



5E Advanced Materials Corporate Investor Presentation

June 2023

Disclaimer

FORWARD-LOOKING STATEMENTS

The information in this Presentation includes “forward looking statements”. All statements other than statements of historical fact included in this Presentation regarding our business strategy, plans, goals and objectives are forward looking statements. When used in this Presentation, the words “believe”, “project”, “expect”, “anticipate”, “estimate”, “intend”, “budget”, “target”, “aim”, “strategy”, “estimate”, “plan”, “guidance”, “outlook”, “intend”, “may”, “should”, “could”, “will”, “would”, “will be”, “will continue”, “will likely result” and similar expressions are intended to identify forward looking statements, although not all forward looking statements contain such identifying words. These forward looking statements are based on 5E’s current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. We caution you that these forward looking statements are subject to all of the risks and uncertainties, most of which are difficult to predict and many of which are beyond our control, incident to the extraction of the critical materials we intend to produce and advanced materials production and development. These risks include, but are not limited to: our limited operating history in the borates and lithium industries and the fact that we have not yet realized any revenue from our proposed extraction operations at our properties; our need for substantial additional financing to execute our business plan and our ability to access capital and the financial markets; our status as an exploration stage company dependent on a single project with no known Regulation S-K 1300 mineral reserves and the inherent uncertainty in estimates of mineral resources; our lack of history in mineral production and the significant risks associated with achieving our business strategies, including our downstream processing ambitions; our ability to obtain, maintain, and renew governmental and environmental permits in order to conduct development and mining operations in a timely manner; our incurrence of significant net operating losses to date and expectations to incur continued losses for the foreseeable future; risks and uncertainties relating to the development of the 5E Boron Americas Complex, including our ability to timely and successfully complete Phase 1 of our 5E Boron Americas Complex; our ability to obtain, maintain and renew required governmental permits for our development activities, including satisfying all mandated conditions to any such permits; and other risks. Should one or more of these risks or uncertainties occur, or should underlying assumptions prove incorrect, our actual results and plans could differ materially from those expressed in any forward looking statements. No representation or warranty (express or implied) is made as to, and no reliance should be placed on, any information, including projections, estimates, targets and opinions contained herein, and no liability whatsoever is accepted as to any errors, omissions or misstatements contained herein.

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MARKET AND INDUSTRY DATA

This Presentation has been prepared by 5E and includes market data and other statistical information from third party sources, including independent industry publications, government publications or other published independent sources. Although 5E believes these third party sources are reliable as of their respective dates for the purposes used herein, neither we nor any of our affiliates, directors, officers, employees, members, partners, shareholders or agents make any representation or warranty with respect to the accuracy or completeness of such information. Although we believe the sources are reliable, we have not independently verified the accuracy or completeness of data from such sources. Some data is also based on 5E’s good faith estimates, which are derived from our review of internal sources as well as the third party sources described above. Additionally, descriptions herein of market conditions and opportunities are presented for informational purposes only there can be no assurance that such conditions will actually occur or result in positive returns.

CAUTIONARY NOTE REGARDING RESERVES

Unless otherwise indicated, all mineral resource estimates included in this Presentation have been prepared in accordance with, and are based on the relevant definitions set forth in, the SEC’s Mining Disclosure Rules and Regulation S-K 1300 (each as defined below). Mining disclosure in the United States was previously required to comply with SEC Industry Guide 7 under the Exchange Act (“SEC Industry Guide 7”). In accordance with the SEC’s Final Rule 13-10570, Modernization of Property Disclosure for Mining Registrant, the SEC has adopted final rules, effective February 25, 2019, to replace SEC Industry Guide 7 with new mining disclosure rules (the “Mining Disclosure Rules”) under sub-part 1300 of Regulation S-K of the Securities Act of 1933, as amended (the “Securities Act”) (“Regulation S-K 1300”). Regulation S-K 1300 replaces the historical property disclosure requirements included in SEC Industry Guide 7. Regulation S-K 1300 uses the Committee for Mineral Reserves International Reporting Standards (“CRIRSCO”) - based classification system for mineral resources and mineral reserves and accordingly, under Regulation S-K 1300, the SEC now recognizes estimates of “Measured Mineral Resources”, “Indicated Mineral Resources” and “Inferred Mineral Resources”, and require SEC-registered mining companies to disclose in their SEC filings specified information concerning their mineral resources, in addition to mineral reserves. In addition, the SEC has amended its definitions of “Proven Mineral Reserves” and “Probable Mineral Reserves” to be substantially similar to international standards. The SEC Mining Disclosure Rules more closely align SEC disclosure requirements and policies for mining properties with current industry and global regulatory practices and standards, including the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, referred to as the “JORC Code”. While the SEC now recognizes “Measured Mineral Resources”, “Indicated Mineral Resources” and “Inferred Mineral Resources” under the SEC Mining Disclosure Rules, investors should not assume that any part or all of the mineral deposits in these categories will be converted into a higher category of mineral resources or into mineral reserves.

For additional information regarding these various risks and uncertainties, you should carefully review the risk factors and other disclosures in our Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) on September 28, 2022, as amended by our Form 10-K/A filed on October 31, 2022, as well as our Form 10-Qs filed on November 10, 2022 and February 9, 2023. Additional risks are also disclosed by 5E in its filings with the Securities and Exchange Commission throughout the year, as well as its filings under the Australian Securities Exchange.

Corporate Strategy

1

Build a globally significant Boron and Lithium business

2

Support US ambitions to re-shore critical supply chains and transition to a clean energy economy

3

Execute on our phased and modular operation to deliver up to 450K short tons of Boric Acid and 5.5K short tons of Lithium

Path Forward: Executing Our Strategy

Near-term Action Items & Strategic Signposts

Obtain EPA Approval

- All required permits are in place and held by 5E today
- One final condition to be cleared in order to operate under the permit with approval to inject acid
- Step Rate Test

Pursuing Funding Solutions

- Utilize funds to move to a PFS/DFS-level document
- Focused on non-dilutive sources such as Government funding (low-cost DOE, etc.)
 - Internal re-org to support these efforts
- Traditional commercial lending & debt capital markets, etc.



**Turn on Plant and
Begin Production
of Boric Acid &
Lithium**

Project Economics

5E Boron Americas Complex: By The Numbers

S-K 1300 Initial Assessment - Technical Report Summary



31 Years
Life of Mine



\$2.41B
After-tax NPV_{8%}



23%
After-tax IRR



US\$13.0B
LOM Net Cashflow



US\$101.2M - 62.1%
EBITDA - EBITDA
margin in FY2027



90ktpa Boric Acid
Initial Production (2nd
calendar Q2026)



\$373M
Initial CAPEX



**74.3Mt at 4.15% B₂O₃,
7.37% H₃BO₃ & 356ppm LCE**
M & I Resource



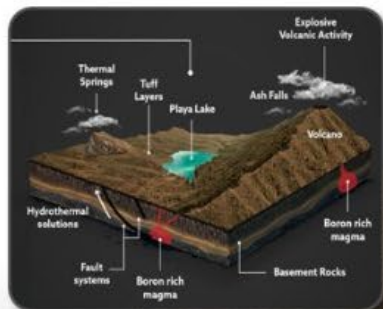
450ktpa Boric Acid
Full Production



US\$621.9M - 58.2%
EBITDA - EBITDA
margin FY2032

Staged Execution and Value Delivery

Rare Resource



Critical Mineral



High-Margin Modular Operation



U.S. Business



Current

CY2023

CY2026

CY2028

CY2030

CY2031

**Resources
Defined**

**Initial Facility
Built**

**Phase 1
Planning**

**Phase 2
Planning**

**Phase 3
Planning**

**FULL PRODUCTION
Planning**

327M tons
8.22%
Boric Acid Content
0.17%
Lithium Carbonate
Content
Designated Critical
Infrastructure
by US govt

9,000 stpa
Boric Acid
110 stpa
Lithium Carbonate
US\$65M
CAPEX
US\$17M
EBITDA

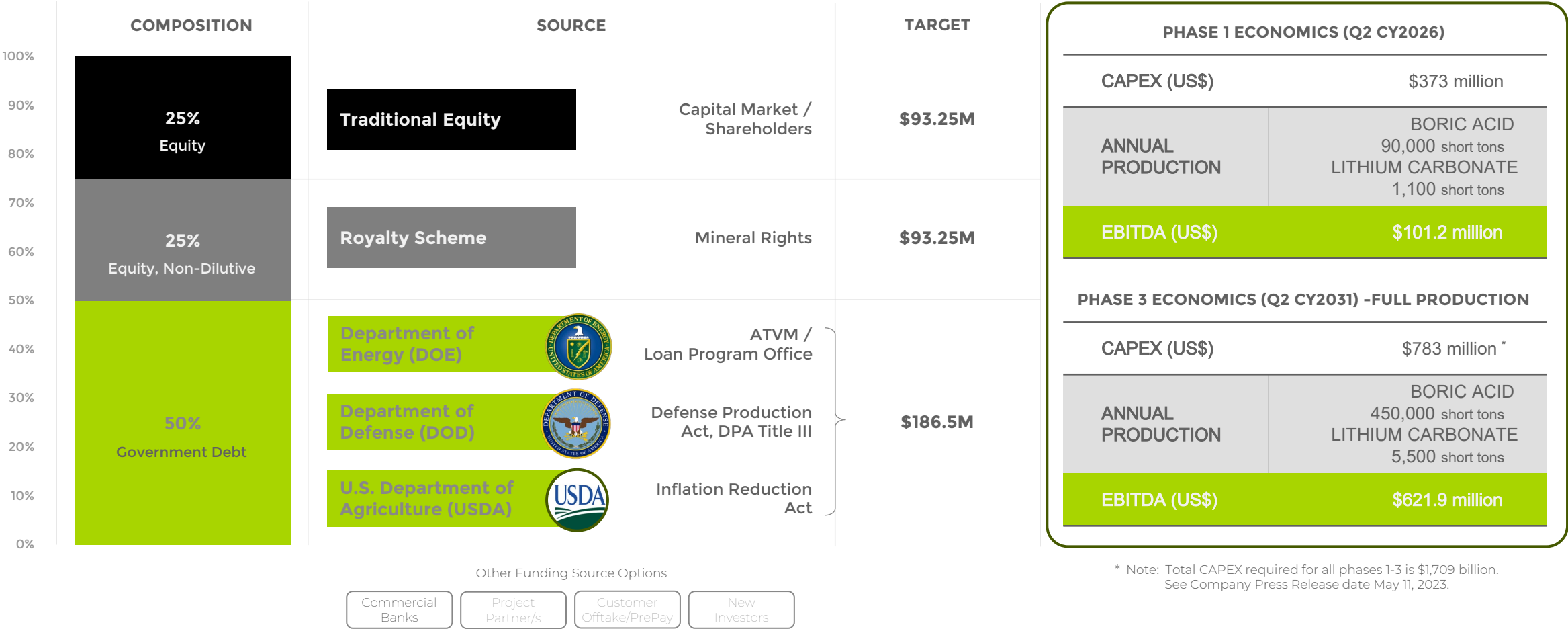
90,000 stpa
Boric Acid
1,100 stpa
Lithium Carbonate
US\$389M
CAPEX
US\$101.2M
EBITDA

180,000 stpa
Boric Acid
2,200 stpa
Lithium Carbonate
US\$620M
CAPEX
US\$360.9M
EBITDA

180,000 stpa
Boric Acid
2,200 stpa
Lithium Carbonate
US\$947M
CAPEX
US\$621.9M
EBITDA

450,000 stpa
Boric Acid
5,500 stpa
Lithium Carbonate
US\$682M
EBITDA

Funding Model



Global Market Opportunity

Pillars of the Boron Opportunity



Propelling

Decarbonization
Sectors

- ✓ Critical material used in wide range of decarbonization technologies (EVs, clean energy production)
- ✓ Demand and pricing growth currently outpacing inflation



Empowering

Global Food
Security Efforts

- ✓ >40% of lands to experience severe yield reduction by 2050 due to nutrient depletion¹
- ✓ Boron is an essential micro nutrient driving crop health



Enabling

Onshore, Critical
Supply Chains

- ✓ Approximately 60%² of global supply is controlled by Eti Maden (Turkish SOE)
- ✓ Opportunity for domestic U.S supply leader with potential for reduced environmental footprint



Solution

to the Asset
Scarcity Challenge

- ✓ Limited number of new supply sources of scale to meet anticipated growing demand
- ✓ We believe 5E has one of the largest known new conventional colemanite deposits globally not owned by the Turkish Government controlled entity, Eti Maden

Today's Challenge

Pivotal time when demand for transition-enabling materials is expected to accelerate, critical supply chains are expected to be increasingly constrained, and a fundamental supply gap is expected to emerge

¹ Source: Center for Strategic & International Studies; Climate Change and Food Security: A test of U.S. Leadership in a Fragile World (2019; Sova, Flowers and Man).

² Source: Millcreek Mining Group.

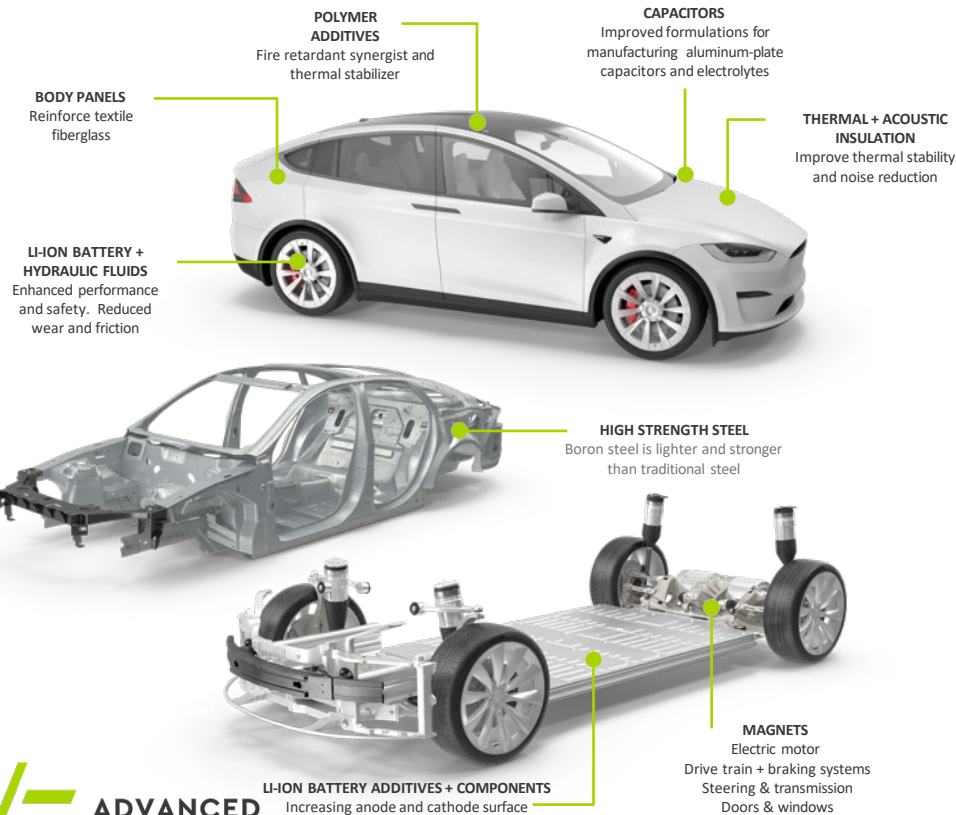
Accelerating Demand from Decarbonization-Enabling End Markets

Boron is an enabler of many decarbonization technologies¹

Electric Vehicles

~30% CAGR
Global Electric Vehicle
Stock Growth(2020-2030)

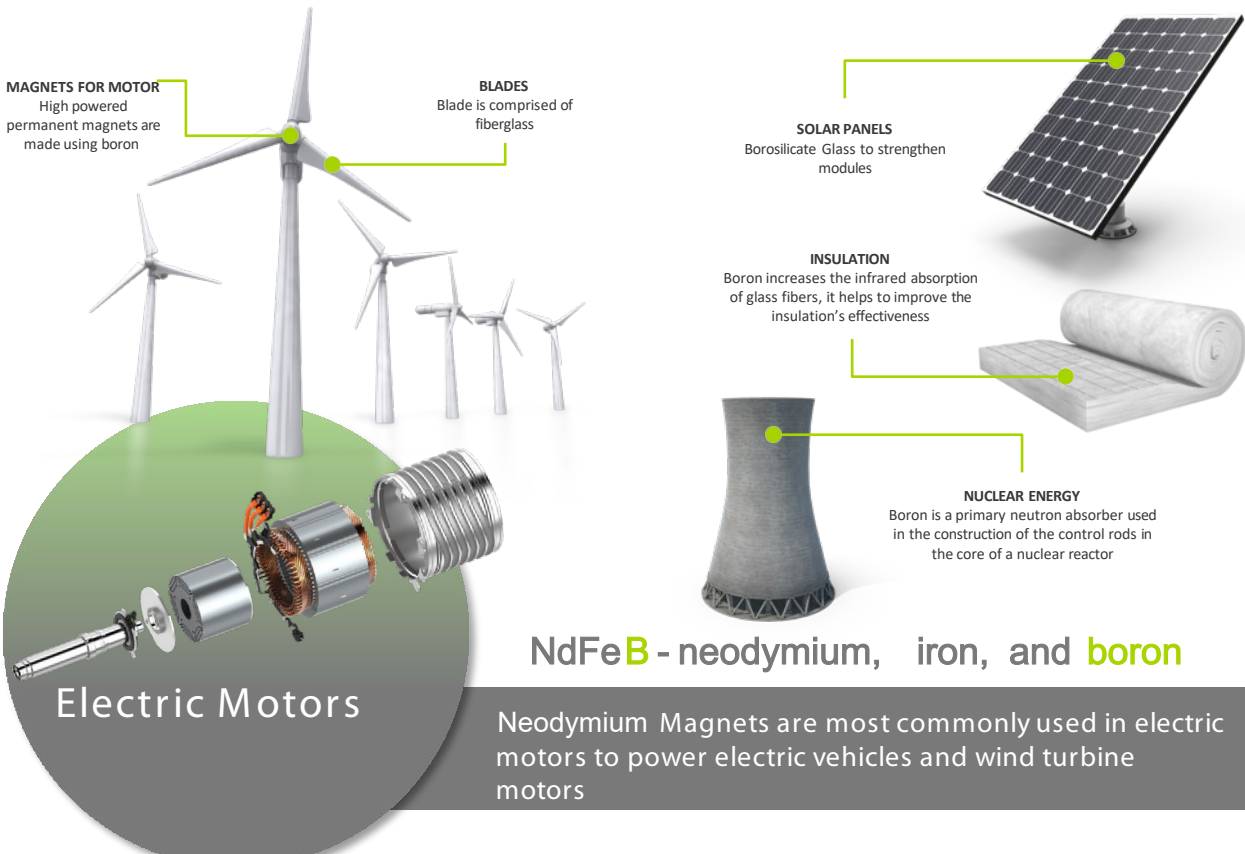
~145m
Global Electric Vehicle
Growth (2020-2030)



Clean Energy and Efficiency

5.8% CAGR
Global Installed Wind & Solar
Capacity (2019-2050)

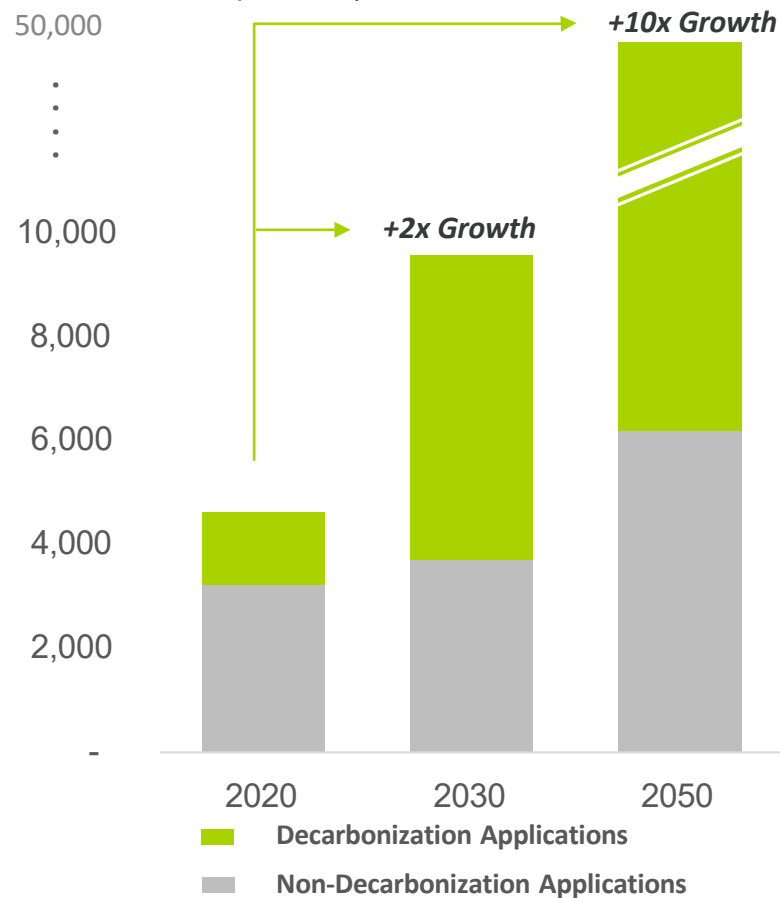
~\$55 Trillion
Global “Green” Energy Infrastructure
Investment (2016-2050) ²



Source: EIA, IEA, United Nations, PGFP, and the Congressional Budget Office.
¹ Credit Suisse Climate Transition Super Materials Equity Research Report dated December 7, 2021.
² Reflects cumulative global renewable, electrification and infrastructure, and energy efficiency investment under the International Renewable Energy Agency's Planned Energy Scenario.

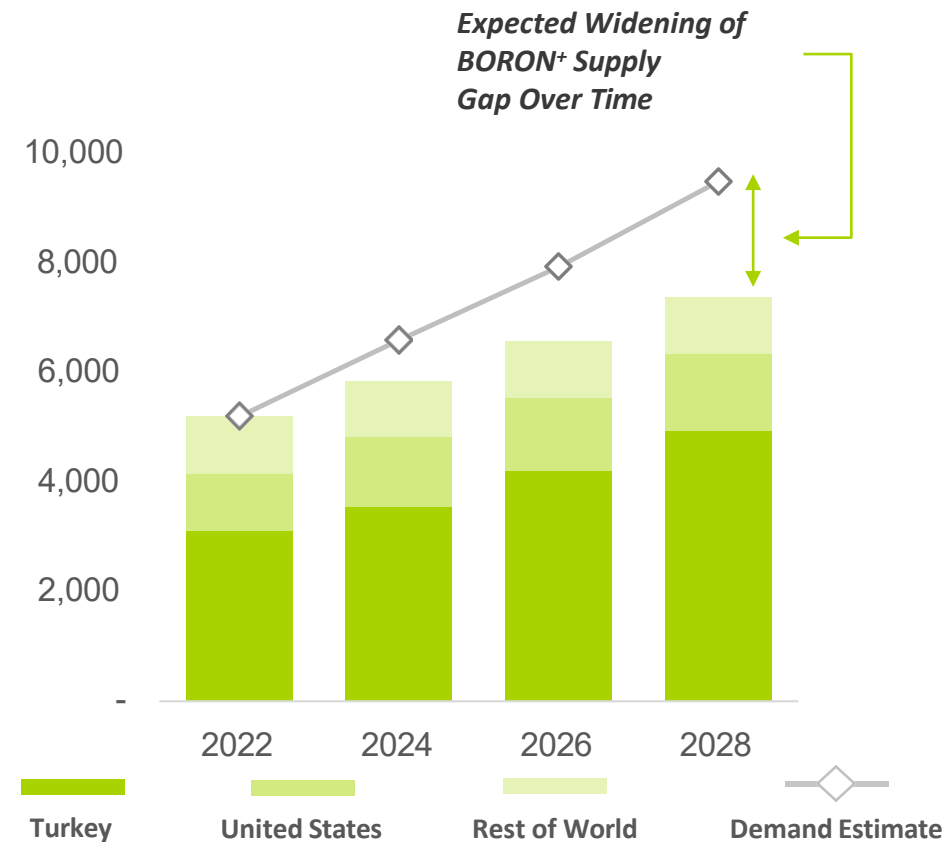
Confluence of Demand Growth and Growing Supply Shortfall

Boron Demand Growth ⁽¹⁾
(k tonnes; boric acid equivalent)



**Expected Demand Growth
Driven by Key Decarbonization Sectors**

Supply / Demand Imbalance ⁽¹⁾
(k tonnes; boric acid equivalent)

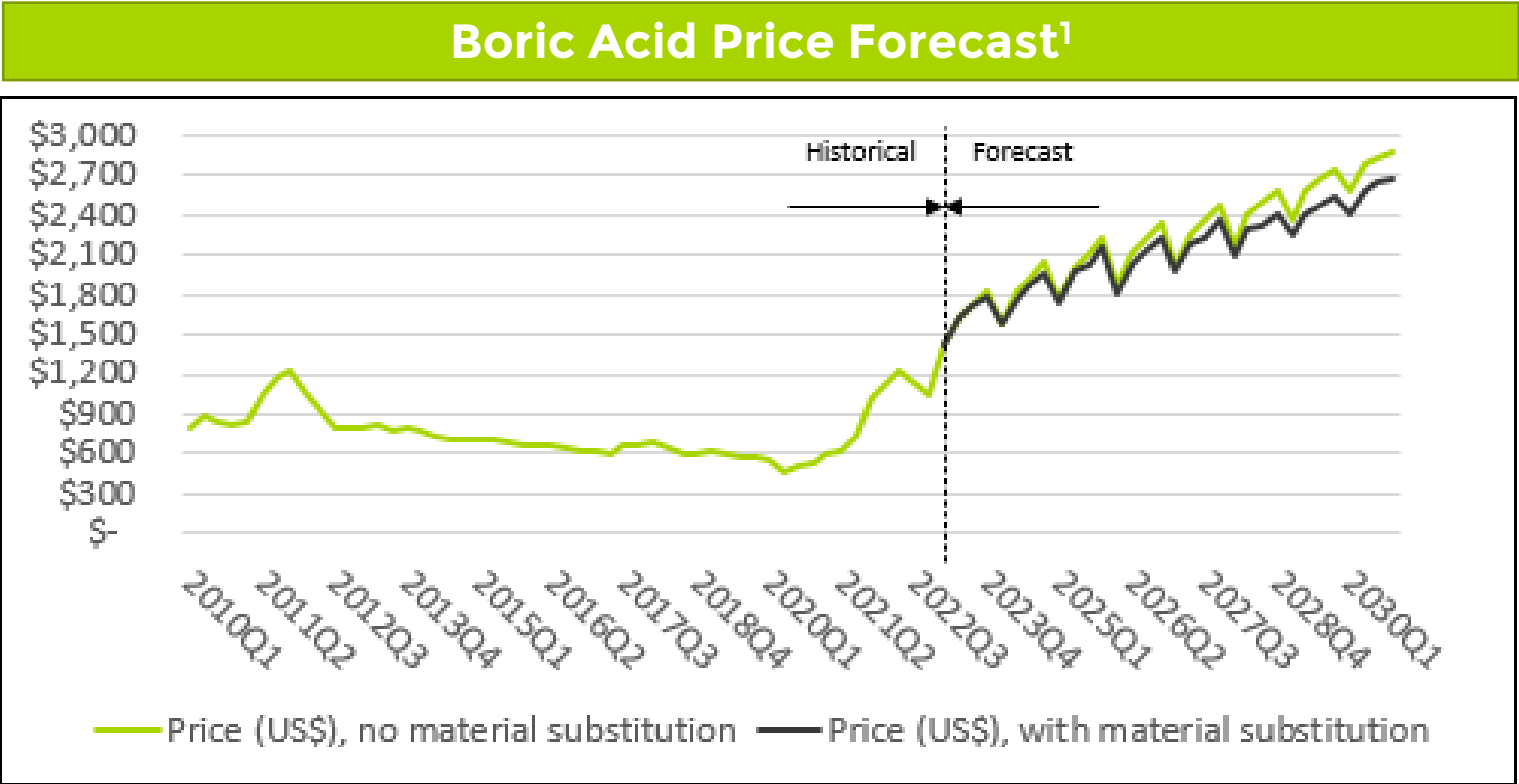


**Continued Supply Pressures Bringing the
Boron Supply Gap into Focus**

Source: Credit Suisse Equity Research.
Note: Elemental boron figures converted to boric acid equivalent at a ratio of 1-to-5.72.
¹ Based on “High Demand” case. Alternatively, under the “Low Demand” case, boron demand growth is expected to increase by ~2x in 2030 and ~4x in 2050 relative to 2020.

Appendix

Pricing – Boric Acid Forecast



Large, High-Grade Boron Resource with Lithium Co-Product

Resource Statement*

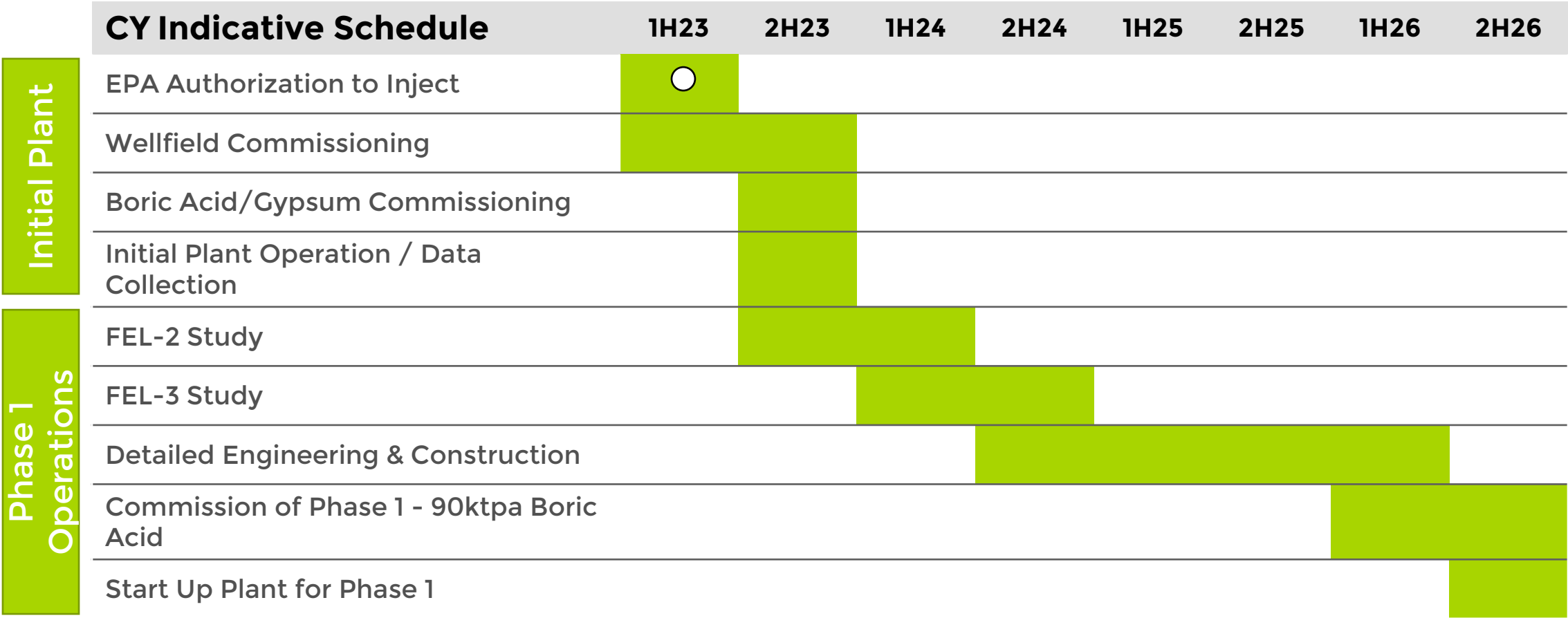
Measured Resource	Tonnage (MST)	B ₂ O ₃ (wt%)	H ₃ BO ₃ (wt%)	Lithium (ppm)	B ₂ O ₃ (MST)	H ₃ BO ₃ (MST)	LCE (MST)
Total Measured Resource	30.95	4.81	8.55	357	1.49	2.65	0.059
Total Indicated Resource	43.35	4.09	7.27	355	1.77	3.15	0.082
Total Measured & Indicated Resource	74.31	4.15	7.37	356	3.26	5.80	0.141
Total Inferred Resource	96.90	4.75	8.43	321	4.60	8.17	0.166

*Using a 2% B₂O₃ cut-off grade and no Lithium cut-off grade.

Contained Tons

	H ₃ BO ₃ (MST)	LCE (MST)
Measured	2,646,840	58,901
Indicated	3,151,461	81,854
Inferred	8,172,461	165,752
Total	13,970,761	306,508

Upcoming Project Milestones – Schedule



Corporate Overview

As of June 22, 2023

Ticker
Share Price
Common Shares / CDIs ¹
Dilutive Securities ²
Enterprise Value ³
Cash Balance

	Nasdaq	ASX
Ticker	FEAM	5EA
Share Price	\$4.17	A\$0.61
Common Shares / CDIs ¹	44.1M	441.5M
Dilutive Securities ²	44.2M	44.2M
Enterprise Value ³	\$175M	A\$274M
Cash Balance	\$26M	



Analyst Coverage

Resource Size⁴
327M Tons

Insider Ownership⁵
15.4%

Estimated Resource Grades⁴
8.22% Boric Acid
323 ppm Lithium Carbonate

Top 50 Ownership⁶
58.4%

¹ Common shares and CDIs are fully fungible and convert at the rate of 1 common share for 10 CDIs. Basic share count figures as of February 9, 2023.

² Includes Options , RSUs, DSUs and PSUs as of December 31, 2022.

³ Enterprise value calculated using the treasury stock method and is equal to market capitalization (using in-the-money dilutive securities) plus net debt. Net debt equal to BlueScape’s \$60 million convertible note (treated as debt given it is out of the money) less \$56.8 million in cash & equivalents.

⁴ Regulation S-K 1300 Initial Assessment Report dated October 18, 2021 (using 2% cut-off grade) prepared by Millcreek Mining Group. Figures presented reflect total estimated measured, indicated and inferred resources combined.

⁵ Insider ownership includes all basic and dilutive securities held by insiders and is calculated using the fully diluted method assuming the conversion of BlueScape’s \$60 million convertible note.

⁶ Calculated using fully diluted share count assuming the conversion of BlueScape’s \$60 million convertible note. Source: S&P Market Intelligence.

Leadership Team With Diverse Skillsets and Proven Execution Capabilities

Leadership Team



Susan Brennan
Chief Executive Officer



Paul Weibel
Chief Financial Officer



J.T. Starzecki
Chief Marketing Officer



Christopher Knight
Vice President, Operations



5E Board of Directors



David Salisbury
Non-Executive Chair



Jimmy Lim
Non-Executive Director



Stephen Hunt
Non-Executive Director



H. Keith Jennings
Non-Executive Director



Graham van't Hoff
Non-Executive Director

