

## **5E EXECUTES RESEARCH AGREEMENT THAT AIMS TO ENHANCE THE PERFORMANCE OF PERMANENT MAGNETS THROUGH INCREASED BORON USAGE**

### **HIGHLIGHTS**

- 5E to collaborate with world renowned U.S. institution, Georgetown University
- Research aims to enhance the performance of permanent magnets through increased boron usage
- Research has the potential to create novel intellectual property and commercialization pathways for 5E as it pertains to the manufacturing of boron enhanced permanent magnets

5E Advanced Materials, Inc. (Nasdaq:FEAM) (ASX:5EA) (“5E” or the “Company”) has entered into a research collaboration agreement with Georgetown University (“Georgetown”) for the advancement of boron based materials research in permanent magnets. Under the terms of the agreement, 5E will provide funds to and collaborate with Georgetown in exploring boron-based novel magnetic materials. This research has the potential to create intellectual property and commercialization pathways for 5E as it pertains to the manufacturing of boron enhanced permanent magnets.

Permanent magnets are a critical component of many high growth future facing and traditional applications, such as electric vehicles, wind turbines, robots, drones, televisions, computers, and phones. Rare earth elements are essential ingredients in today’s Neodymium-based permanent magnets, which are challenging and environmentally disruptive to mine. This research effort will focus on exploring boron-based permanent magnet materials using earth-abundant elements. This combination has the potential to enhance the performance of such permanent magnets in the form of higher energy density and/or improved mechanical properties.

This research agreement aligns with 5E’s strategy to become a global leader in boron specialty and advanced materials by collaborating with innovative leaders such as Georgetown University.

#### **Commenting on the research agreement, Georgetown University Professor and McDevitt Chair in Physics, Dr. Kai Liu, said:**

*“Boron is a fascinating material. Our research may allow us to achieve new types of strong and sustainable magnets with higher composition of boron. Such novel boron enhanced magnets may exhibit superior properties for practical applications across many industry sectors.*

*We look forward to collaborating with 5E as they are committed and well positioned to become a thought leader of boron specialty and advanced materials given their expertise and U.S. based boron resource.”*

#### **Commenting on the research agreement, 5E CCO and CTO, Dr. Dinakar (Dino) Gnanamgari, said:**

*“Georgetown University is a world-renowned university and research center located in the U.S. capital, Washington, DC. Georgetown’s Office of Technology Commercialization is committed to introducing innovation into the marketplace by leveraging its state-of-the art facilities, decorated staff, and other resources in partnership with leading institutions.*

*We believe Georgetown is an excellent collaborator to further advance boron specialty and advanced materials as we pursue a leading global position.”*

#### **About 5E Advanced Materials, Inc.**

5E Advanced Materials, Inc. (Nasdaq:FEAM) (ASX:5EA) is positioned to become a vertically integrated global leader in BORON<sup>+</sup> advanced materials with a focus on enabling decarbonization. BORON<sup>+</sup> products target critical, high value applications within electric transportation, clean energy, food and domestic security. 5E’s advanced materials business is underpinned by its low cost, light environmental touch boron resource in Southern California, which is designated Critical Infrastructure by the U.S. government and serves as the largest known new conventional boron deposit globally. 5E’s resource quality, domestic supply source, and downstream processing capabilities provide a competitive advantage given customer product specifications, scarcity of resource, and reliance on unstable, international supply. There is an increasing call for a new stable source of BORON<sup>+</sup> as U.S. and rest of world demand accelerates and 5E is strategically positioned to answer this call. We are in the Right Place, at the Right Time, with the Right Asset.



### Forward Looking Statements

This press release contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

**Authorized for release by:** Henri Tausch, Chief Executive Officer

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