

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2021

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HOUSE BILL 1156

Short Title: Critical Technologies Research Fund. (Public)

Sponsors: Representatives Roberson, Saine, Szoka, and K. Hall (Primary Sponsors).  
*For a complete list of sponsors, refer to the North Carolina General Assembly web site.*

Referred to: Appropriations, if favorable, Rules, Calendar, and Operations of the House

May 31, 2022

A BILL TO BE ENTITLED  
AN ACT TO ESTABLISH THE CRITICAL TECHNOLOGIES RESEARCH FUND.  
The General Assembly of North Carolina enacts:

**SECTION 1.** Article 10 of Chapter 143B of the General Statutes is amended by adding a new Part to read:

"Part 2L. Critical Technologies Research Fund.

**"§ 143B-437.110. Critical Technologies Research Fund.**

(a) Fund. – There is established the Critical Technologies Research Fund to be administered by the North Carolina Board of Science, Technology, and Innovation. In order to support research into critical technologies that may enhance the economic competitiveness of this State and promote the national security and energy independence from foreign energy sources, the Board may provide competitive grants to eligible entities to support critical technologies research and matching funds for federal grants.

(b) Use of Funds; Eligibility. – Funds shall be used to provide competitive grants to eligible entities to support critical technologies research and matching funds for federal grants. The Board shall prioritize grants for applicants in accordance with subsections (d) and (e) of this section. At least fifty percent (50%) of the grants shall be used for matching requirements for eligible entities receiving federal grants. Each grant from the Fund shall have a maximum of two hundred thousand dollars (\$200,000). In administering the Fund, the Board shall consider time-sensitive needs for grant applicants and ensure the grant application process is accelerated to ensure eligible entities are competitive for federal grant applications and research competition. The Board may allocate up to ten percent (10%) of the balance of the Fund each fiscal year for eligible entities located in this State for any other purpose the Board determines to be in alignment with the purpose of the Fund. The Board may use up to five percent (5%) of the funds for administrative costs in operating the Fund.

(c) Definitions. – The following definitions apply in this Part:

(1) Board. – North Carolina Board of Science, Technology, and Innovation.

(2) Business. – A corporation, sole proprietorship, cooperative association, partnership, S corporation, limited liability company, nonprofit corporation, or other form of business organization located in this State.

(3) Critical technology. – Any of the following technologies meeting the criteria of NASA TRL 3 through 6:

a. A clean energy or clean transportation technology, including the manufacturing of semiconductors.

b. Cybersecurity technology.



- 1                   c.     Technology essential to supporting, maintaining, or constructing the  
2                   domestic electrical grid, or for proper handling or management of  
3                   recycling or reusing decommissioned renewable energy equipment.  
4                   d.     Drinking water infrastructure.  
5                   e.     Any materials or components directly used in the technologies listed  
6                   in this subdivision.  
7                   f.     Integrated clean energy systems that combine one or more elements of  
8                   recycling process and programs, including microgrids.  
9                   g.     The implementation needs and market barriers for critical  
10                  technologies.  
11               (4)   Eligible entity. – A business, for-profit corporation, nonprofit corporation,  
12                  postsecondary constituent institution of The University of North Carolina, as  
13                  defined in G.S. 116-2(4), community college, as defined in G.S. 115D-2(2),  
14                  or eligible private postsecondary institution, as defined in G.S. 116-280(3),  
15                  located in this State.  
16               (5)   Fund. – Critical Technologies Research Fund.  
17               (6)   NASA. – National Aeronautics and Space Administration.  
18               (7)   TRL. – Technology Readiness Level.  
19               (d)   First Tier Prioritization. – The Board must prioritize the following areas of research  
20               for grants prior to considering priority factors listed in subsection (e) of this section.  
21                   (1)   Recycling of electric vehicle batteries.  
22                   (2)   Recycling of batteries for residential or utility-scale energy storage.  
23               (e)   Second Tier Prioritization. – Except as provided in subsection (d) of this section, the  
24               factors for second tier prioritization in this subsection apply to applications for grants from the  
25               Fund. The Board must prioritize the following factors when evaluating applications:  
26                   (1)   The grant applicant would use the funds as required matching funds for federal  
27                   grants.  
28                   (2)   The critical technology would aim to reduce domestic dependence on foreign  
29                   energy.  
30               (f)   Exemption. – If a grant application is for an area of research listed in sub-subdivisions  
31               (c)(3)f. and g. of this section, then the grant application is exempt from any TRL requirement in  
32               this section. No more than twenty percent (20%) of the Fund shall be used for the purpose listed  
33               in sub-subdivision (c)(3)g. of this section.  
34               (g)   Grant Conditions. – Grants are made pursuant to an agreement with an eligible entity  
35               that includes, at a minimum, all of the following:  
36                   (1)   A provision requiring an eligible entity to certify in writing that it will use the  
37                   grant provided from the Fund for the agreed purpose reflected in the grant  
38                   application.  
39                   (2)   A provision establishing the method for determining compliance with the  
40                   grant conditions.  
41                   (3)   A provision requiring recapture of the grant funds if the eligible entity fails to  
42                   comply with the requirements of the grant.  
43               (h)   Failure to Comply with Grant Requirements. – If an eligible entity receiving a grant  
44               fails to meet or comply with any condition or requirement set forth in an agreement or with  
45               criteria developed by the Board, the Board may reduce the amount of the grant or may terminate  
46               the agreement, or both. The reduction in the amount of the grant must, at a minimum, be  
47               proportional to the failure to comply measured relative to the condition or criterion with respect  
48               to which the failure occurred. The Board shall notify an affected entity of the reduction to its  
49               grant payment.  
50               (i)   Report. – No later than March 1 of each year in which grants are disbursed or there is  
51               a cash balance remaining in the Fund, the Board shall submit a report to the Joint Legislative

Economic Development and Global Engagement Oversight Committee and the Fiscal Research Division. Each report shall contain, at a minimum, all of the following:

(1) The number of grants awarded.

(2) The average grant amount.

(3) The total amount granted to date.

(4) The entities that have received a grant and a summary and description of each grant.

(5) The total amount of grants that have been recaptured."

**SECTION 2.** There is appropriated from the General Fund to the Department of Commerce the sum of four million dollars (\$4,000,000) in nonrecurring funds for the 2022-2023 fiscal year for the Critical Technologies Research Fund.

**SECTION 3.** This act becomes effective July 1, 2022.