

# AMERICA'S NEXT URANIUM DEVELOPER

Investor Presentation – January 2020



TSX: AZZ / OTCQB: AZZUF / FRA: P8AA

# DISCLAIMER / SAFE HARBOR STATEMENT

Certain information and statements in this presentation may be considered forward-looking information or forward-looking statements for purposes of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "budget", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative and grammatical variations) of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Such forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause Azarga Uranium Corp.'s ("Azarga" or the "Company") actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits the Company will obtain from them. These forward-looking statements reflect management's current views and are based on certain expectations, estimates and assumptions which may prove to be incorrect. Material expectations, estimates and assumptions pertaining to forward looking statements include, but are not limited to: the timing of permits and licenses necessary to project finance and develop the Company's Dewey Burdock Project, the improvement of uranium markets and uranium pricing, the availability of additional capital to enable the Company to continue as a going concern and the Company's mineral properties provide a pipeline for continued growth.

A number of risks and uncertainties could cause its actual results to differ materially from those expressed or implied by the forward looking statements, including, but not limited to: global economic conditions; uranium price fluctuations; government regulation and policy risks; public involvement in the permitting process; Native American involvement in the permitting process; environmental regulatory requirements and risks; the market price of the Company's shares; public acceptance of nuclear energy and competition from other energy sources; the Company will require significant amounts of additional capital in the future; competition for properties and experienced employees; uranium industry competition and international trade restrictions; possible loss of interests in exploration and development properties; mining and mineral exploration is inherently dangerous and subject to factors beyond the Company's control; the Company's mineral resources are estimates; the nature of exploration and development projects; political risk; currency fluctuations; the Company has no history of mining operations; property title rights; dependence on key personnel and qualified and experienced employees; delineation of mineral reserves and additional mineral resources; insurance coverage; dilution from further equity financing and outstanding stock options and share purchase warrants; the Company has never paid dividends and may not do so in the foreseeable future; litigation and other legal proceedings; technical innovation and obsolescence; disclosure and internal controls; and conflicts of interest.

Undue reliance should not be placed on forward-looking statements because they involve known and unknown risks, uncertainties and other factors that are in many cases beyond the Company's control. Forward-looking statements are not guarantees of future performance and the Company's actual results of operations, financial condition and liquidity, and the development of the industry in which it operates, may differ materially from statements made or incorporated by reference in this presentation. The Company undertakes no obligation to update forward-looking statements if management's beliefs, estimates and opinions or the Company's circumstances as at the date hereof should change. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether, as a result of new information, future events or otherwise. Additional information about these and other assumptions, risks and uncertainties are set out in the "Risks and Uncertainties" section in the Company's MD&A filed with Canadian security regulators.

Certain technical data in this presentation was taken from NI 43-101 technical reports as described herein, and is subject to the assumptions, qualifications and procedures described therein. The Dewey Burdock Technical Report and PEA and the Centennial Technical Report and PEA are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would categorize them as Mineral Reserves. There is no certainty that the results of the Dewey Burdock Technical Report and PEA and the Centennial Technical Report and PEA will be realized. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

Mr. John Mays, P.E. is the Qualified Person who supervised the preparation of the exploration technical data in this presentation.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy securities.







### ARE URANIUM SPECIALISTS AND MINE DEVELOPERS

BELIEVE IN URANIUM UPSIDE

OWN DEWEY BURDOCK; ROBUST ECONOMICS CEMENT PROJECT AS ONE OF THE PREEMINENT UNDEVELOPED ISR PROJECTS IN THE USA

HAVE A PIPELINE OF URANIUM PROJECTS IN THE USA WITH 41 MLBS MEASURED & INDICATED AND 6 MLBS INFERRED U308 RESOURCES

ARE FOCUSED ON LOW-COST ISR PROJECTS IN THE USA AND **POSITIONED TO SUCCEED** 

# **URANIUM SPECIALISTS & MINE DEVELOPERS**

### **BOARD OF DIRECTORS**

### Glenn Catchpole - Chairman

 Engineer with 40 years experience in uranium, including extensive work with Cameco. Former CEO of Uranerz Energy Corporation prior to its US\$175 million acquisition by Energy Fuels Inc. in 2015.

### **Delos Cy Jamison**

 Founder and Principal at the Jamison Group, LLC, which specializes in complex land and resource exchanges involving Federal assets. Former National Director of the Bureau of Land Management in the United States of America.

### Matthew O'Kane

 Managing Director of Comet Resources Limited, an ASX listed explorer. Former CFO of a large private commodities trading firm in Hong Kong, Celsius Coal Limited and SouthGobi Resources Limited.

### Joseph Havlin

 Current VP Finance with Wyo-Ben, Inc. US CPA with 30+ years experience holding senior operations and financial management positions in mining, manufacturing and other industries.

### **BOARD OF DIRECTORS**

### **Todd Hilditch**

 Former President & CEO of Salares Lithium Inc. which was acquired by Talison Lithium Limited, the world's largest lithium producer prior to it being taken over in a \$840 million transaction.

### **Sandra MacKay**

 25+ years experience as a corporate commercial lawyer, including Sr. VP Legal with Uranerz Energy Corporation, VP Legal at Aker Chemicals, and Sr. Legal Counsel at Chevron Canada.

### **MANAGEMENT**

### Blake Steele - President & CEO

 Formerly with SouthGobi Resources Limited (Ivanhoe Mines Group) and previously with Deloitte in Audit and Financial Advisory practices.

### John Mays - COO

 20+ years experience in design, construction and operation of ISR uranium mines and formerly Chief Engineer, UrAsia Energy.



Renaissance for US uranium

# EPA Withdraws Last-Minute Obama-Era Uranium Proposal Source: U.S. Environmental Protection Agency, 19 October 2018

Department of Interior – Uranium declared a "Critical Mineral" vital to the Nation's economic and national security

# Department of Energy halting uranium sales

Section 232 Investigation into uranium imports results in President Trump establishing US Nuclear Fuel Working Group to develop recommendations for *reviving and expanding domestic* nuclear fuel production Source: White House.gov, 12 July 2019

President Trump stated: "I agree with the Secretary [of Commerce] that the United States uranium industry faces significant challenges in producing uranium domestically and that this is an issue of national security."

Source: WhiteHouse.gov, 12 July 2019



Uranium demand is growing...

- Nuclear Generating Capacity 2% CAGR from 2018-2040<sup>1</sup>
- 163 nuclear reactors under construction or planned² 37% of current operating nuclear fleet
- China accelerating nuclear growth plans
  - 120 to 150 Gwe of installed capacity forecast by 2030³ (currently 45.7 Gwe)²
- India 22 reactors currently operable, 7 under construction, 42 planned or proposed<sup>2</sup>
- Japan 9 reactors restarted and 17 additional reactors have applied for restarts<sup>4</sup>
  - 20-22% of energy mix from nuclear power by 20304 (approximately 30 reactors needed)
- U.S. heavy reliance on nuclear power
  - Generates approx. 20% of electricity and 63% of carbon-free electricity<sup>5</sup>
  - Two new reactors under construction
- Financial funds and producer purchases depleting spot market supply

2018 – URANIUM SUPPLY/DEMAND IN A NET DEFICIT POSITION<sup>6</sup>

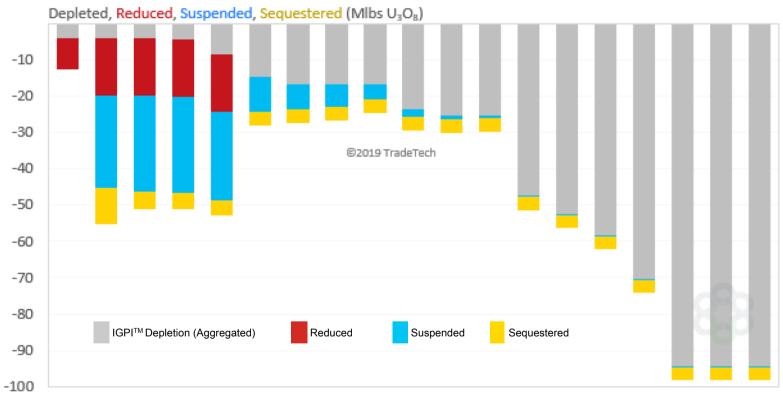
2020 - EXPECTED DEMAND: 179Mlbs<sup>6</sup>

2020 – EXPECTED PRIMARY SUPPLY: 142Mlbs<sup>7</sup>



...While primary supply has been cut back

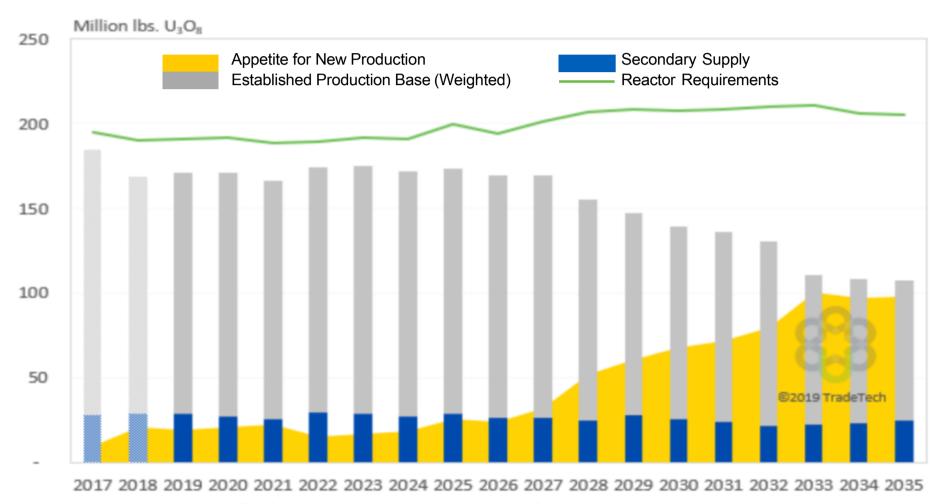
### AGGREGATE IMPACT OF MICRO TRENDS - RESTRICTED PRIMARY SUPPLY







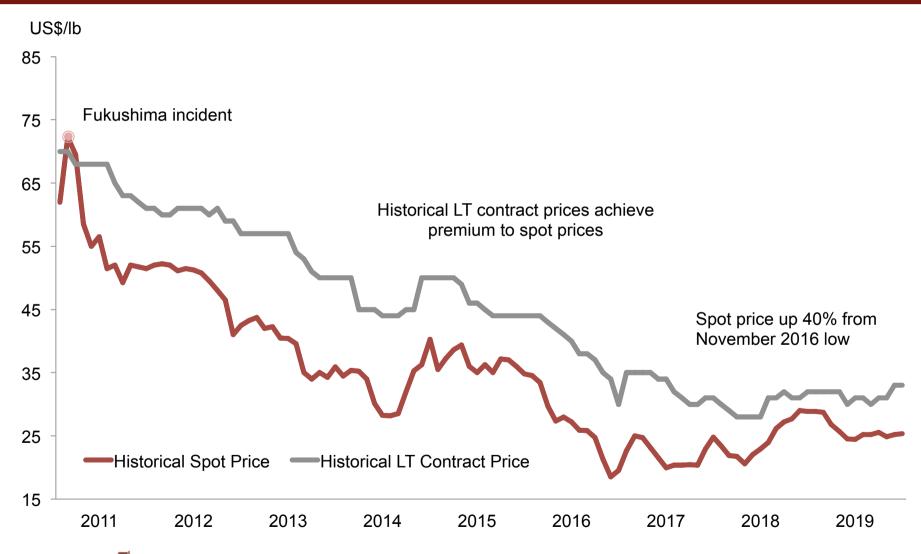
New production is needed



All assumptions are consistent with TradeTech's latest proprietary assumptions, August 2019 (i.e. Q2 2019); Established Production Base shown is weighted to assimilate the challenge of existing operations remaining at full capacity over Life-of-Mine.



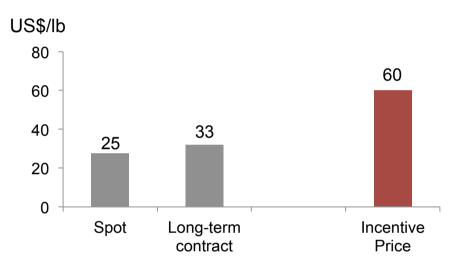
Uranium prices recovering due to supply disruption and strong demand





New production requires higher prices

### HIGHER PRICES ARE NEEDED<sup>1</sup>



BMO estimates incentive price of US\$60/lb²

### **FUEL CYCLE IS LONG SO MARKETS REACT EARLY**

Mining / milling

UF<sub>6</sub> conversion

U-235 enrichment

Fuel fabrication

Fuel loading













### 12-18 months

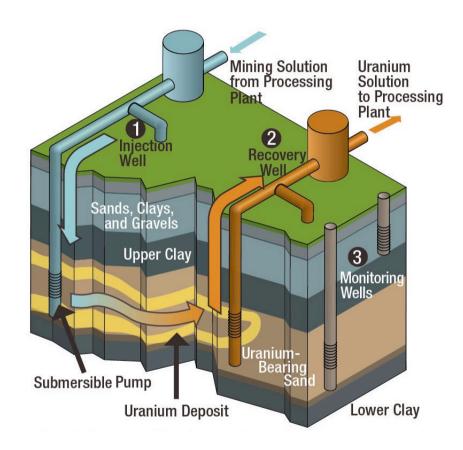
Source: 1. TradeTech for Spot and Long-term contract price. 2. BMO Capital Markets - Uranium - 5 September 2018







In-situ recovery (ISR) mining...cheaper and more reliable



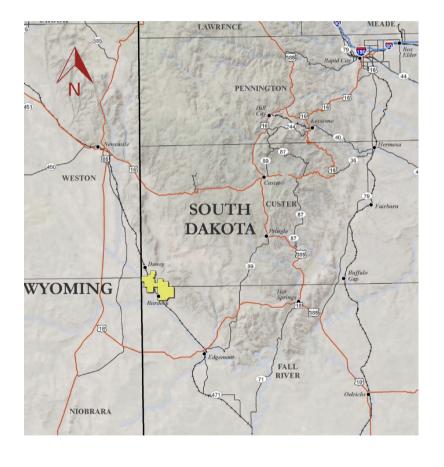
Source: United States Nuclear Regulatory Commission (www.nrc.gov)

- 1. World Nuclear Association World Mining Uranium Production (August 2019)
- 2. TradeTech The Nuclear Review (October 2016)

- Produces 50% of global uranium<sup>1</sup>
- Injection wells add oxygen and carbon dioxide to groundwater creating a lixiviant solution in the layer of earth containing the uranium ore
- Uranium dissolves into the solution
- Recovery wells 2 pump the solution back to the surface to a processing facility and then returned to injection wells after removal of uranium
- Monitoring wells 3 are checked regularly to ensure uranium and lixiviant is not escaping the uranium deposit
- Environmental impact manageable no waste rock tailings, minimal dust
- Operate at approximately 2/3 the cost of conventional mines<sup>2</sup>
- Average capital expenditure of constructing ISR mine less than 15% of conventional mines<sup>2</sup>
- Provides greater operational flexibility and ability to adapt to changes in uranium price



Dewey Burdock: Location and infrastructure



- Edgemont uranium district in southwest South Dakota, approximately 60 miles from Cameco's Crow Butte mine in Nebraska
- Mineral rights and surface rights covering approximately 16,960 acres and 12,610 acres, respectively
- Well served by infrastructure



Sixteen miles from Edgemont, serviced by two lane, all weather gravel road



Major power lines located across the project; 15 miles of 69kV power line to be built for central processing plant



Two approximately 3,000 foot wells to be drilled on site to pump water from the Madison Formation



Dewey Burdock: Undeveloped ISR project in the USA with grade and scale

### **NI 43-101 COMPLIANT RESOURCE**

Measured & Indicated: 17,122,147 lbs at average grade of 0.116%

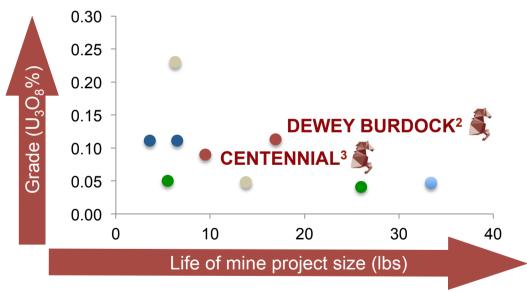
Inferred: 712,624 lbs at average grade of

0.055%

Source: Dewey Burdock Technical Report and PEA (see Appendix). Only includes ISR resources. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

# Robust Project Economics Advanced Permitting Aggressively Moving Towards Production

# GRADE AND SCALE



Source: 1. Peers include: Uranium Energy Corp.'s Goliad and Reno Creek, Energy Fuels' Nichols Ranch and Alta Mesa, UR-Energy's Lost Creek and Shirley Basin, and Peninsula Energy's Lance. Peer grade data is sourced from latest NI 43-101 for Measured plus Indicated Resources for all except Lance, where data is published according to the Australian JORC Code for Measured plus Indicated Resources. Life of Mine project size data comes from the latest published life of mine production for each project, with the exception of Uranium Energy Corp.'s Goliad and Reno Creek projects and Energy Fuel's Alta Mesa project, which comes from latest NI 43-101 for Measured plus Indicated Resources. 2. Dewey Burdock Technical Report and PEA (see Appendix); includes some Inferred Resources in production. 3. Centennial Technical Report and PEA (see Appendix); includes some Inferred Resources in production.



Dewey Burdock: One of the preeminent undeveloped ISR projects in the USA

### PEA COMPLETE - PERMITTING WELL ADVANCED

Mine Life	16 years (incl. 2 year ramp-up)
Annual Production	1.0 Mlbs/yr
LOM Production	14.3 Mlbs
Initial Capital Costs	US\$31.7M (US\$2.22/lb)
Cash Operating Costs - Plant and well field operation - Restoration / de-commissioning - Site management / overhead	US\$10.46/lb US\$7.58/lb US\$1.17/lb US\$1.71/lb
Local Taxes & Royalties	US\$5.15/lb
Sustaining Capital Costs	US\$11.05/lb
Pre / Post Tax NPV8%1	US\$171.3M / US\$147.5M
Pre / Post Tax IRR <sup>1</sup>	55% / 50%

- Initial capital costs of US\$31.7m is 'sector leading' for a project of this size
- Lowest quartile life of mine uranium C1 cash costs
  - US\$10.46/lb
- Pre-tax IRR of 55% at US\$55/lb longterm uranium price (note: post-Federal tax IRR of 50%)
- Strong project economics even at low uranium prices; pre-tax IRR and NPV of US\$26.6m and 17%, respectively, at US\$35/lb long-term uranium price

Source: Dewey Burdock Technical Report and PEA (see Appendix); the Dewey Burdock Technical Report and PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would categorize them as Mineral Reserves. There is no certainty that the results of the Dewey Burdock Technical Report and PEA will be realized. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.



<sup>1.</sup> Economics at a uranium price of US\$55/lb U<sub>3</sub>O<sub>8</sub>.

Dewey Burdock: Status of key permits



Final Source &
By-product
Materials
License

Issued April 2014 and in good standing



UIC Class III

UIC Class V

- Revised draft permits issued in August 2019
- Addressed majority of company's comments on initial draft permits
- Public comment period closed
- Working with EPA to obtain final permits



Ground Water Disposal Plan

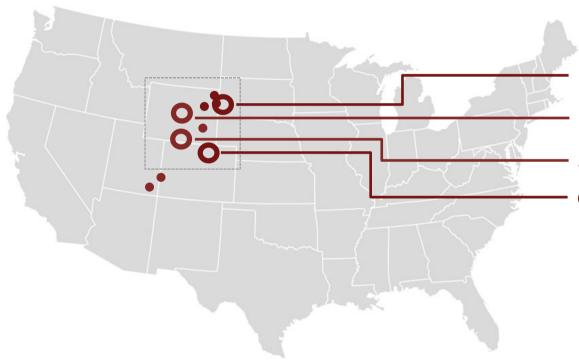
Water Rights
Permit

Large Scale
Mine Plan Permit

- Applications complete and recommended for approval by South Dakota DENR staff
- South Dakota permit hearings for final approval commenced in late-2013, continuance ordered until completion of federal regulatory approvals (NRC and EPA)



Focused on America



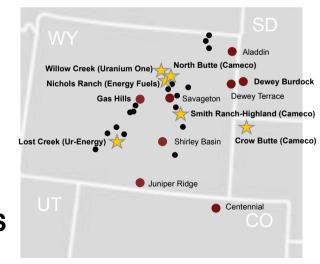
### **Dewey Burdock – South Dakota**

& Dewey Terrace - Wyoming

# **Gas Hills – Wyoming**

Juniper Ridge - Wyoming

Centennial - Colorado



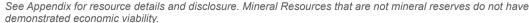
PROXIMAL TO EXISTING PRODUCTION CENTERS

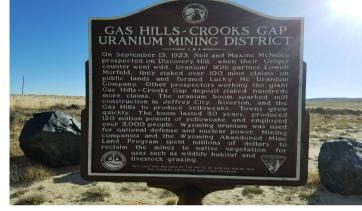


Gas Hills: Focused on ISR Potential

### URANIUM DEVELOPMENT IN A HISTORIC URANIUM DISTRICT

- Located in Freemont and Natrona Counties, WY
- 100% ownership; road, power, natural gas and water access available nearby
- Historic cumulative production of ~100 Mlbs U<sub>3</sub>O<sub>8</sub> in the district, mostly from open pit mining (1957-1989)
- Sandstone hosted roll-front uranium mineralization.
- Three of the five deposits within the Gas Hills property recently shown to be amenable to ISR mining
  - Day Loma, Loco-Lee and George-Ver -
- Hydraulic head and permeability of these three deposits shown to be sufficient to allow for the successful use of ISR mining techniques
- Additional work to further evaluate how ISR mining may positively impact future development options at Gas Hills ongoing





Gas Hills NI 43-101 Resources	Grade (% ∪₃O₅)	Contained ('000 lbs U <sub>3</sub> O <sub>8</sub> )
Indicated		
Day Loma George-Ver Loco-Lee	0.110% 0.082% 0.085%	2,948 1,027 755
Total Indicated	0.098%	4,729
Inferred		
Day Loma George-Ver Loco-Lee Rock Hill Bull Rush	0.100% 0.064% 0.052% 0.036% 0.065%	271 938 330 589 401
Total Inferred	0.054%	2,529



Dewey Terrace: Potential satellite to Dewey Burdock

### SIGNIFICANT URANIUM MINERALIZATION IDENTIFIED

- Located in Wyoming, adjacent to Dewey Burdock
- 259 mineralized drill holes identified
  - 91 mineralized drill holes with 129 intercepts equal to or exceeding 0.2 GT cut-off using a 0.02% grade cut-off with average eU<sub>3</sub>0<sub>8</sub> grade of 0.062% and an average thickness of 7.4 feet
- Deposition consistent with sand channel systems within Dewey Burdock
- Conditions indicate possible ISR amenability
- Several drill holes encountered multiple intercepts demonstrating a vertically stacked group of separate mineralized zones, similar to Dewey Burdock
- Uranium mineralization covers seven separate mineralized zones over a trend of approximately 2.5 miles
- NEXT STEPS continue review of project information with the objective of quantifying the uranium mineralization identified at Dewey Terrace to supplement existing resources at Dewey Burdock



Centennial: Additional Optionality

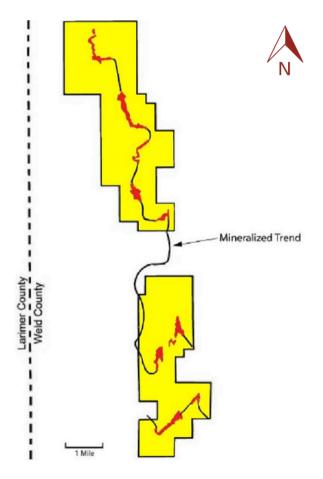
### NI 43-101 COMPLIANT RESOURCE

- Indicated: 10.4 Mlbs @ 0.09% U<sub>3</sub>O<sub>8</sub> avg. grade
- Inferred: 2.3 Mlbs @ 0.09% U<sub>3</sub>O<sub>8</sub> avg. grade
- Preliminary Assessment completed in 2010

Source: Centennial Technical Report and PEA (see Appendix). Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

### PROJECT ECONOMICS<sup>1</sup>

Annual Production	0.7 Mlbs/yr
LOM Production	9.5 Mlbs
Initial Capital Costs	US\$71.1M (US\$7.50/lb)
Cash Operating Costs <sup>2</sup>	US\$34.95/lb
Pre-tax NPV8% <sup>3</sup>	US\$51.8M
Pre-tax IRR <sup>3</sup>	18%



Source: 1. Centennial Technical Report and PEA (see Appendix), which is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would categorize them as Mineral Reserves. There is no certainty that these results will be realized. Mineral Resources that are not mineral reserves do not have demonstrated economic viability. 2. Includes US\$10.63/lb of satellite/well-field development costs and \$5.59 of local taxes and royalties. 3. At US\$65/lb uranium price and including a 20% contingency on costs and capital expenditure.



Juniper Ridge - Shirley Basin

### JUNIPER RIDGE

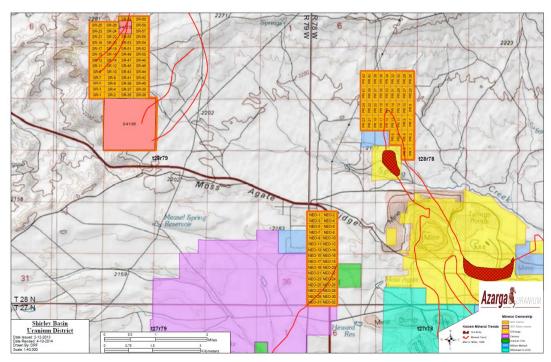
- Located in Carbon County, WY
- 100% ownership
- Road, power and water available nearby
- Historic intermittent uranium production from 1954-1966 producing ~536,000 lbs U<sub>3</sub>O<sub>8</sub> from 12 open pits and 2 shallow underground mines
- Sandstone hosted roll-front uranium mineralization
- Depth averages ~100 feet (ranges from near-surface to <300 feet), avg. thickness of ~10 feet
- Indicated: 6.0 Mlbs @ 0.058% U<sub>3</sub>O<sub>8</sub>
- Inferred: 0.2 Mlbs @ 0.085% U<sub>3</sub>O<sub>8</sub>

See Appendix for resource details and disclosure. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

# **Azarga 🏂** uranium

### SHIRLEY BASIN

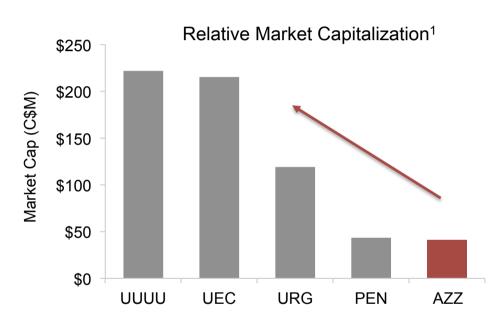
- Located adjacent to Cameco and Ur-Energy's ISR uranium properties
- Multi-million pound exploration target potential on 3 claim blocks



# AZZ POSITIONED TO SUCCEED

ISR Peer Landscape

### **NEXT-IN-LINE PRODUCTION**



- The <u>only</u> pure-play ISR-focused developer in the USA
- No debt

### SHARE PERFORMANCE





# AZZ POSITIONED TO SUCCEED

**Next Steps** 

### AMERICA'S NEXT URANIUM DEVELOPER

- Finalization of permitting at Dewey Burdock
   One of the preeminent undeveloped ISR projects in the USA
- Renewed focus on ISR amenability at Gas Hills

Focused on growing ISR-amenable pounds in a historic uranium district

Identification and quantification of uranium mineralization at Dewey Terrace

A potential satellite project to Dewey Burdock

Platform for further consolidation



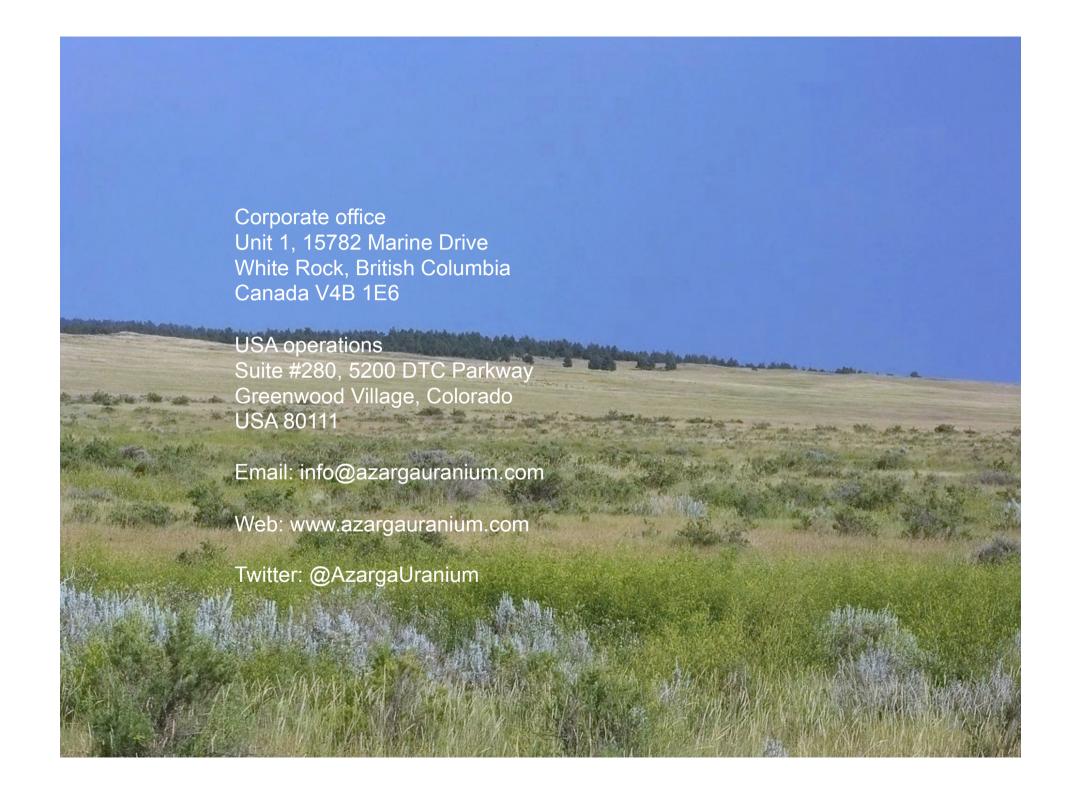












# APPENDIX: NI 43-101 RESOURCES

	Tons	Grade (% U <sub>3</sub> O <sub>8</sub> )	Contained (lbs U <sub>3</sub> O <sub>8</sub> )
Dewey Burdock <sup>1</sup>			
Measured & Indicated (ISR)	7,388,222	0.116%	17,122,147
Measured & Indicated (non-ISR)	1,097,690	0.058%	1,265,037
Inferred	645,546	0.055%	712,624
Inferred (non-ISR)	113,489	0.051%	114,858
Centennial <sup>2</sup>			
Indicated	6,873,199	0.09%	10,371,571
Inferred	1,364,703	0.09%	2,325,514
Aladdin <sup>3</sup>			
Indicated	466,232	0.111%	1,038,023
Inferred	42,611	0.119%	101,255
Gas Hills <sup>4</sup>			
Indicated	2,407,000	0.098%	4,729,000
Inferred	2,324,000	0.054%	2,529,000
Juniper Ridge <sup>5</sup>			
Indicated	5,139,000	0.058%	6,006,000
Inferred	107,000	0.085%	182,000

- 1. NI 43-101 Technical Report, Preliminary Economic Assessment, Dewey-Burdock Uranium ISR Project, South Dakota, USA, completed by Woodard & Curran and Rough Stock Mining Services (effective 3 December 2019) ("Dewey Burdock Technical Report and PEA").
- 2. NI 43-101 Preliminary Assessment, Powertech Uranium Corp., Centennial Uranium Project, Weld County, Colorado, completed by SRK Consulting (effective 2 June 2010) ("Centennial Technical Report and PEA").
- 3. Technical Report on the Aladdin Uranium Project, Crook County, Wyoming, completed by Jerry D. Bush, certified Professional Geologist (effective 21 June 2012).
- 4. Amended and Restated Gas Hills Uranium Project, Mineral Resource and Exploration Target, NI 43-101 Technical Report, Fremont and Natrona Counties, Wyoming, USA, completed by Douglas L. Beahm, P.E., P.G., Principal Engineer, BRS Inc. (effective 9 June 2017).
- 5. Juniper Ridge Uranium Project, Carbon County, Wyoming, USA, Amended and Restated NI 43-101 Mineral Resource and Preliminary Economic Assessment, completed by Douglas L. Beahm, P.E., P.G., Principal Engineer, BRS Inc. and Terrence P. (Terry) McNulty, P.E., D.Sc., T.P McNulty and Associates (effective 9 June 2017).

Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

