Standard LITHIUM

NYSE: SLI - TSXv: SLI - FSE: S5L

July 9, 2021

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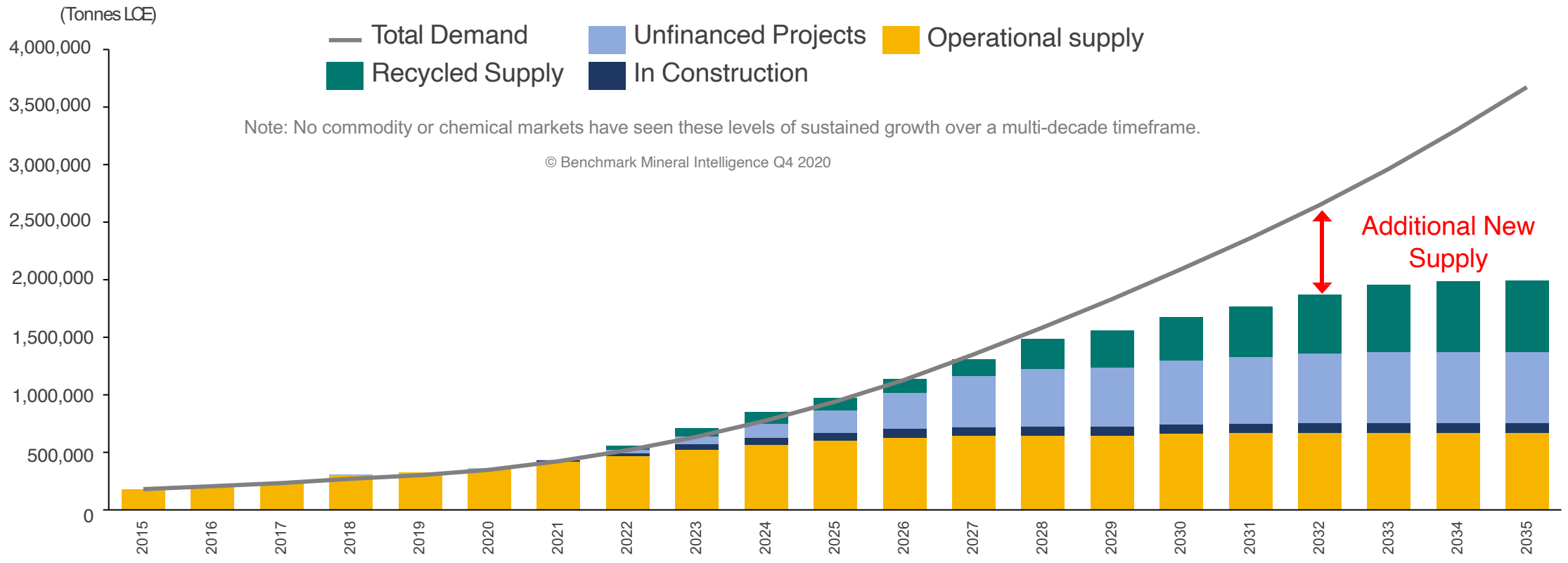
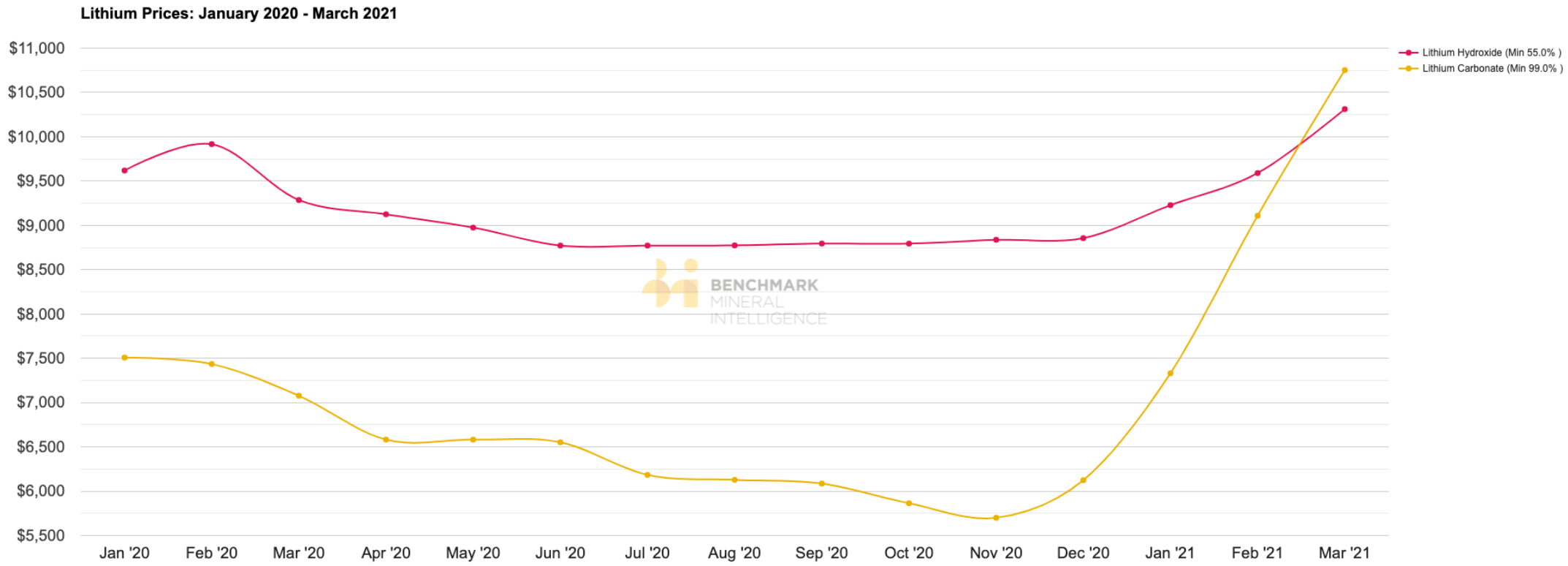
The technical content of this presentation has been reviewed and approved by Steve Ross, P.Geol., a Qualified Person as defined by National Instrument 43-101 and an employee of the Company.

Background: There's no geological shortage of lithium – and no shortage of customers, but there is a shortage of financing, and increasingly, a shortage of time…

Example of Lithium Demand Vs Financed, Unfinanced Supply and Recycled Supply (MT LCE)



Lithium Pricing Up 90% Q1 2021



Lithium's Moment:

The United States is largely absent from most steps of this supply chain, with virtually no mining or chemical processing of these materials domestically.

Lithium Mining				
USA 1%	China 14%	Australia 46%	Chile 28%	Argentina 11%

Lithium Chemical Processing				
USA 7%	China 51%	Chile 29%	Argentina 11%	Russia 2%

Lithium Battery Cell Production				
USA 11%	China 57%	Japan 15%	Korea 10%	Europe 7%

The most rapidly advancing lithium project in North America

- **Largest reported lithium brine project in the U.S.** Initial production of 20,900 tonnes* BQ Li_2CO_3 from existing brine flow. Target expansion >70,000 TPA
- **First mover** with a clear path to production, existing infrastructure, most permits already in place
- **Bolt-on** DLE technology to extract and purify lithium from the brine by-product of existing bromine production facilities in south Arkansas.
- **Strategic partnership** with global chemical major **LANXESS** (Bayer, spinoff) includes project finance, off-take and operations commitment
- **Positive ESG profile** North America's premiere **Direct Lithium Extraction** project, minimal environmental footprint, existing industrial site, social license.
- **Strong** project economics – lowest quartile OPEX Battery Quality Li2CO3*
- **Geo-politically safe,** business friendly, low-cost Arkansas U.S. location

* Source: Worley Parson Preliminary Economic Assessment August 2019

South Arkansas Lithium Project

Located on one of the worlds largest brine reservoirs

LANXESS Project:

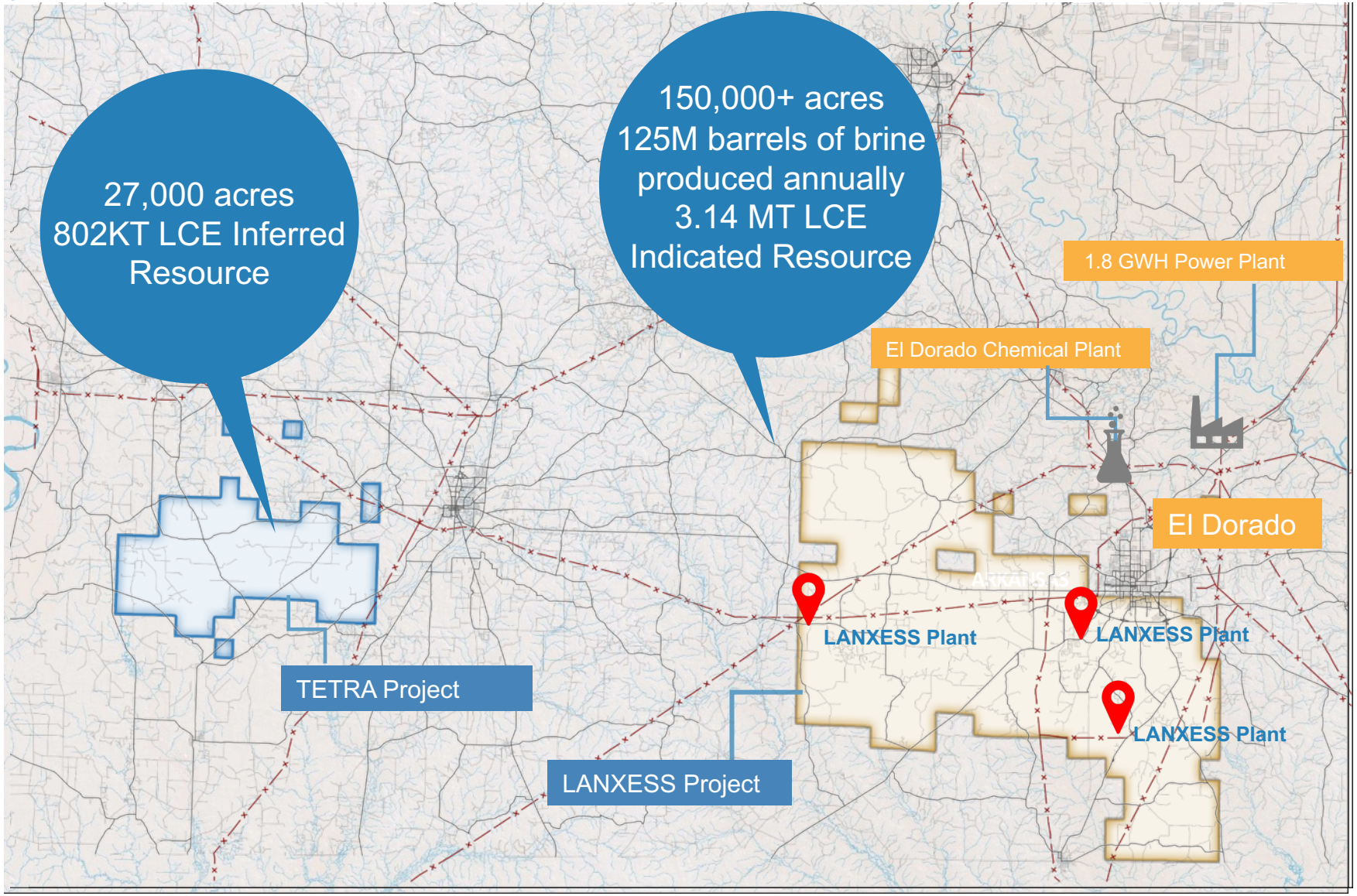
- 150,000 acres of operating brine leases
- 3 permitted brine processing plants
- 3.14 MT LCE Indicated Resource
- Preliminary Economic Assessment targeted 20.9KT per annum Li2CO3*

TETRA Project:

- 27,000 acres of brine leases
- 802KT LCE Inferred Resource**

South Central Arkansas Project:

- Supportive jurisdiction
- Minimal geo-political & permit risk
- Low-cost power less than .05kw
- Local low-cost chemical reagents
- Road, rail, power, plentiful water at site
- Skilled workforce



*Source: Worley Parson Preliminary Economic Assessment August 2019
** Source: Apex Geoscience NI-43-101 February 2019

Standard Lithium & LANXESS AG: Joint Venture*

Expertise & Capital

- LANXESS is a global specialty chemical company (Bayer spinoff)
- 60+ chemical production sites globally
- +15,000 employees
- 21 North American sites with
- USD $7B revenue 2019

Fast-track to Production

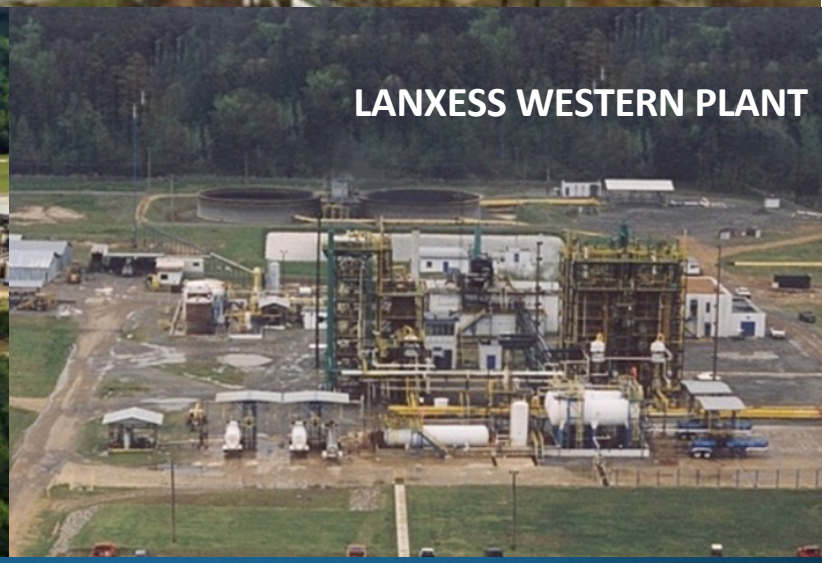
- LANXESS brings expertise in specialty chemicals, sales & marketing
- Operational and human resources skills
- Existing, permitted, Arkansas brine operations are the largest in North America

* 70/30 JV in favor of LXS with option for SLL to achieve 40% subject to certain milestones
Subject to certain conditions - See news release Nov 12, 2018 -

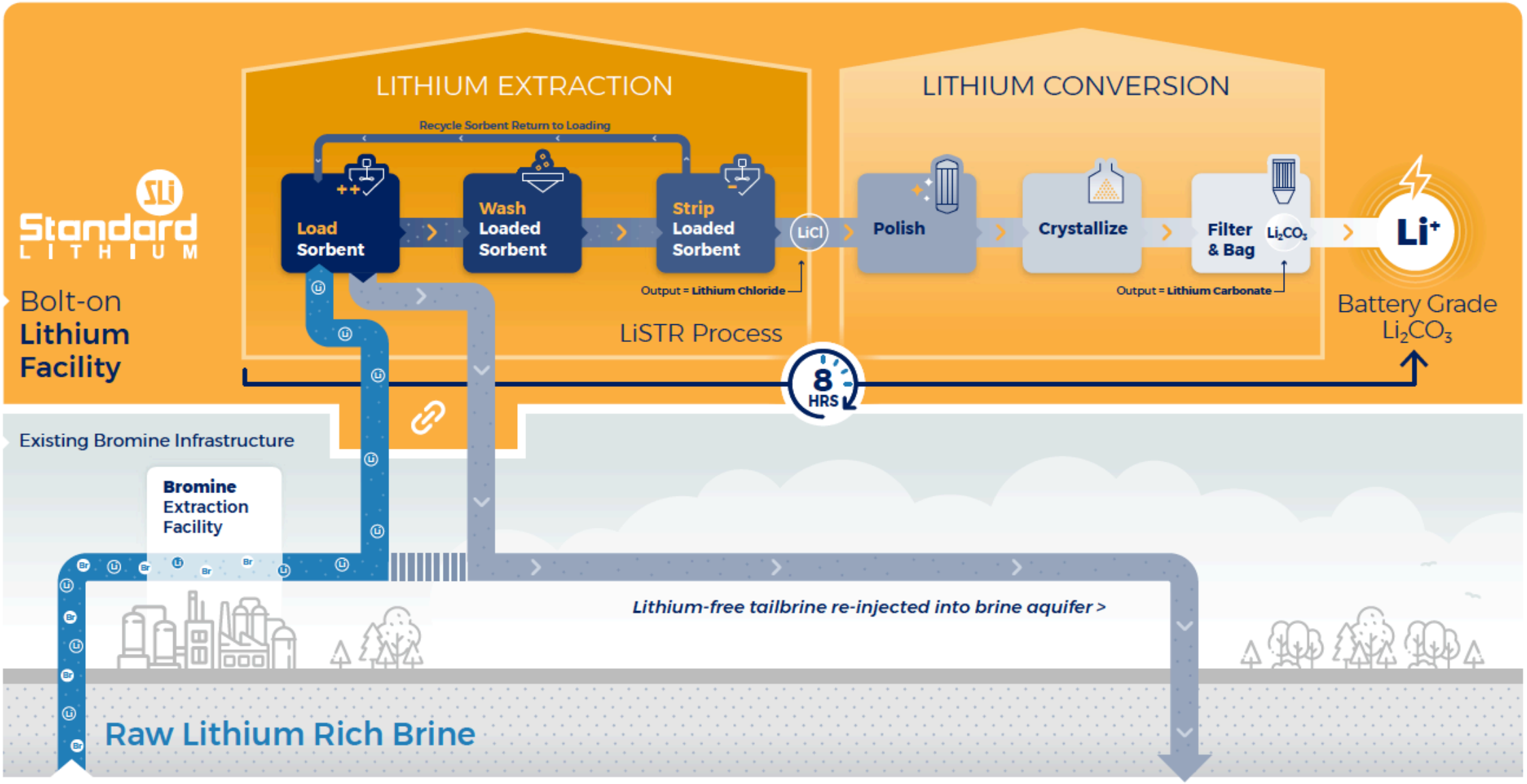
LANXESS
Energizing Chemistry

Operations in south Arkansas:

- 150,000 acres of operating brine leases
- 10,000 brine leases
- 3 permitted brine processing facilities
- Road, rail, power, water onsite
- 250+ miles of brine supply & disposal pipelines
- 62 production & re-injection wells
- 5.25 billion gallons of brine processed annually
- 500+ member skilled workforce
- 50+ years of operating history



Direct Lithium Extraction Process



STANDARD
lithium
POWERING THE FUTURE
ARKANSAS
lithium
EL DORADO · ARKANSAS

FIRST TO MARKET: Standard Lithium's Disruptive Extraction Technology Advantage

- Standard Lithium's proprietary LiSTR **Direct Lithium Extraction** technology is the key to unlocking a globally significant domestic U.S. critical resource.
- LiSTR Direct Lithium Extraction:
  - Not weather dependent, fast – hours not months, higher recovery, higher purity than conventional
  - Minimized environmental footprint – dozens of acres vs thousands with evaporation ponds or hard rock surface mining
  - Faster to market – Bolt-on process leverages the existing infrastructure of North America's largest permitted brine processing facilities

LEVERAGING EXISTING INFRASTRUCTURE FOR PHASED BUILD-OUT

Initial Target – 20,900 tonnes/year battery quality Li_2CO_3 from existing brine stream*

Expansion Targeted - 70,000+ tonnes/year battery quality Li2CO3

DEMONSTRATION PLANT	PHASE 1: SOUTH PLANT	PHASE 2: WEST PLANT	PHASE 3: CENTRAL PLANT	EXPANSION
100-150 TPA Li2CO3	9,700 TPA Li2CO3	8,300 TPA Li2CO3	3,000 TPA Li2CO3	50,000+ TPA Li2CO3

*Source: Worley Parson Preliminary Economic Assessment August 2019
** Source: Apex Geoscience NI-43-101 February 2019

Arkansas Advantage:

Low-cost operating environment

- Unparalleled infrastructure - Road, rail, power, water onsite
- Most permits already in place
- Low-cost power and gas
- Most chemical reagents produced locally

Deep talent pool

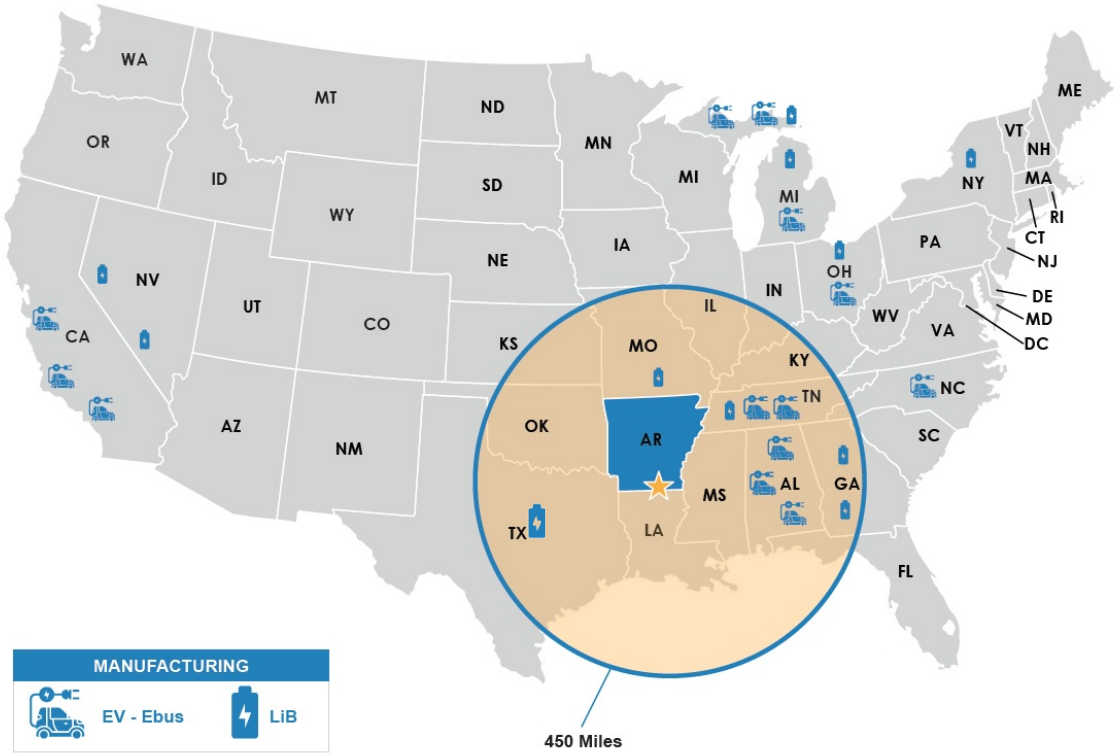
- Arkansas has 60+ years of brine processing experience
- Gulf coast region USA among world's premier chemical processing regions

Low tax rates

- US has lowest corporate tax rate among major Western countries
- US does not have a Value-Added Tax (China 16%)

Proximity to major markets

- USA & EU represent 30% of world automotive sales
- COVID has changed supply chain dynamics
- Western battery investments are growing



MANAGEMENT - DIRECTORS

ROBERT MINTAK
CEO
20+ years experience in corporate management, with a specific emphasis on strategic development. He has a global network of lithium industry contacts and is a pioneer in the rapidly evolving lithium space

KARA NORMAN
CFO
A Chartered Professional Accountant with extensive experience in financial reporting for resource development and technology companies.

DR. ANDY ROBINSON
PRESIDENT, COO
An experienced geoscientist with a PhD in Geochemistry from the University of Bristol, UK, and has worked on a wide range of projects in the resource, power and energy sectors in Europe, Africa, and North and South America.

ANTHONY ALVARO
DIRECTOR
Co-founder of Standard Lithium with over two decades capital markets experience. Anthony Alvaro has raised in excess of $500 million in for both public and private companies.

ROBERT CROSS
NON-EXEC CHAIRMAN
An engineer with 25 years of experience as a company builder. He co-founded and serves as Chairman of B2Gold, which will achieve almost one million ounces of low-cost gold production in 2019. Mr. Cross has an Engineering Degree from the University of Waterloo (1982) and received an MBA from Harvard.

JEFF BARBER
DIRECTOR
Jeff is a CFA charter holder and holds a masters degree in Finance and Economics from the University of Alberta. He extensive capital market experience as an investment banker with both Canaccord Genuity and Raymond James and an economist at Deloitte.

TECHNICAL TEAM - SCIENTIFIC ADVISERS

ROSS LEWIS

SENIOR PROJECT MANAGEMENT

Ross has over 45 years of experience in process engineering, mechanical engineering, materials handling systems design, project management, procurement and construction in projects around the globe.

STEVE ROSS P.GEO

PROJECT MANAGEMENT

Steve is an environmental and water resource professional. His water resources background includes hydrogeology, water quality, groundwater modeling, regulatory strategy, and water resources evaluation and he is licensed as a Professional Geologist in California and Alberta.

PROF. JASON HEIN

LITHIUM CRYSTALLIZATION

Jason is a recognized global expert on the application of A.I. and robotics on reaction optimization. Jason's work integrates machine learning and newly developed robotic tools to visualize and control reactions as they happen in real time.

DR. RON MOLNAR

LITHIUM EXTRACTION

Dr. Molnar is a chemical engineer with over 35 years experience in hydrometallurgical bench and pilot plant testing. He has successfully built and operated more than 60 pilot plants around the globe.

PROF. BARRY SHARPLESS

LITHIUM CRYSTALLIZATION

Prof. Sharpless received the **Nobel Prize** for Chemistry in 2001 for his work on chirally catalyzed oxidation reactions. Prof. Sharpless received the Priestley Medal, the American Chemical Society's highest honor, in 2019.

CRAIG BROWN

LITHIUM EXTRACTION

Craig Brown is a hydrometallurgical expert with over 45 years experience in developing processes for separating a wide range of chemicals from aqueous solutions. He was a central figure in the development and application of ion exchange technology, which is now well established and utilized in over 50 countries in dozens of different applications

STANDARD LITHIUM LTD Effective date: July 9, 2021	
Co-Listed/Quoted	Canada - TSXv: SLI USA - NYSE American: SLI Germany - FSE:S5L
Shares Outstanding Options Warrant Fully diluted	141,166,203 13,750,784 9,813,870 164,730,857
52 Week Range CDN$ 52 Week Range USD$	$1.00 / $6.14 $0.76/ $4.93
AUDITOR	Manning Elliot
LEGAL COUNSEL	Cassells Brock
TRANSFER AGENT	AST Trust Company
YEAR END	June 30

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