Regions (#)	Market Cap. (US\$B)	Enterprise Value (US\$B)
1	BHP Group	\$11,918	55	9	\$122.3	\$136.8
2	Rio Tinto	\$8,536	53	9	\$99.0	\$122.3
3	Glencore	\$7,880	108	17	\$46.4	\$77.9
4	Vale	\$7,362	12	3	\$43.8	\$54.6
5	Fortescue Metals	\$5,556	12	3	\$30.8	\$32.9
6	Southern Copper	\$2,565	34	4	\$81.3	\$84.7
7	Sumitomo Metal Mining	\$737	13	5	\$7.2	\$10.9
8	IGO Limited	\$671	18	1	\$2.1	\$1.9
9	Alpha Metallurgical	\$634	25	1	\$1.5	\$1.0
10	Stanmore	\$544	12	1	\$1.1	\$1.5

NexGen:	1 Asset	MARKET CAP US\$5.5Bn
	1 Region	

Avg Annual After-Tax FCF (Y1 -5) (US\$M)



¹ FactSet, CapIQ. Peer FCF represents 2023A Operating Cash Flow less CAPEX (calendarized) as reported by FactSet; screen excludes precious metals and steel producers and companies solely listed on the Moscow Exchange. Active mining properties and jurisdictions from CapIQ. Peer market capitalization and enterprise value (as reported by FactSet) are as at August 31, 2025; currency figures presented in US\$ with conversions at FactSet spot rates as of that date. NexGen basis: NexGen's projected after-tax FCF figures are non-GAAP measures and are derived from the 2021 Feasibility Study base case (US\$50/lb U3O8), with sensitivity prices shown based on the August 2024 Interim Trend Update. Comparability and assumptions: Peer figures may not be directly comparable due to differences in definitions, accounting policies, tax regimes, sustaining vs. growth capital treatment, and timing; NexGen's after-tax FCF should not be considered in isolation or as a substitute for IFRS measures. Sensitivities are illustrative only and do not represent forecasts of uranium prices or prices at which uranium produced from the Rook I Project can be sold. Forward-looking information and risks: This slide contains forward-looking information subject to risks and uncertainties – including uranium price and FX assumptions, permitting and regulatory approvals, construction execution, financing availability and terms, supply chain and inflationary pressures, and broader market conditions. Actual results may differ materially; see "Forward-Looking Statements" in this presentation. Prospective investors should avoid undue reliance on sensitivity analyses or forward-looking information. ;Based on FactSet as at 31-August-25. NXE Market cap as of 31-August-25

Our Impact*

Rook I Project Benefits



Fueling enough carbon-free energy to power up to **46 million homes**.

That's approximately **1/3** of all the homes in the U.S.¹



Removing the equivalent of nearly **~70 million cars** off the road each year.¹



Displaces more than **300,000,000 tonnes** of CO₂ annually.¹

¹ WNA 2021, IAEA, IEA, EIA, WNA as cited by Canadian Nuclear Association, EPA, and Internal NXE calculations 20224
*Annual impact metrics (e.g., cars off the road, CO₂ displaced, homes powered) are calculated based on the Rook I Feasibility Study production schedule – approximately 30 million lbs U₃O₈ per year, Years 1–5, as outlined in the 2021 FS. These figures are illustrative only, do not imply any increase to reserves or extension of mine life, are subject to permitting, financing, operating performance, and market conditions, and do not include construction-phase impacts.

Low Material Movement, High-Value Output

Competitive Advantage

High-grade deposit enables just 3 trucks per day to feed the mill* - compared to hundreds or thousands at typical mining operations. And just 1.5 trucks leaving site - dramatically reducing infrastructure and impact.



*Based on maximum licensed capacity and 450 tonne trucks

Leveraged to Rising Uranium Prices - By Design

Future Forward Sales Strategy

Applying a simple strategy which reflects the geological hard rock setting of Arrow:

Maximize profitability (price) per lb sold by aligning sales with market demand.

NexGen contracting strategy is designed to capture rising prices.

Through volume-based contracting with market-related pricing mechanisms at time of delivery, this pricing is achieved¹.

Low OPEX provides natural downside protection. While contract structure applies leverage to future uranium prices. This approach provides customers with reliable, flexible supply.

Total sales commitments for **10 million lbs at market-related pricing**, with **annual deliveries of 2 million lbs**, all scheduled from **commercial production**².

Realized Weighted Volume Average Price for the first 3 sales commitments* Realized Table (excludes escalation):

Below Table Based on initial sales commitments totalling 1 Mlbs U3O8 per annum over 5 years

Uranium Price (US\$/lbs.U ₃ O ₈)	2030	2031	2032	2033	2034
\$80	\$79	\$79	\$79	\$79	\$79
\$100	\$99	\$99	\$99	\$99	\$99
\$150	\$141	\$141	\$141	\$141	\$141
\$175	\$150	\$150	\$150	\$150	\$150

*Rounded to the nearest dollar, includes any applicable discounts, excludes ancillary commissions, and associated costs of delivery. It is intended for illustrative pricing outcomes under 5 million pounds of committed volumes, based on various assumed spot price scenarios. These outcomes exclude the Company's market-related pricing structure. **Table does not include the August 2025 contract of an additional 5 million pounds.** Refer to the December 4, 2024 Press Release for more information.

¹ Statements regarding future cash flows, production, sales, uranium price, and operating costs of the Rook I Project are subject to the various risks and assumptions as outlined in the Company's AIF, and those further described under the heading "Forward Looking Information" of this Presentation.

² Refer to August 6, 2025 Press Release for more information.

Full support from local Indigenous Nations

Local Partnership Driving Real Impact

Industry-leading Benefit Agreements signed with all four identified Local Priority Area Indigenous communities reflecting tremendous advocacy for the Project:

- ✓ Clearwater River Dene Nation
- ✓ Birch Narrows Dene Nation
- ✓ Buffalo River Dene Nation
- ✓ Métis Nation – Saskatchewan Northern Region II, in partnership with the Métis Nation – Saskatchewan

“Since as early as 2013, the Rook I Project has been a platform for both NexGen and the CRDN, together with regulatory authorities, to set a new and elite standard on Indigenous engagement, participation, and partnerships for projects in the traditional territory of Indigenous peoples.”

- Chief Teddy Clark, CRDN

“The Rook I Project is bringing once-in-a-lifetime opportunities and change to our Citizens in NRII. NexGen has shown leadership in the industry, by working with us, and recognizing our voice, and our people ... We applaud NexGen for its leadership, and its respectful, and collaborative approach, and we look forward to the development of the Rook I Project.”

- Leonard Montgrand, MN-S Regional Director for NRII

Investing in People

Competitive Advantage



500+

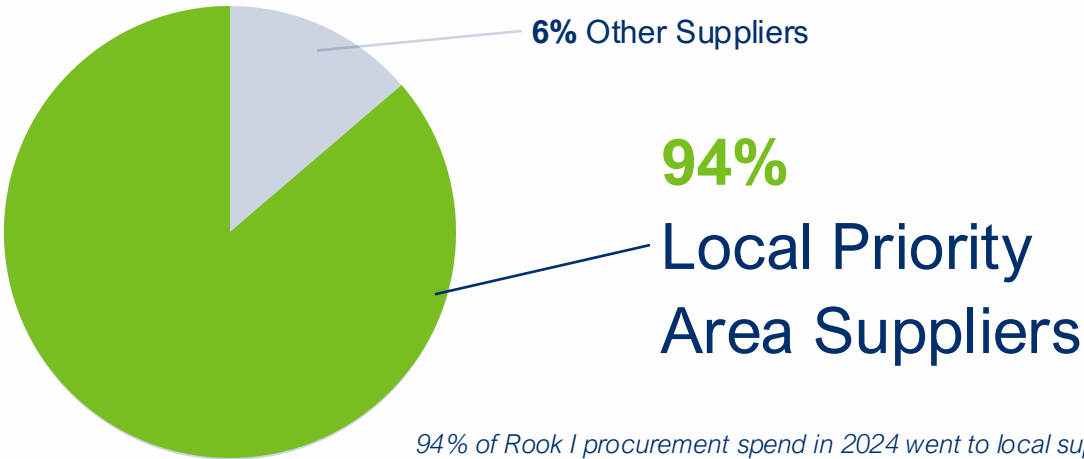
Local Priority Area (LPA) students have participated in Company-funded skills, certification, and professional development programs since 2023.

82%

Of NexGen's Rook I site employees in 2024 were from the LPA in northern Saskatchewan.

Located 150 km north of **La Loche and Clearwater River Dene Nation** (combined population 4,500+), the Rook I Project is integrating local talent by creating training programs, hiring locally and developing skillsets that extend beyond mining.¹

Rook I Procurement Spend in 2024



94% of Rook I procurement spend in 2024 went to local suppliers and Indigenous partnered businesses — totaling C\$56.6 million.

Educational Partners in Saskatchewan:

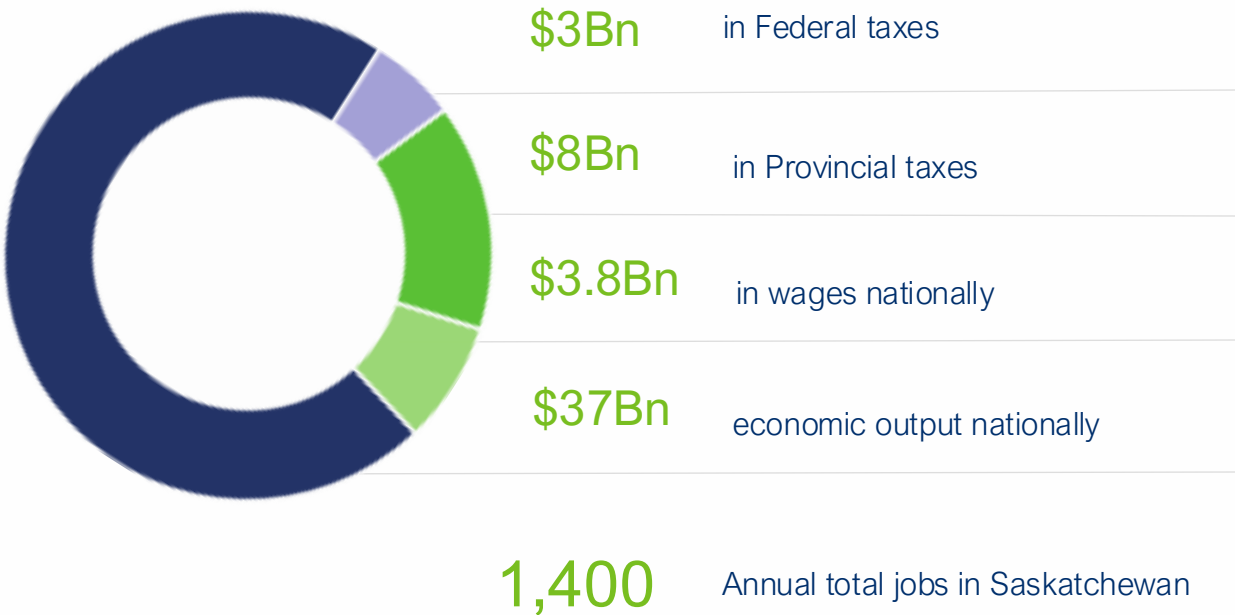


\$37 Billion Economic Engine for Canada

Benefits

Total Economic Impact ¹

Over Construction and the First 11 Years of Production (figures in C\$)



Supporting families, Indigenous employment, and local communities.

Fuels public infrastructure, services, and growth.

¹ EY's 2025 Economic Impact Study for NexGen – Rook I Project.

**A generational
opportunity for Canadian
economic and clean
energy leadership.**



Federal Approvals



Execution Ready, Final Permit Pending

Regulatory Landscape

CNSC Commission Hearing Dates set for November 19, 2025, and February 9 – 13, 2026. **Construction commences immediately** following a positive outcome.

Permitting is for an **initial 24-year operating period** including the on-site processing facility sized for up to 1,300 tonnes per day.¹

A mere 1% of mines get past permitting – NexGen is on the cusp.²

¹ The Rook I Project is subject to federal and provincial permitting. The 24-year operating period reflects the scope of the mine and mill permit and is not an indicator of economic mine life, production duration, or reserves. There can be no assurance that the required permits will be obtained on the terms sought or at all. For details on mine life, production duration, and reserves, please refer to the 2021 Feasibility Study. See "Forward-Looking Statements" for risks and uncertainties related to permitting and approvals.

² Minerals Council of Australia – Meeting the minerals investment challenge 2023

Patterson Corridor East (PCE) Evolving High-Grade Discovery, 3.5km East of Arrow

Growth

Recent Assays Confirm Exceptional Uranium Intercepts and Potential Scale¹

- PCE exhibits extensive mineralization, with 48 of 79 holes intersecting uranium, including 34 intersecting high-grade (>10,000 cps) and 14 off-scale hits (61,000 cps), indicating extremely high-grade uranium.
- Best discovery-phase intercept to date: RK-25-232 - 15.0 m @ 15.9% U₃O₈ including an exceptional 0.5 m section of @ 68.8%.
- RK-24-222, ~200 m from RK-25-232, intersected 17.0 m at 3.85% U₃O₈, including 3.0 m at 10.1%.
- RK-25-254 among the shallowest at 454.4 m depth; intersecting 19.5 m >500 cps including 5.0 m at >10,000 cps and 2.0 m at off-scale 61,000 cps
- 600 m x 600 m mineralized system confirmed and expanding.

2025 Drill Program focuses on better understanding PCE's potential within its basement-hosted setting.²

¹ Refer to the News Releases dated March 24, 2025, May 27, 2025 and July 29, 2025 and the Company's MD&A dated August 5, 2025 for the periods ended June 30, 2025 and filed under the Company's profile on SEDAR+ at sedarplus.ca, on EDGAR at www.sec.gov, and on the ASX at www.asx.com.au for the detailed spectrometer and assay results and other drilling details.

² These results are preliminary in nature and do not have demonstrated economic viability. No economic analysis has been completed, and any future resource or reserve estimates will require further drilling and technical evaluation. Geological similarities to the Arrow deposit are provided for context only. Such similarities are not indicative of mineralization, grade, tonnage, continuity, or economic potential elsewhere within the project.

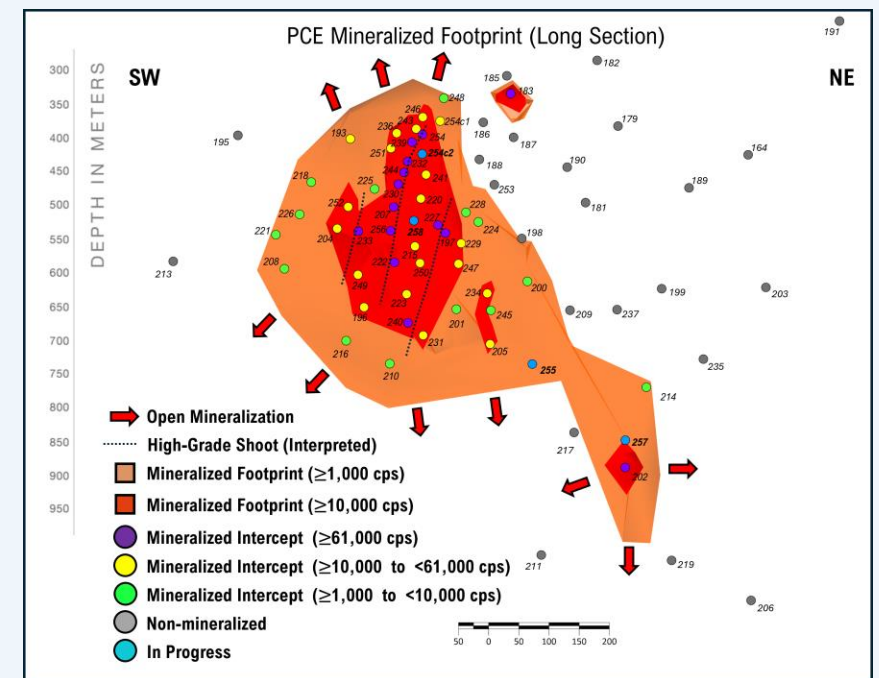


Figure 1: Interpreted 3D model of mineralization at PCE shown as a long section oriented perpendicular to the primary mineralized plane; total mineralized footprint in orange and the high-grade subdomains in red.

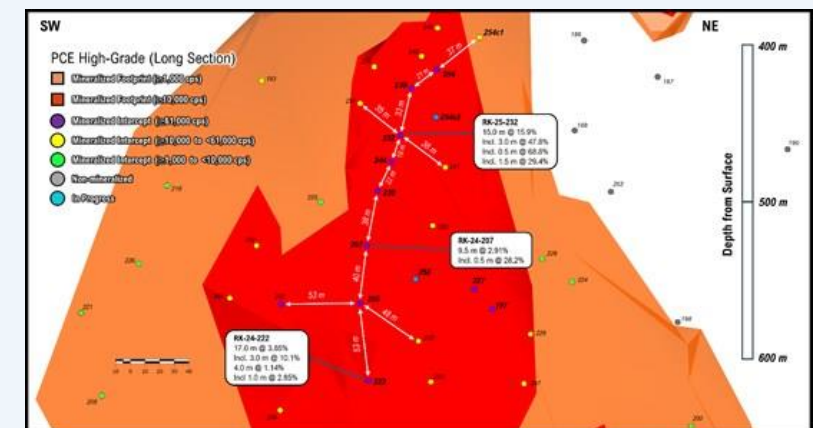
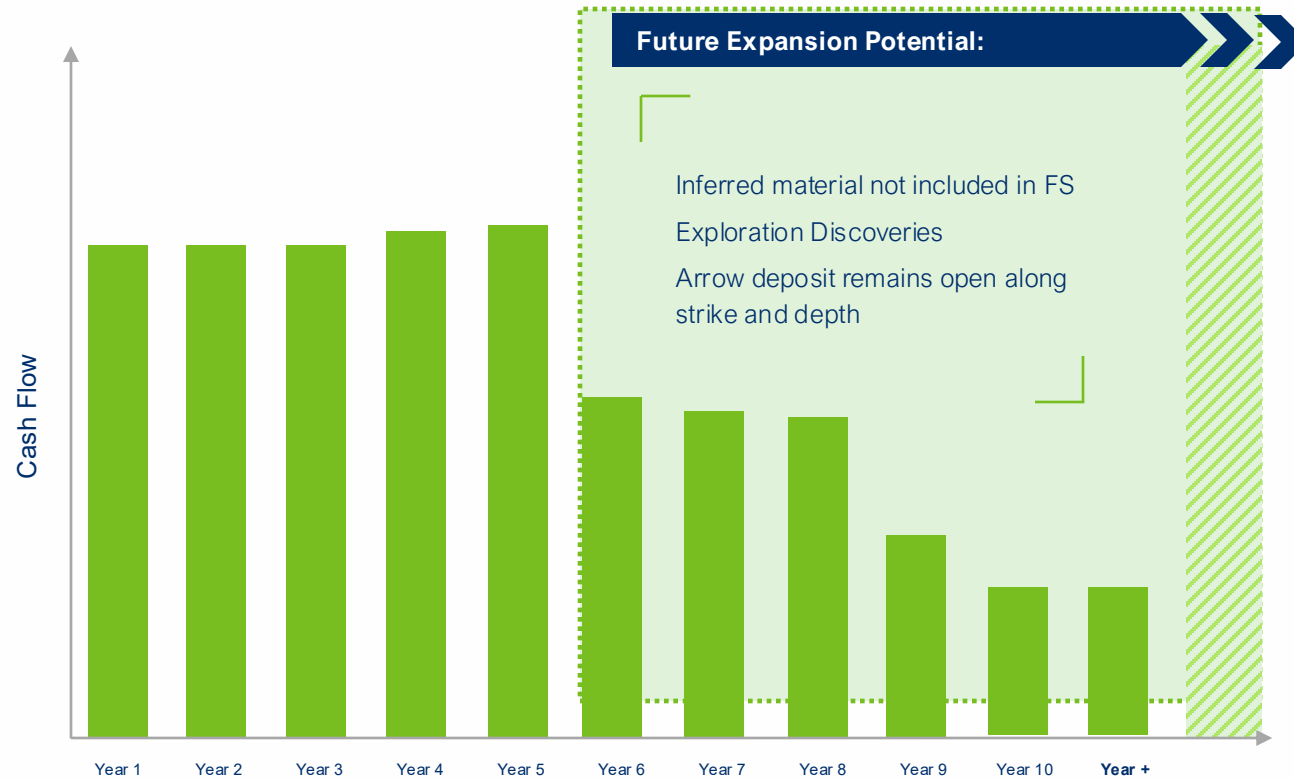


Figure 2: Close-up of long section view of PCE high-grade subdomain around RK-25-232 (15.0 m at 15.9% U₃O₈).

From Project to District

Growth



NexGen's land package has the potential to become its own uranium-rich district – **with Rook I as the foundation.**¹



Rook I is set to deliver strong after-tax net cash flow for years², with potential for resource expansion once in production.³



Over **150 exploration target areas** already identified across 27 key corridors on the substantial 190,000+ hectare land package.

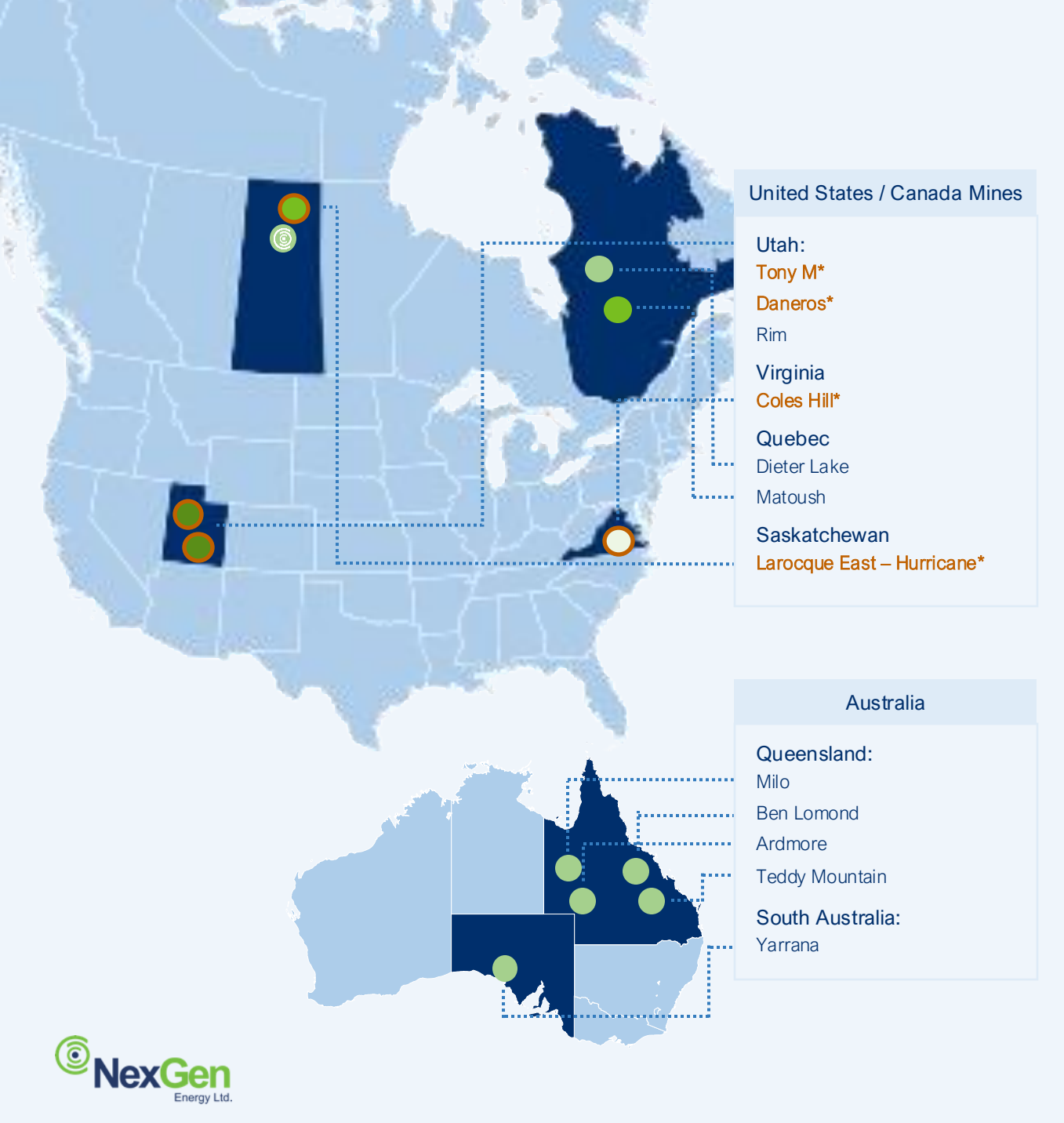


Recent success at Patterson Corridor East has confirmed high grade uranium mineralization.

¹ Additional details regarding reserves and resources can be found in the Rook I FS. Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

² Statements regarding future cash flows, production, sales, uranium price, and operating costs of the Rook I Project are subject to the various risks and assumptions as outlined in the Company's AIF, and those further described under the heading "Forward Looking Information" of this Presentation.

³ The current mine plan and economics remain those in the 2021 Feasibility Study



IsoEnergy: Hidden Value in Plain Sight

Strategic Ownership in IsoEnergy

NexGen Energy holds ~31% of IsoEnergy, providing exposure to a diversified portfolio of high-quality uranium assets globally, including strategic, large and high-grade **U.S. assets**.

IsoEnergy's assets include:

- **Hurricane (Canada):** One of the world's highest-grade undeveloped uranium deposits.
- **Tony M & Daneros (Utah):** Fully permitted, near-term U.S. production opportunities.

Balanced portfolio across near-term production, development, and strategic long-term optionality.

Map Key



Positioned to Fund, Build, Deliver

Capital Structure

Share Structure



Liquidity & Strategic Assets



Supports a fully funded path to production with supportive shareholder alignment.

¹ Inclusion of the new US\$110M 2023 Debentures and the US\$250M 2024 Debentures, converted at US\$6.76 and US\$10.73, respectively, would bring the number to fully diluted shares to 740,709,221. Assumes potential conversion of the US\$110M 2023 Debentures converted at US\$6.76 (~16M), and of the US\$250M 2024 Debentures converted at US\$10.73 (~23M)

² Approximate cash balance as per October 16th 2025

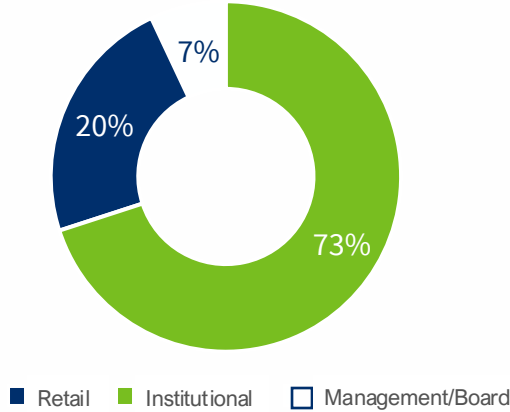
³ Traded on the TSX, NYSE and ASX for Q3 2025

⁴ Based on IsoEnergy market capitalization as of October 31, 2025

⁵ On May 8, 2024 the Company entered into a binding term sheet with MMCap International Inc. SPC for purchase of 2,702,410 lb of natural uranium concentrate for an aggregate purchase price of US\$250M based on the 5-day average UxC spot price. This transaction closed on May 28th 2024.

⁶ Management ownership figures include shares held by Mega Uranium Ltd. For clarity, these shares are not owned or controlled by NexGen management or insiders, as per SEDi filings.

Ownership As of September 30, 2025⁶



Analyst Coverage



Executive and Leadership Team

Proven Leadership



Leigh Curyer

Chief Executive Officer, President
& Director



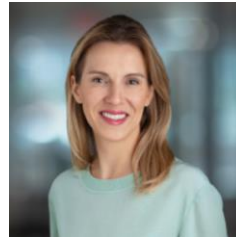
Travis McPherson

Chief Commercial Officer



Ben Salter, CPA

Chief Financial Officer



Monica Kras

VP, Corporate Development



Simon Allard

VP, Commercial



Adam Engdahl

VP, Community



Mary Fraser

VP, Communications



Dylan Smart

VP, Regional Development



Jason Craven

VP, Exploration



Michelle Cho

VP, Finance



Luke Moger

VP, Environment, Permitting,
Licensing

NexGen's executive and leadership team brings expertise across the entire mining cycle - including permitting, project financing, construction, and operations - backed by centuries of combined industry experience and ready to deliver.

Project Development Team

Proven Leadership



Graeme Johnson
Chief Project Officer

30+ years' experience leading multi-billion-dollar mining projects from design to execution.



Chris Copley
Project Director

20+ years' experience delivering complex mining developments on time and on budget.



Don Merriman
VP, Engineering

30+ years' experience leading large-scale EPC/EPCM engineering projects in mining.



Lee Langlois
Director, Construction

30+ years' global project experience specializing in greenfield construction and execution.



Becky Douglas
Director, Procurement

25+ years' experience leading procurement and supply chain for major projects.

Chris Komperdo

Area Manager

20+ years' experience in underground mining, shaft sinking and early operations.

Nick Espenberg

Director, Mine Technical Services

15+ years experience in underground mining, technical services, operations planning.

Blake Martel

Sr Mine Engineer

7+ years underground mining experience supporting projects through mine planning, engineering, and scope development.

JS Michel

Sr. Engineer (Lead), Shafts

25+ years' experience specializing in shaft engineering and construction.

Dominik Hamel

Shaft Superintendent

25+ years' global shaft sinking and underground construction experience.

Chad Sewell

Director, Engineering

20+ years' experience in engineering, project design, and execution across mining sectors.

Chris Madsen

Lead Mine Infrastructure

13+ years' experience in engineering and project management for underground mining infrastructure.

Bryan Dyck

Lead Processing & Metallurgy

13+ years' experience leading uranium processing and metallurgy programs.

Jared Orynik

Sr Project Metallurgist & Processing

20+ years' mining and process experience across multiple commodities and jurisdictions.

Marc Ouellette

Manager, Contracts

15+ years' experience in mining, oil & gas, and major project contract management.

Ali Sheykholeslami

Area Manager, Infrastructure

28+ years' international experience delivering large-scale infrastructure projects.

Engineered for execution, NexGen's Project Development team has successful execution experience across the full mining life cycle from early operational planning through to full-scale construction and long-term operations. Collectively, they have delivered globally significant projects, amassing over 400+ years of combined experience.

Board Overview

Proven Leadership



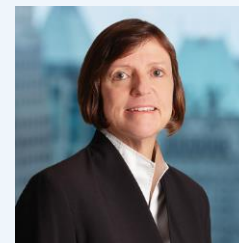
**Christopher
Mcfadden**
Chairman



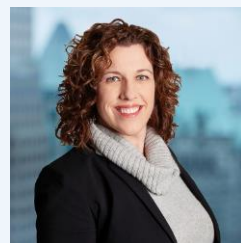
Richard Patricio
Director



Brad Wall
Director



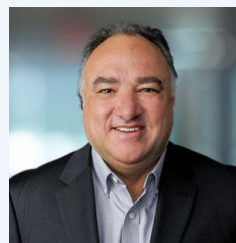
Sybil Veenman
Director



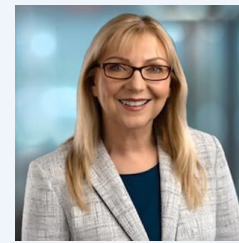
Karri Howlett
Director



Warren Gilman
Director



Ivan Mullany
Director



Sharon Birkett
Director

The Board enhances NexGen's deep expertise through a dozen subject matters, ranging from mining to capital markets and regulatory and government affairs.



GROWTH

2025 Priorities

- Execute Approved 2025 Site Program
- Advance Detailed Engineering and Critical Path Procurement
- Continued Negotiation of Offtake Contracts
- Continue Local Training Programs for Majority at Labour Onsite
- PCE Exploration Drilling, Refining Extent of System



WHY INVEST NOW

Right People.

Right Asset.

Right Time.

- A strategic natural resource project capable of re-establishing Canada as the largest uranium supplier in the world.
- Carefully curated and developed team to execute this project exceptionally well.
- Fully supported by all Indigenous partners.
- Cash flow generation will re-rate company significantly.
- Underinvestment in uranium supply for +15 years means a growing supply deficit and incentive prices rising.
- Significantly leveraged to uranium prices.

We're changing the
world of nuclear
energy, so nuclear
energy can change
the world.



Favourable Geology Meets Mining Advantage

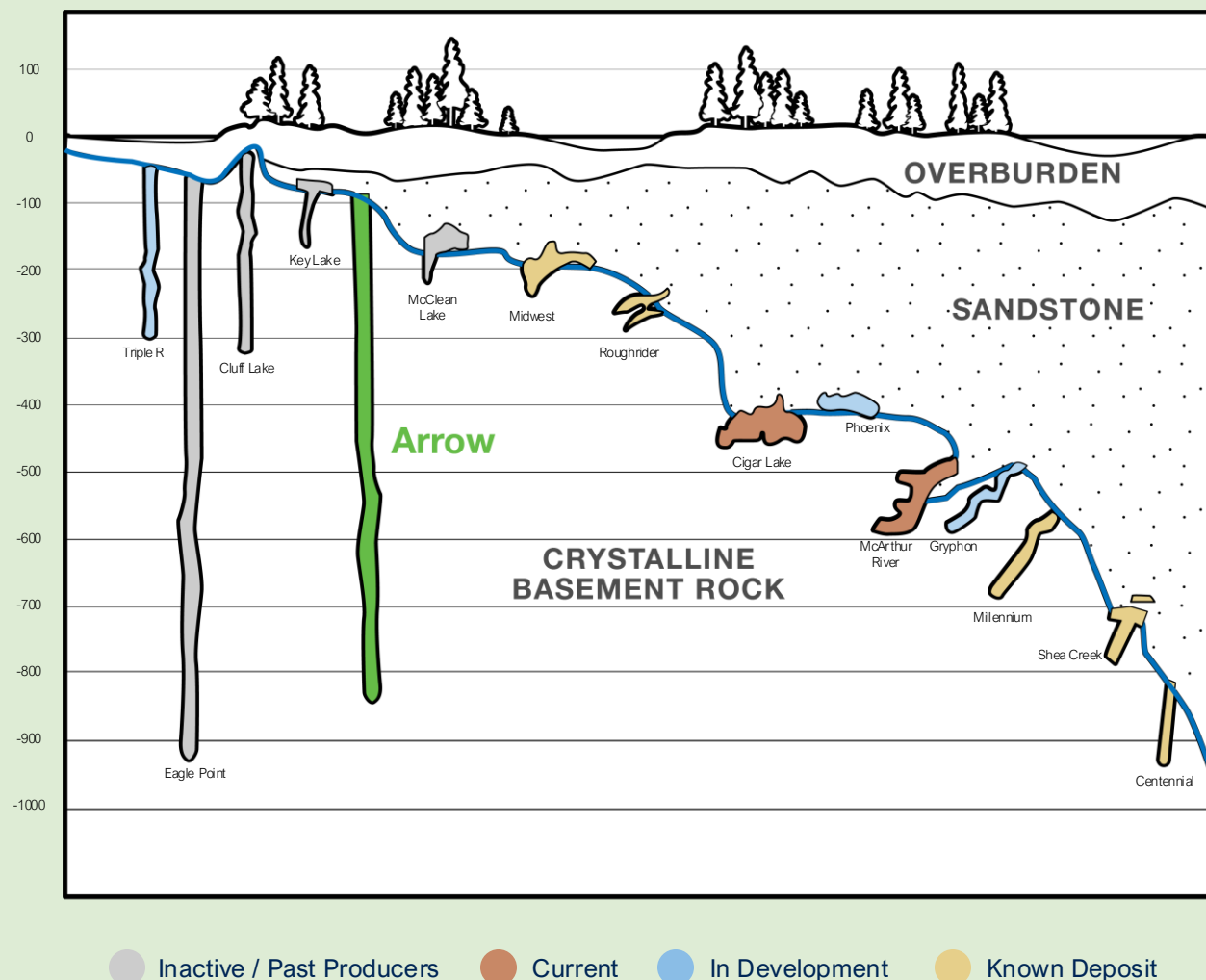
NexGen's Rook I Project

Hosted underground in crystalline-granite rock with low hydraulic conductivity. **Ideal conditions for conventional bulk mining methods.**¹

Low water egress, monometallic, stable ground conditions, and nearly vertically stacked.

The high grades and favorable technical conditions drive low **operating costs**, creating a natural cost hedge and flexibility to structure contracts that will capture upside price potential.

Allows for flexibility of production volumes and provides consistent grades with predictable supply.



¹ Rook I Feasibility Study, 2021

NexGen mineral resources and reserves¹

Appendix

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

¹ Rook I 2021 FS Technical Report as source. 1) Mineral Reserves are reported with an effective date of 21 January 2021. Mineral Reserves are estimated using a long-term metal price of US\$50/lb U₃O₈. (2) Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Tailings Management: Industry-Leading Design

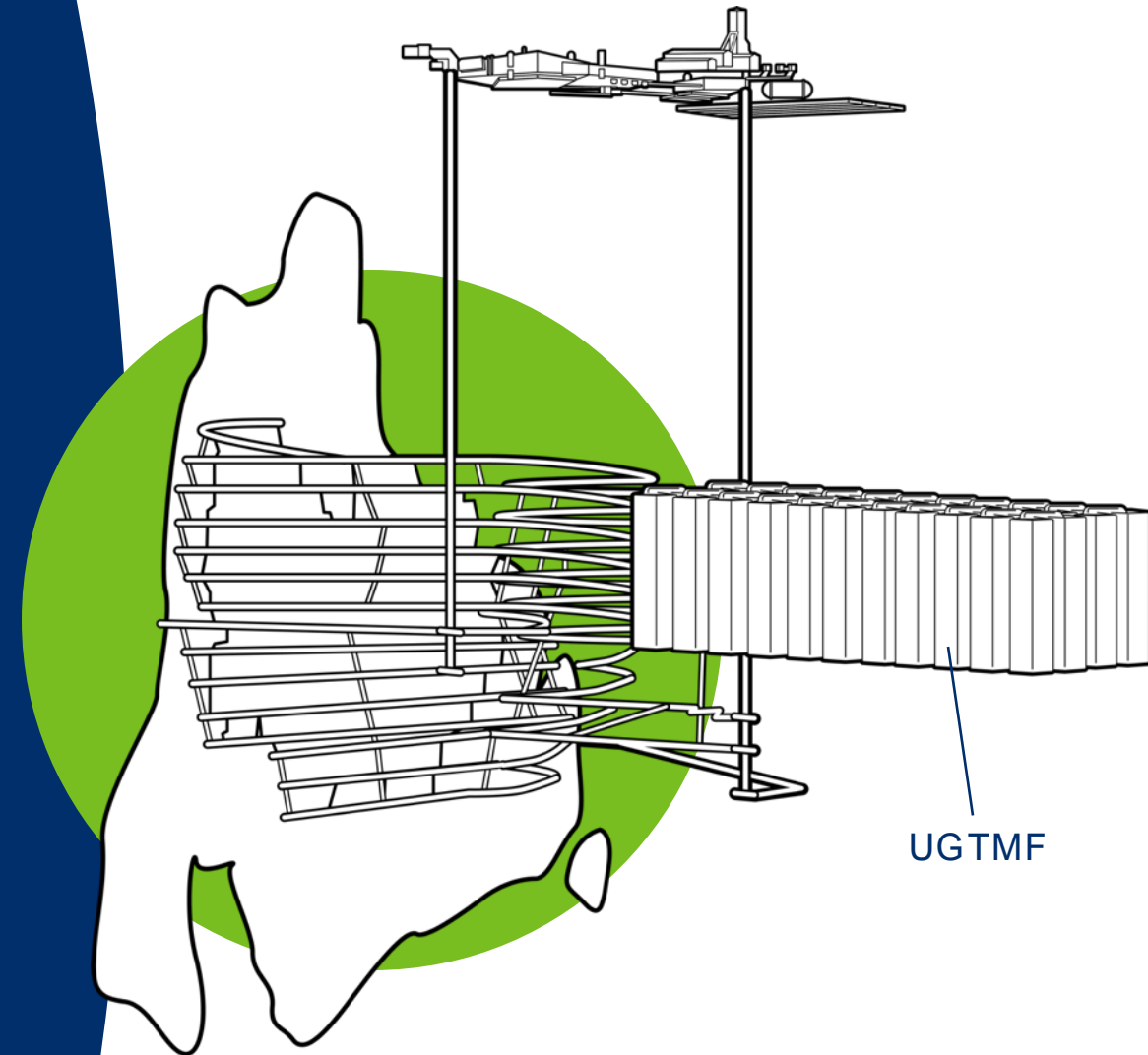
Rook I Project

All processed waste streams will be stored underground, in **backfilled mine stopes**, or a purpose-built, innovative **Underground Tailings Management Facility (UGTMF)**¹.

- Eliminates surface tailings disturbance and reclamation.
- Near zero risk of surface tailings failures, mitigating one of the most significant risks in operating mining projects.

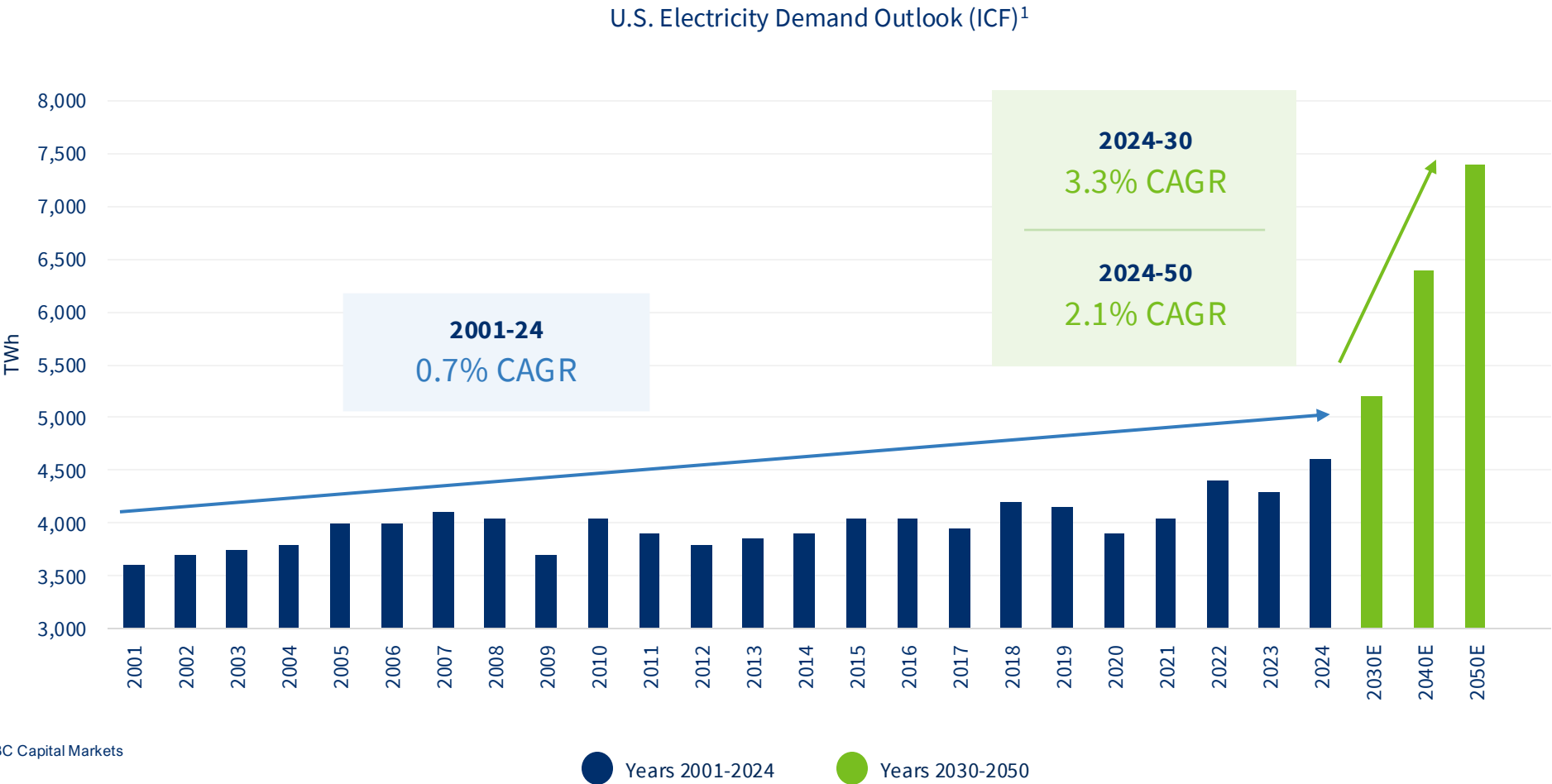
The UGTMF will set a new global standard in environmental mine management.

¹ For more detail on the mining and tailings method please refer to the Rook I FS.



U.S Electricity Demand Outlook

Electricity's Resurgence



¹ EIA, ICF forecast, RBC Capital Markets

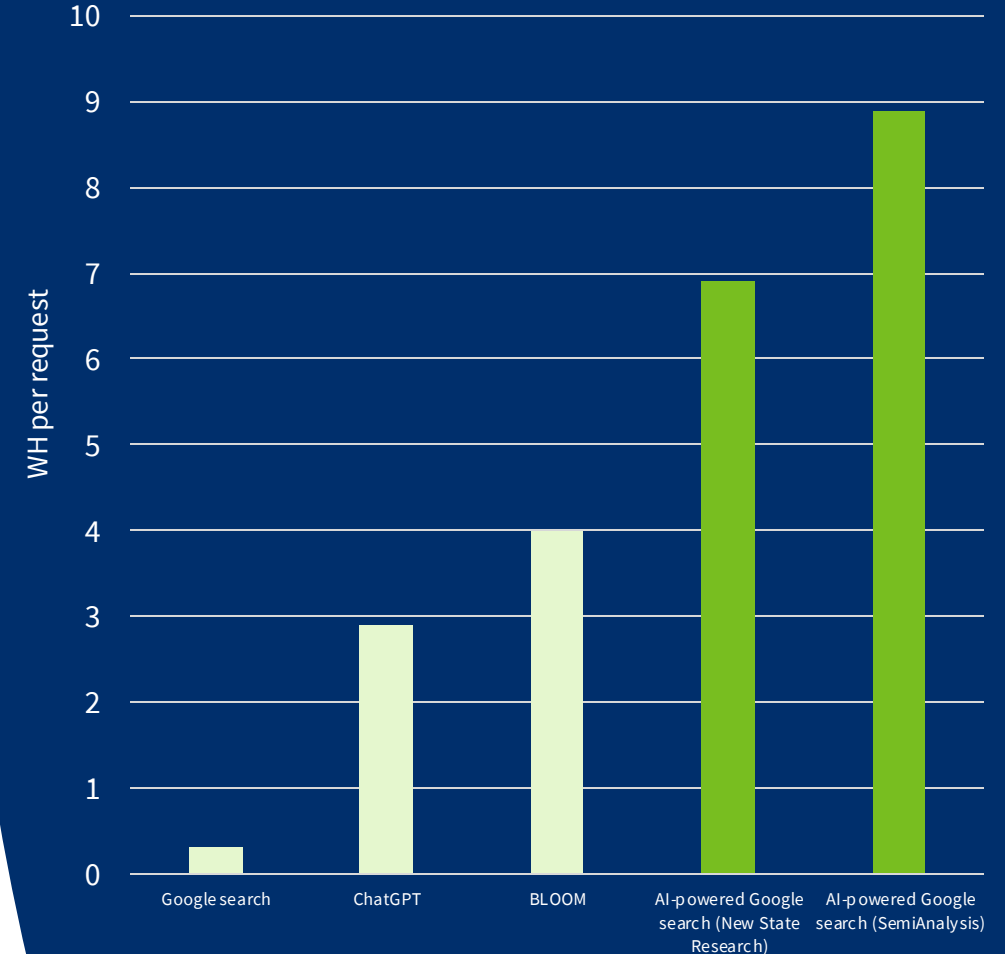
The Electrification Boom and Implications for Nuclear Power

AI NEEDS NUCLEAR

We are experiencing a seismic shift in energy consumption patterns. Energy providers are scrambling to revise demand forecasts to reflect the urgency of this escalating need.

- **Artificial Intelligence and Sector Electrification:** The exponential rise of AI and the electrification of key sectors are catapulting electricity demands to unprecedented levels. This surge is particularly pronounced in AI, where data centers and computing infrastructure require significant resources.
- **Stable Energy Supply:** The intermittent nature of renewable energy sources like solar and wind require a clean, reliable, baseload power source.
- **Low-Carbon Objectives:** To meet global climate targets, the increased demand for energy will need to be supplied by low-carbon sources.
- **Unleashing the Potential of Advanced Nuclear Technologies:** Smaller, more flexible nuclear reactor designs like small modular reactors (SMRs) are heralding a new era for nuclear energy.
- **Safety and Public Perception:** Continued improvements in nuclear technology are needed to enhance safety standards, waste management, and public perception.

ESTIMATED ENERGY CONSUMPTION PER REQUEST FOR VARIOUS AI-POWERED SYSTEMS COMPARED TO A STANDARD GOOGLE SEARCH¹



¹ The growing energy footprint of artificial intelligence by Alex de Vries

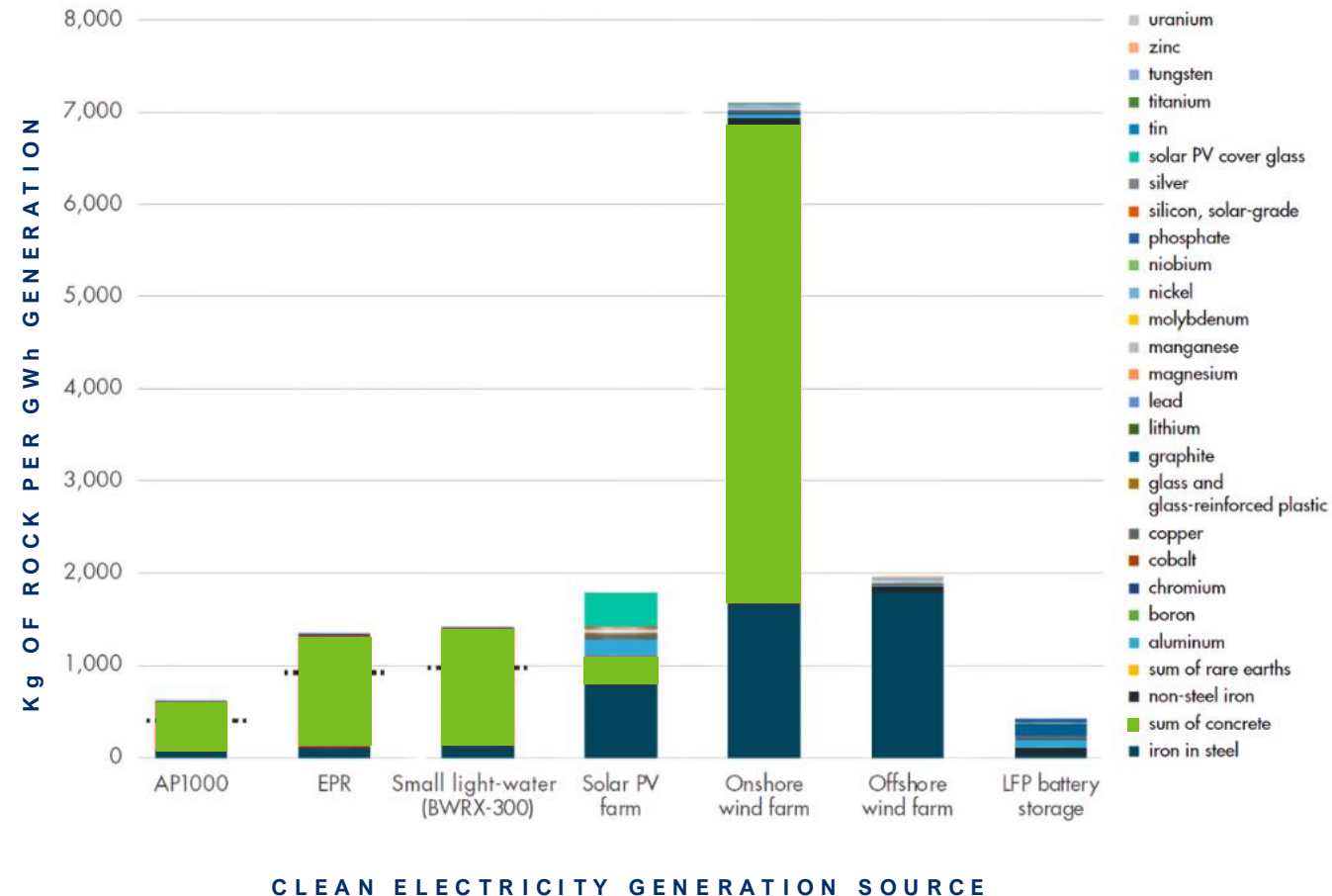
Clean Energy from Nuclear Power

NUCLEARS ADVANTAGE

NUCLEAR POWER FOOTPRINT

- Utilize only **10% to 34%** of critical materials per GWh compared to solar, wind, and battery technologies, delivering potent low-carbon electricity with a minimal materials footprint.
- Has an extractive impact that is more than **20x** smaller than coal and gas per unit of electricity generated.

MINING INTENSITY OF CLEAN ELECTRICITY GENERATION¹



¹ Break Through Institute – Updated Mining Footprint and Raw Material Needs for Clean Energy. April 2024
AP1000 (Advanced Passive 1000), EPR (European Pressurized Reactor), BWRX-300 (Boiling Water Reactor, 300 MWe class),
Solar PV farm (Solar Photovoltaic farm) and LFP (Lithium Iron Phosphate).



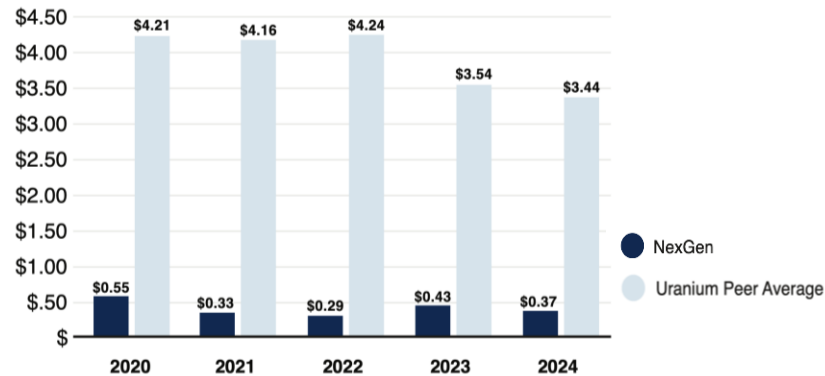
Efficient Use of Capital

ROOK I PROJECT

NexGen's ratio of exploration and development spend relative to its general and administrative spend is the highest compared to its uranium peers, while the Company's ratio of general and administrative spend relative to its market capitalization is the lowest compared to its uranium peers.

G&A Spend per Dollar of Exploration & Development Spend (\$C)*

As of December 31, 2024

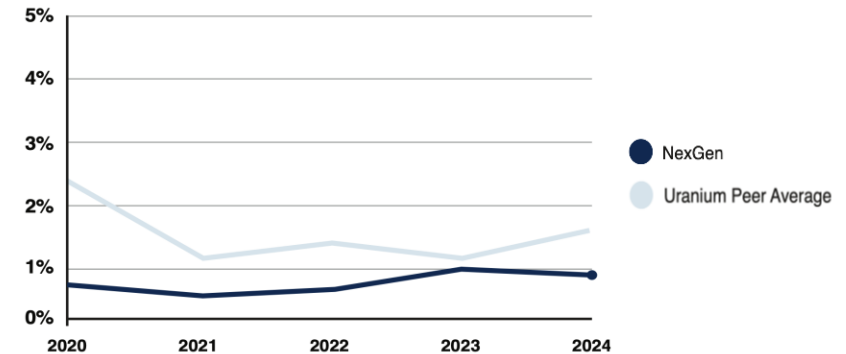


*Exploration and Development spend includes costs related to exploration, drilling, environmental and permitting, engineering and design, direct labour and associated costs. General and Administrative spend includes General or Administrative expenses as defined in each peer's financial statements, or projected if not available at the time of publishing the MIC.

Source: Publicly filed *Annual Financial Statements and Management Information Circular (MIC)* of the management selected "Uranium Peers", being Cameco Corp, Denison Mines Corp, Energy Fuels Inc, Fission Uranium Corp and Uranium Energy Corp. Fission's General and Administrative spend is prorated based on the cumulative spend up to and including 3Q24 and 4Q24 results were not released due to the acquisition by Paladin.

G&A Spend as a Percentage of Market Capitalization ()(***)**

As of December 31, 2024



** General and Administrative spend includes General or Administrative expenses as defined in each peer's financial statements and does not include selling costs.

*** Peer Market Capitalization sourced from S&P Capital IQ. Fission's Market capitalization is as of December 24th 2024, the last day it traded on TSX prior to being de-listed at market close.

Source: Publicly filed *Annual Financial Statements and Management Information Circular* of the management selected "Uranium Peers", being Cameco Corp, Denison Mines Corp, Energy Fuels Inc, Fission Uranium Corp and Uranium Energy Corp.

Global Growth is Surging Across All Major Markets

NUCLEAR REACTORS WORLDWIDE ¹

LEGEND

● Operating

● Planned

▨ Proposed

● Under Construction



Top Contributing Countries:

Argentina

Brazil

Mexico

LATAM

7 Operating

1 Planned

11 Proposed

2 Under Construction



Top Contributing Countries:

China

India

Japan

APAC

146 Operating

51 Planned

196 Proposed

43 Under Construction



Top Contributing Countries:

Russia

Ukraine

UK

EMEA

175 Operating

32 Planned

115 Proposed

20 Under Construction



Top Contributing Countries:

USA

Canada

NA

111 Operating

2 Planned

22 Proposed

0 Under Construction

Global Reactor count is rising led by APAC and EMEA, with North America re-entering growth mode



Energy Security Commitments

BENEFITS

With an asset located in a premier stable democracy, NexGen is committed to being a supplier of choice. NexGen will:

Only sell to utilities in nations who are allied for energy security and targeting net zero.

Maintain a checklist of standards for all partners in the chain of custody of our uranium.

Keep our supply chain and operations onshore in these nations to guarantee the highest levels of security, safety, labour standards, and local community partnership.

Advocate for policies that support sensibly produced uranium to set a new standard for the industry.

Our commitments make NexGen a supplier of choice for utilities as they seek to expand their nuclear energy operations.



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