ADVANCED MATERIALS

July 2026

De-risked, Permitted Sovereign Boron Supply

5E Advanced Materials

(NASDAQ: FEAM)

Disclaimer

FORWARD-LOOKING STATEMENTS

The information in this Presentation includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. All statements other than statements of historical fact included in this presentation regarding our business strategy, plans, goal, and objectives are forward-looking statements. When used in this presentation, the words "believe," "project," "expect," "anticipate," "estimate," "intend," "budget," "target," "aim," "strategy," "plan," "guidance," "outlook," "intent," "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 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: the substantial doubt about our ability to continue as a going concern and need to raise substantial additional capital following the proposed offering; our limited operating history in the borates and lithium industries and no revenue from our proposed extraction operations at our properties; our need for substantial additional financing to continue as a going concern and to execute our business plan and our ability to access capital and the financial markets; our status as an development stage company dependent on a single project and the inherent uncertainty in estimates ofmineral resources and reserves; our lack of history in mineral production and the significant risks associated with achieving our business strategies, including our downstream processing ambitions; our incurrence of significant net operating losses to date and plans to incur continued losses for the foreseeable future; risks and uncertainties relating to the development of the Fort Cady project, including our ability to successfully operate our Small Scale Boron Facility; our ability to obtain, maintain and renew required governmental permits for our development activities, including satisfying all mandated conditions to any such permits; the implementation of and expected benefits from certain reduced spending measures, and other risks and uncertainties set forth in our filings with the U.S. Securities and Exchange Commission (SEC) from time to time. 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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This Presentation includes forward-looking non-GAAP financial measures. These measures may not be comparable to similar measures presented by other companies and should not be viewed as a substitute for measures reported under U.S. GAAP. These measures are commonly used in the mining industry to provide stockholders and potential investors with additional information regarding the Company's future performance in its mining operations at projected full-run rates. This presentation contains references to future annualized EBITDA, which is a forward-looking non-GAAP financial measures that are detailed in the Company's Regulation S-K 1300 compliant Preliminary Feasibility Study (the "PFS"). EBITDA is defined as net income before interest expenses, income tax expense, and depreciation. The Company has not provided a reconciliation of future annualized EBITDA to the Company's future net income, the most comparable financial measure calculated in accordance with GAAP, as such GAAP measure is not available on a forward-looking basis without unreasonable effort. Specifically, the Company could not calculate interest, income taxes, depreciation or the effect of certain corporate level transactions or activities, on a forward-looking basis with any reasonable degree of accuracy, but such items could be significant and have a material impact on the Company's net income. For more information regarding these forward-looking non-GAAP financial measures, you should read the Company's PFS included as Exhibit 96.1 to the Company's Current Report on Form 8-K filed with the SEC on August 7, 2025.

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.

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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 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 factors, you should carefully review the risk factors and other disclosures in the Company's filings with the SEC. Additionally, 5E undertakes no obligation to comment on third-party analyses or statements regarding 5E's actual or expected financial or operating results or its securities.

Positioning

5E is the only U.S. pure-play boron platform that is fully permitted, de-risked, and advancing toward commercial execution

1. Inflection point driven by U.S. critical mineral designation

Boron elevated alongside lithium, graphite, and rare earths, creating structural demand for secure domestic supply

2. Only pure-play U.S. boron exposure

Controls the largest permitted U.S. colemanite deposit
- a scalable, strategic proxy for boron

3. Fully permitted, infrastructure-ready asset

DHS-designated critical infrastructure with power, gas, rail, and interstate access (high barriers to entry)

4. De-risked through operational validation

Pilot facility delivered on-spec product, validated process, and qualified customers

5. Strong commercial and financing momentum

Customer engagement progressing to offtake and first offtake signed; access to U.S. federal funding pathways (EXIM, DOE, DFC)

6. Advancing toward FID with aligned workstreams

Engineering, financing, and commercial efforts converging toward construction readiness

Transitioning from development to construction readiness

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Capital Structure Overview

5E has transitioned from a development-stage company to a de-risked, policy-aligned platform advancing toward commercial execution.

Capital Structure Snapshot

Strong Strategic Ownership with Alignment to Long-Term Growth

41.5M Shares Outstanding

$76.7M Market Cap [1]

[1] As of May 2026

Aligned, Long-Term Shareholder Base

50% Held by strategic investors (Ascend & Bluescape)

Institutional participation supporting broader market engagement

Transitioning to Project Financing Model

Shift from equity-funded development → non-dilutive, project-level financing

- EXIM, DOE, and U.S. federal programs advancing
- Targeting structured capital stack aligned with project cash flows
- Focus on minimizing shareholder dilution

Clean Near-Term Dilution Profile

- Limited near-term dilution at current share levels
- Warrants priced well above market
  - 464 thousand priced at $18.36 (expiring 2027 & 2030)

Tightly held structure with strategic backing positions 5E to benefit from re-rating as key milestones are achieved

Company Evolution — From Development to Execution

2016 - 2020

- Resource Definition & Permitting
- Acquisition and consolidation of Fort Cady asset
- Permitting and regulatory approvals secured
- Establishing foundation for in-situ recovery (ISR) boron production

2021 - 2023

- Technology & Process Development
- Pilot facility construction and commissioning
- Development of proprietary ISL mining approach
- Initial customer engagement and product validation

2024 - 2025

- Validation & Market Alignment
- Successful pilot operations and on-spec product delivery
- Customer qualification across key end-markets
- Pre-Feasibility Study completed

2026

- Transition to Commercialization
- Boron designated as a U.S. critical mineral
- Expanded access to federal funding and financing
- Advancing FEED, offtake agreements, and financing toward FID

A structured progression from resource development → technical validation → commercial readiness.
Positioned today at an inflection point with technical, commercial, and policy alignment in place.

Clear Pathway to Re-rating

Multiple near-term catalysts position 5E for a potential re-rating as the company transitions to commercial development

Today: Development-Stage Valuation

- Early-stage perception despite technical validation
- Limited visibility on financing structure
- Customer engagement not yet reflected in valuation
- Under-recognized strategic positioning (U.S. critical mineral)

Near-Term: Execution-Driven Re-Rating

- Advancing non-dilutive project financing (EXIM, DOE, OSC)
- Progression to binding customer offtake agreements
- Completion of FEED and construction readiness
- Increased recognition as a strategic U.S. supply chain asset

Near-Term Catalysts

- Financing clarity and commitment
- Customer offtake agreements
- FEED completion and FID progression
- Expanded federal support and visibility

As key milestones are achieved, valuation is expected to increasingly reflect project fundamentals, strategic positioning, and long-term cash flow potential.

Market Demand

Boron is critical, scarce, and structurally undersupplied

Critical Across High-Growth End Markets

- Essential in **EVs, permanent magnets, semiconductors, and solar glass**
- Required for **advanced alloys, defense applications, and fertilizers**
- Limited substitutability across core applications

Structural Supply Constraints

- 85% of global supply controlled by **two producers (Eti Maden & Rio Tinto)**
- 70% of global reserves concentrated in **Turkey**
- U.S. reliant on **a single domestic producer**

Demand Growth Outpacing Supply

- Boric acid demand growing at **~5.5% CAGR**
- 697K tonnes of new demand expected by 2033
- Limited new projects / supply gap emerging from mid-decade

Strategic Implication

- U.S. policy shift toward **domestic critical mineral supply chains**
- Diversification required to reduce **geopolitical and defense risk**

A newly designated critical mineral entering a structural deficit creates asymmetric upside for supply entrants

Pilot Validation to Commercial Scale

1. Process Optimized:

- Wellfield and process optimization
- Developed power solutions
- Simplified Process
- Value-added byproducts

2. Strategic Execution

- Production quality achieved
- Deliver product to key customers
- Test higher production rate wellfield completions

3. Engineering Advanced:

- Completed Pre-feasibility report
- +/-25% CAPEX and OPEX estimates[1]
- Foundation for debt financing
- Advancing proprietary ISL mining and processing IP

4. Operational Success

- Completed customer qualification
- Negotiating offtake agreements
- Positioned for bankable financing backed by strong customer demand

Process Validated; Transition To Commercial Scale Underway

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Pathway to Commercial Growth

[1] Commercial Phase 1, Commercial Phase 2, Capital Needs, and EBITDA are forward-looking non-GAAP financial measures. For more information, see "Non-GAAP Financial Measures" above.

[2] Capital and EBITDA are referenced from Regulation S-K 1300 Pre-feasibility Study Technical Report Summary with a report date of August 6, 2025 (using 2% cut-off grade) prepared by Qualified Persons. Figures presented reflect total estimated proven and probable reserves.

	DEVELOPMENT PHASE	*CAPACITY*	*CAPITAL NEEDS*	*RESULT(S)*
1	**Pilot Operations** *Current*	**2k ST BA** *Operating one short ton per day*	**Currently in Operation**	• Optimized design • **Customer off-take** • Position to scale
2	**Commercial Phase 1** *2028 - 2029*	**136.5k ST BA** *165.4k tons of calcium-based product*	**US $435M** *Across years 2027-28* *Target $285M EXIM*	• **$100M** run-rate EBITDA; • **19.2% unlevered IRR; $725m project NPV** • Plan to progress to Phase 2
3	**Commercial Phase 2** *2030-2032*	*Designed to unlock 5E's large-scale resource base, demonstrating scalability beyond Phase 1*		• **Improved economics from initial Phase 2 forecast** • Optionality to scale • Borate derivative potential

Values in USD-M

Mineral
Raw Material
$

2nd Derivative
Boric Acid
$$

3rd Derivative
Boron Oxide
$$$

4th+ Derivatives
Carbides/Nitrides
$$$$

Applications
Across the boron value chain – from resource to advanced derivatives.

The Team to Deliver

Leadership Team

Paul Weibel
CHIEF EXECUTIVE OFFICER
BSc, CPA

Lonnie Bailey
VP of OPERATIONS
BS ChE, MBA

Joshua Malm
CHIEF FINANCIAL OFFICER
BSc, MSc, CPA

Mark Zamek
VP COMMERCIAL PRODUCTS
BSc, ChE

Rod MacLaine
VP ENGINEERING & CONSTRUCTIUON
BSc Eng

pwc | Albemarle® | Chord Energy | RioTinto | FORTESCUE FUTURE INDUSTRIES

GENLiTH | Pilgrim's | pwc | ETiMADEN ETiMINE USA INC. | Jacobs

Board of Directors

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NON-EXECUTIVE CHAIR
BA, M Chem, MBA
Shell

Bryn Jones
NON-EXECUTIVE DIRECTOR
M Min Eng
BOSS ENERGY

Barry Dick
NON-EXECUTIVE DIRECTOR
BS, MBA
Merrill Lynch

Curtis Hébert
NON-EXECUTIVE DIRECTOR
JD, BS
BRUNINI ATTORNEYS AT LAW

Jonathan Siegler
MANAGING DIRECTOR & CHIEF FINANCIAL OFFICER
bluescape

Near-Term Catalysts & Value-Drivers

Financing & Capital

- EXIM loan diligence and commitment progressing
- Access to U.S. critical mineral funding programs
- Non-dilutive capital pathways aligned with federal priorities

Commercial Execution

- Progression to binding offtake agreements
- Strategic customers seeking secure domestic supply
- Potential customer prepayment structures

Engineering & Development

- Completion of FEED (FEL-3) engineering
- EPC contract and construction readiness
- CAPEX and operating model optimization

Final Investment Decision (FID)

- Transition from development to construction phase
- Key inflection point unlocking project value

Strategic Positioning

- Increasing recognition as a U.S. critical mineral supplier
- Alignment with defense, energy, and advanced manufacturing
- Growing investor visibility

Multiple near-term catalysts provide a clear pathway to value realization.

Near-Term Catalyst and Milestone Roadmap

Achieved

- **Wellfield**
  Mine plan confirmed from horizontal wells
- **High Head Grade**
  Confirmed high temperature drives a higher head grade

- **USGS**
  Success fully listed boron as a USGS Critical Mineral
- **Final LCD Trial**
  Ship 18 super bags for 5-week tank testing trial to make high-strength glass

- **EXIM Engineering Multiplier Program**
  Applied for $10mln credit facility for FEED
- **Resource Upgrade and Lithium PEA**
  Borate resource increased 61% and LCE up 54%

Upcoming Catalysts

- **EXIM EMP**
  Funding commitment for EXIM EMP
- **Intellectual Property**
  Prelim patents filed to own U.S. ISL for borates
- **Ferroboron** Critical component in magnets

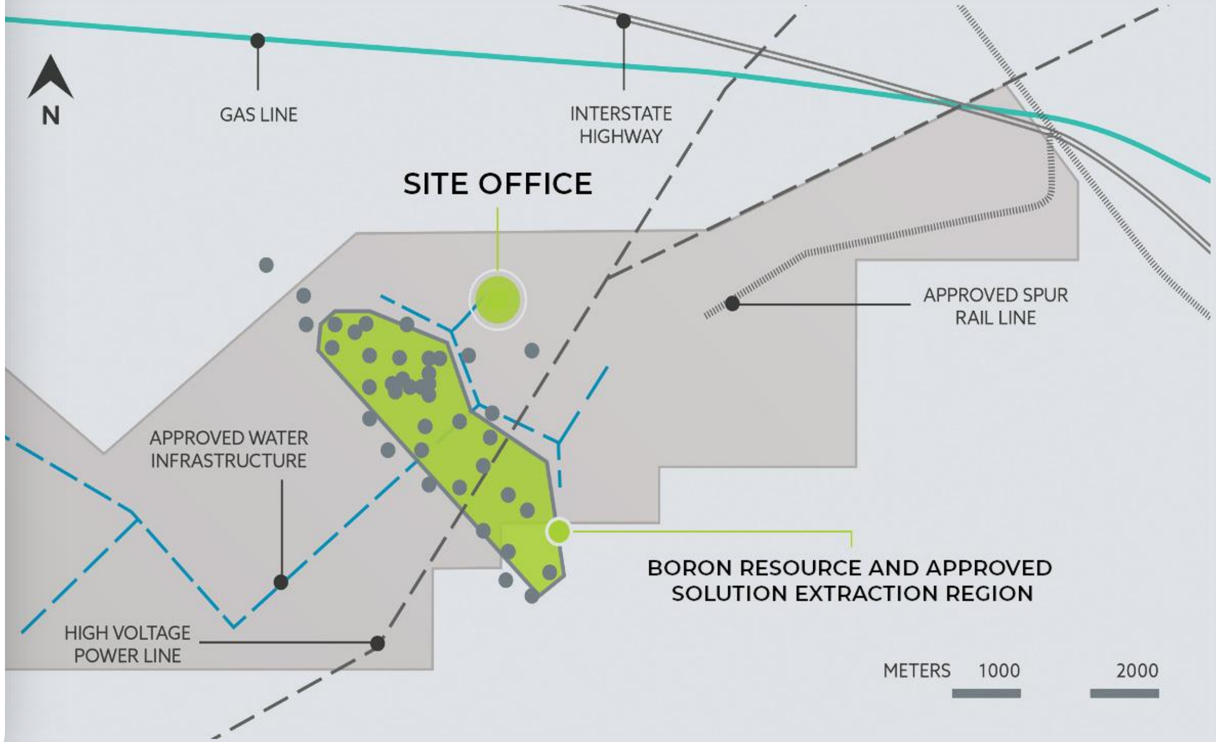
- **EXIM Make More In America Initiative**
  Apply for Project Finance $285m loan
- **Feasibility Study**
  Final feasibility study released paving way to FID
- **Stock Rerate**
  5E is the only pure play boron stock listed in the U.S.

- **Offtake Agreements**
  Bankable contracts with strategic customers achieved
- **Mines of the Future**
  Potential award for non-dilutive grant application
- **Advanced Material Tolling**
  Near term push to identify cash flow opportunities for new products

- **Diversified Product Portfolio**
  Commercial portfolio now includes advanced materials
- **National Lab Partnership**
  Potential collaboration with one of the National Labs

Why 5E Wins

- Boron formally recognized as **critical mineral**
- U.S. lacks **diversified domestic supply**
- **Largest** known and permitted **U.S. boron resource** aligned with federal policy
- Technical risk removed through **pilot validation**
- Clear pathway to **financing, offtake and FID**
- Strong alignment with **defense, energy and industrial policy**
- Advancing toward **construction readiness**



Thank you.

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