Union Calendar No.

117TH CONGRESS  
1ST SESSION  
H. R. 4588  
[Report No. 117–]  

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish a regional technology and innovation hub program, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES  
JULY 20, 2021  
Ms. WILD (for herself, Mr. BAIRD, Mr. BOWMAN, Mr. GONZALEZ of Ohio, and Mr. KHANNA) introduced the following bill; which was referred to the Committee on Science, Space, and Technology  
AUGUST --, 2021  
Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed  
[Strike out all after the enacting clause and insert the part printed in italic]  
[For text of introduced bill, see copy of bill as introduced on July 20, 2021]
A BILL

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish a regional technology and innovation hub program, and for other purposes.
Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Regional Innovation Act of 2021”.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Regional Innovation Capacity.
Sec. 3. Regional Clean Energy Innovation Program.
Sec. 4. Critical technology and innovation analytics program.

SEC. 2. REGIONAL INNOVATION CAPACITY.

(a) IN GENERAL.—The Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96–480; 15 U.S.C. 3701 et seq.) is amended—

(1) by redesignating section 28 as section 29;

and

(2) by inserting after section 27 the following:

“SEC. 28. REGIONAL TECHNOLOGY AND INNOVATION HUB PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term ‘appropriate committees of Congress’ means—

“(A) the Committee on Commerce, Science, and Transportation, the Committee on Environ-
ment and Public Works, and the Committee on Appropriations of the Senate; and

“(B) the Committee on Science, Space, and Technology and the Committee on Appropriations of the House of Representatives.

“(2) COOPERATIVE EXTENSION SERVICES.—The term ‘cooperative extension services’ has the meaning given the term in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103).

“(3) HISTORICALLY BLACK COLLEGES AND UNIVERSITIES.—The term ‘historically Black colleges and universities’ has the meaning given the term ‘part B institution’ in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061);

“(4) LABOR ORGANIZATION.—The term ‘labor organization’ has the meaning given the term in section 2(5) of the National Labor Relations Act (29 U.S.C. 152(5)), except that such term shall also include—

“(A) any organization composed of labor organizations, such as a labor union federation or a State or municipal labor body; and

“(B) any organization which would be included in the definition for such term under such section (5) but for the fact that the organization represents—
“(i) individuals employed by the United States, any wholly owned Government corporation, any Federal Reserve Bank, or any State or political subdivision thereof;

“(ii) individuals employed by persons subject to the Railway Labor Act (45 U.S.C. 151 et seq.); or

“(iii) individuals employed as agricultural laborers.

“(5) MANUFACTURING EXTENSION CENTER.—The term ‘manufacturing extension center’ has the meaning given the term ‘Center’ in section 25(a) of the National Institute of Standards and Technology Act (15 U.S.C. 278k(a)).

“(6) MANUFACTURING USA INSTITUTE.—The term ‘Manufacturing USA institute’ means a Manufacturing USA institute described in section 34(d) of the National Institute of Standards and Technology Act (15 U.S.C. 278s(d)).

“(7) MINORITY-SERVING INSTITUTION.—The term ‘minority-serving institution’ means a Hispanic-serving institution, an Alaska Native-serving institution, a Native Hawaiian-serving institutions, a Predominantly Black Institution, an Asian American
and Native American Pacific Islander-serving institution, or a Native American-serving nontribal institution as described in section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)).

“(8) SITE CONNECTIVITY INFRASTRUCTURE.—The term ‘site connectivity infrastructure’ means localized driveways and access roads to a facility as well as hookups to the new facility for drinking water, waste water, broadband, and other basic infrastructure services already present in the area.

“(9) STATE.—The term ‘state’ has the meaning given such term in section 27(a) of the Stevenson-Wydler Act of 1980 (15 U.S.C. 3722(a)).

“(10) TRIBAL COLLEGE OR UNIVERSITY.—The term ‘Tribal College or University’ has the meaning given such term in section 316 of the Higher Education Act of 1965 (20 U.S.C. 1059c).

“(11) VENTURE DEVELOPMENT ORGANIZATION.—The term ‘venture development organization’ has the meaning given such term in section 27(a) of the Stevenson-Wydler Act of 1980 (15 U.S.C. 3722(a)).

“(12) COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION.—The term ‘community development financial institution’ has the meaning given in section

“(13) MINORITY DEPOSITORY INSTITUTION.—The term ‘minority depository institution’ means an entity that is—

“(A) a minority depository institution, as defined in section 308 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (12 U.S.C. 1463 note); or

“(B) considered to be a minority depository institution by—

“(i) the appropriate Federal banking agency; or

“(ii) the National Credit Union Administration, in the case of an insured credit union.

“(b) REGIONAL TECHNOLOGY AND INNOVATION HUB PROGRAM.—

“(1) IN GENERAL.—Subject to the availability of appropriations, the Secretary shall carry out a program—

“(A) to encourage new and constructive collaboration among local, State, and Federal government entities, institutions of higher education, the private sector, economic development
organizations, labor organizations, worker cooperative membership associations, State or local employee ownership and cooperative development centers, nonprofit organizations, and community organizations to promote inclusive regional innovation initiatives;

“(B) to support eligible consortia in the development and implementation of regional innovation strategies;

“(C) to designate eligible consortia as regional technology and innovation hubs and facilitate activities by consortia designated as regional technology and innovation hubs in implementing their regional innovation strategies—

“(i) to enable United States leadership in technology and innovation sectors critical to national and economic security;

“(ii) to support regional economic development and resilience, including in small cities and rural areas, and promote increased geographic diversity of innovation across the United States;

“(iii) to promote the benefits of technology development and innovation for all
Americans, including underserved communities and vulnerable communities;

“(iv) to support domestic job creation and broad-based economic growth; and

“(v) to improve the pace of market readiness, industry maturation, and overall commercialization of innovative research;

“(D) to ensure that the regional technology and innovation hubs address the intersection of emerging technologies and either regional challenges or national challenges; and

“(E) to conduct ongoing research, evaluation, analysis, and dissemination of best practices for regional development and competitiveness in technology and innovation.

“(2) AWARDS.—The Secretary shall carry out the program required by paragraph (1) through the award of the following:

“(A) Strategy development grants or cooperative agreements to eligible consortia under subsection (e).

“(B) Strategy implementation grants or cooperative agreements to regional technology and innovation hubs under subsection (f).
“(c) ELIGIBLE CONSORTIA.—For purposes of this section, an eligible consortium is a consortium that—

“(1) includes 1 or more of each of the following—

“(A) institutions of higher education, which may include Historically Black Colleges and Universities, Tribal Colleges and Universities, and minority-serving institutions;

“(B) State, local, or Tribal governments or other political subdivisions of a State, including State and local agencies, or a consortia thereof;

“(C) industry or firms in relevant technology or innovation sectors;

“(D) labor organizations or workforce training organizations, which may include State and local workforce development boards as established under section 101 and 107 of the Workforce Investment and Opportunity Act (29 U.S.C. 3111; 3122); and

“(E) organizations that contribute to increasing the participation of underserved populations in science, technology, innovation, and entrepreneurship; and

“(2) may include 1 or more—
“(A) economic development entities with relevant expertise, including a district organization (as defined in section 300.3 of title 13, Code of Federal Regulations, or successor regulation);

“(B) economic development organizations or similar entities that are focused primarily on improving science, technology, innovation, entrepreneurship, or access to capital;

“(C) venture development organizations;

“(D) worker cooperative membership associations and state or local employee ownership and cooperative development centers;

“(E) financial institutions and investment funds, including community development financial institutions and minority depository institutions;

“(F) elementary schools and secondary schools, including area career and technical education schools (as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (29 U.S.C. 2302);


“(H) Federal laboratories;
“(I) Manufacturing extension centers;
“(J) Manufacturing USA institutes;
“(K) transportation planning organizations;
“(L) a cooperative extension services; and
“(M) organizations that represent the perspectives of underserved communities in economic development initiatives.

“(d) DESIGNATION OF REGIONAL TECHNOLOGY AND INNOVATION HUBS.—

“(1) IN GENERAL.—In carrying out subsection (b)(1)(C), the Secretary shall use a competitive, merit-review process to designate not fewer than 10 eligible consortia as regional technology and innovation hubs.

“(2) GEOGRAPHIC DISTRIBUTION.—In conducting the competitive process under paragraph (1), the Secretary shall ensure geographic distribution in the designation of regional technology and innovation hubs by—

“(A) focusing on localities that are not leading technology centers;
“(B) ensuring that not fewer than one third of eligible consortia designated as regional tech-
ology and innovation hubs significantly benefit a rural or other underserved community;

“(C) ensuring that at least one eligible consortium designated as a regional technology and innovation hub is headquartered in a State that is eligible to receive funding from the Established Program to Stimulate Competitive Research of the National Science Foundation; and

“(D) ensuring that at least one eligible consortium designated as a regional technology and innovation hub is headquartered in a region that has a high density of institutions of higher education serving populations historically underrepresented in STEM, including historically Black Colleges and Universities and minority-serving institutions.

“(3) RELATION TO CERTAIN GRANT AWARDS.— The Secretary shall not require an eligible consortium to receive a grant or cooperative agreement under subsection (e) in order to be designated as a regional technology and innovation hub under paragraph (1) of this subsection.

“(e) STRATEGY DEVELOPMENT GRANTS AND COOPERATIVE AGREEMENTS.—
“(1) IN GENERAL.—The Secretary shall use a competitive, merit-review process to award grants or cooperative agreements to eligible consortia for the development of regional innovation strategies.

“(2) NUMBER OF RECIPIENTS.—The Secretary shall award a grant or cooperative agreement under paragraph (1) to not fewer than 20 eligible consortia.

“(3) GEOGRAPHIC DIVERSITY AND REPRESENTATION.—

“(A) IN GENERAL.—The Secretary shall carry out paragraph (1) in a manner that ensures geographic diversity and representation from communities of differing populations.

“(B) AWARDS TO RURAL COMMUNITIES AND UNDERSERVED COMMUNITIES.—In carrying out paragraph (1), the Secretary shall award not fewer than one-half of the grants and cooperative agreements under such paragraph to eligible consortia that significantly benefit a rural state, rural community, or other underserved community.

“(4) USE OF FUNDS.—The amount of a grant or cooperative agreement awarded under paragraph (1) shall be as follows:
“(A) To coordinate locally defined planning processes, across jurisdictions and agencies, relating to developing a comprehensive regional technology strategy.

“(B) To identify regional partnerships for developing and implementing a comprehensive regional technology strategy.

“(C) To conduct or update assessments to determine regional needs and capabilities.

“(D) To develop or update goals and strategies to implement an existing comprehensive regional plan.

“(E) To identify or implement planning and local zoning and other code changes necessary to implement a comprehensive regional technology strategy.

“(F) To develop or update goals for ensuring that any new regional technology strategy mitigates and does not exacerbate economic or social inequities in a region.

“(5) FEDERAL SHARE.—The Federal share of the cost of an effort carried out using a grant or cooperative agreement awarded under this subsection may not exceed 80 percent—
“(A) where in-kind contributions may be used for all or part of the non-Federal share, but Federal funding from other government sources may not count towards the non-Federal share;

“(B) except in the case of an eligible consortium that represents all or part of a rural or other underserved community, the Federal share may be up to 90 percent of the total cost, subject to subparagraph (A); and

“(C) except in the case of an eligible consortium that is led by a Tribal government, the Federal share may be up to 100 percent of the total cost of the project.

“(f) STRATEGY IMPLEMENTATION GRANTS AND COOPERATIVE AGREEMENTS.—

“(1) IN GENERAL.—The Secretary shall use a competitive, merit-review process to award grants or cooperative agreements to regional technology and innovation hubs for the implementation of regional innovation strategies, including regional strategies for infrastructure and site development, in support of the regional innovation and technology and innovation hub’s plans and programs. The Secretary should determine the size and number of awards based on appropriations available to ensure the success of re-
gional technology and innovation hubs as outlined in subsection (h).

“(2) USE OF FUNDS.—Financial assistance awarded under paragraph (1) to a regional technology and innovation hub may be used by the regional technology and innovation hub to support any of the following activities, consistent with the most current regional innovation strategy of the regional technology and innovation hub:

“(A) WORKFORCE DEVELOPMENT ACTIVITIES.—Workforce development activities, including activities relating to the following:

“(i) The creation of partnerships between industry, workforce, nonprofit, and educational institutions to create and align technical training and educational programs.

“(ii) The design, development, and updating of educational and training curriculum tied to demonstrated regional workforce needs.

“(iii) The procurement of facilities and equipment, as required to train a technical workforce.
“(iv) The development and execution of programs to rapidly award certificates or credentials recognized by regional industries or other organizations.

“(v) The matching of regional employers with a potential new entrant, underemployed, underrepresented, or incumbent workforce.

“(vi) The expansion of successful training programs at a scale required by the region served by the regional technology and innovation hub, including through the use of online education.

“(vii) The development and expansion of programs with the goal of increasing the participation of persons historically underrepresented in STEM in the workforce development plans of the regional technology and innovation hub.

“(B) BUSINESS AND ENTREPRENEUR DEVELOPMENT ACTIVITIES.—Business and entrepreneur development activities, including activities relating to the following:
“(i) The development and growth of local regional businesses and the training of entrepreneurs.

“(ii) The support of technology commercialization, including funding for activities relevant for advancing high growth potential ventures such as acceleration, incubation and other relevant programming.

“(iii) The development of local and regional capital networks and consortia to attract necessary private funding to businesses and entrepreneurs in the region.

“(iv) The development of local and regional networks for business and entrepreneur mentorship.

“(v) The expansion of employee and worker ownership and participation in business decisionmaking, including through coordination and collaboration with worker cooperative membership associations and existing local and state employee ownership and cooperative development centers, or the creation of such centers where they do not yet exist, in order to provide information, technical assistance, access to financing,
and training to startups, contractors, and businesses that are considering employee ownership as a model, and to facilitate the creation of and conversion to employee-owned startups, businesses, and cooperatives.

“(C) TECHNOLOGY DEVELOPMENT AND MATURATION ACTIVITIES.—Technology maturation activities, including activities relating to the following:

“(i) The development and deployment of technologies in sectors critical to the region served by the regional technology and innovation hub or to national and economic security, including industry-university research cooperation, proof of concept, prototype development, and testing.

“(ii) The development of programming to support the creation and transfer of intellectual property into private use, such as through startup creation.

“(iii) The provision of facilities for technology maturation, including incubators for collaborative development of tech-
nologies by private sector, academic, non-profit, and other entities.

“(iv) Activities to provide or ensure access to capital for new business and cooperative formation and business expansion, or preservation of existing businesses through conversion to employee ownership and cooperatives, including by attracting new private, public, and philanthropic investment and by establishing local and regional venture and loan funds, community development financial institutions, and minority depository institutions.

“(D) INFRASTRUCTURE-RELATED ACTIVITIES.—The building of facilities and site connectivity infrastructure necessary to carry out activities described in subparagraphs (A), (B), and (C), including activities relating to the following:

“(i) Establishing a center with required tools and instrumentation for workforce development.

“(ii) Establishing a facility for technology development, demonstration, and testing.
“(iii) Establishing collaborative incubators to support technology commercialization and entrepreneur training.

“(3) TERM.—

“(A) INITIAL PERFORMANCE PERIOD.—The term of an initial grant or cooperative agreement awarded under this subsection shall be for a period that the Secretary deems appropriate for the proposed activities but not less than 2 years.

“(B) SUBSEQUENT PERFORMANCE PERIOD.—The Secretary may renew a grant or cooperative agreement awarded to a regional technology and innovation hub under paragraph (1) for such period as the Secretary considers appropriate, if the Secretary determines that the regional technology and innovation hub has made satisfactory progress towards the metrics agreed to under subsection (j).

“(C) FLEXIBLE APPROACH.—In renewing a grant or cooperative agreement under subparagraph (B), the Secretary and the eligible consortium may agree to new or additional uses of funds in order to meet changes in the needs of the region.
“(4) LIMITATION ON AMOUNT OF AWARDS.—

“(A) INITIAL PERFORMANCE PERIOD.—The amount of an initial grant or cooperative agreements awarded to a regional technology and innovation hub under paragraph (3)(A) shall be no more than $150,000,000.

“(B) SUBSEQUENT PERFORMANCE PERIOD.—Upon renewal of a grant or cooperative agreement under paragraph (3)(B), the Secretary may award funding in the amount that the Secretary considers appropriate, ensuring that no single regional technology and innovation hub receives more than 15 percent of the aggregate amount of the grants and cooperative agreements awarded under this subsection.

“(5) MATCHING REQUIRED.—

“(A) INITIAL PERFORMANCE PERIOD.—Except in the case of a regional technology and innovation hub described in subparagraph (C), the total amount of all grants awarded to a regional technology and innovation hub under this subsection in phase one shall not exceed 90 percent of the total operating costs of the regional technology and innovation hub during the initial performance period.
“(B) SUBSEQUENT PERFORMANCE PERIOD.—Except in the case of a regional technology and innovation hub described in subparagraph (C), the total amount of all grants awarded to a regional technology and innovation hub in subsequent performance periods shall not exceed 75 percent of the total operating costs of the regional technology and innovation hub in each year of the grant or cooperative agreement.

“(C) RURAL COMMUNITIES OR UNDERSERVED COMMUNITIES AND INDIAN TRIBES.—

“(i) IN GENERAL.—The total Federal financial assistance awarded in a given year to a regional technology and innovation hub under this subsection shall not exceed amounts as follows:

“(I) In the case of a regional technology and innovation hub that primarily serves a rural community or other underserved community, in a fiscal year, 90 percent of the total funding of the regional technology and innovation hub in that fiscal year.

“(II) In the case of a regional technology and innovation hub that is
led by a Tribal government, in a fiscal year, 100 percent of the total funding of the regional technology and innovation hub in that fiscal year.

“(ii) minimum threshold of rural representation.—For purposes of clause (i)(I), the Secretary shall establish a minimum threshold of rural representation and other underserved community representation in the regional technology and innovation hub.

“(D) in-kind contributions.—For purposes of this paragraph, in-kind contributions may be used for part of the non-Federal share of the total funding of a regional technology and innovation hub in a fiscal year.

“(6) grants for infrastructure.—Any grant or cooperative agreement awarded under this subsection to support the construction of facilities and site connectivity infrastructure shall be awarded pursuant to section 201 of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3141) and subject to the provisions of such Act, except that subsection (b) of such section and sections 204 and 301 of such Act (42 U.S.C. 3144; 3161) shall not apply.
“(7) Relation to Certain Grant Awards.—

The Secretary shall not require a regional technology and innovation hub to receive a grant or cooperative agreement under subsection (e) in order to receive a grant or cooperative agreement under this subsection.

“(g) Applications.—An eligible consortium seeking designation as a regional technology and innovation hub under subsection (d) or a grant or cooperative agreement under subsection (e) or (f) shall submit to the Secretary an application therefore at such time, in such manner, and containing such information as the Secretary may specify.

“(h) Considerations for Designation and Award of Strategy Implementation Grants and Cooperative Agreements.—In selecting an eligible consortium that submitted an application under subsection (g) for designation under subsection (d) or for a grant or cooperative agreement under subsection (f), the Secretary shall consider the following:

“(1) The potential of the eligible consortium to advance the research, development, deployment, and domestic manufacturing of technologies in a technology or innovation sector critical to national and economic security.

“(2) The likelihood of positive regional economic effect, including increasing the number of high wage
domestic jobs, creating new economic opportunities
for economically disadvantaged and underrepresented
populations, promoting employee and worker ownership,
and advancing models of local and cooperative
economic development that build and retain wealth in
the region.

“(3) How the eligible consortium plans to integrate with and leverage the resources of 1 or more federally funded research and development centers, National Laboratories, Federal laboratories, Manufacturing USA institutes, Hollings Manufacturing Extension Partnership centers, or other Federal entities.

“(4) How the eligible consortium will engage with the private sector, including small- and medium-sized businesses and cooperatives, and employee-owned businesses and cooperatives, to commercialize new technologies and improve the resiliency and sustainability of domestic supply chains in a technology or innovation sector critical to national and economic security.

“(5) How the eligible consortium will carry out workforce development and skills acquisition programming, including through partnerships with entities that include State and local workforce development boards, institutions of higher education, includ-
ing community colleges, historically Black colleges and universities, Tribal colleges and universities, and minority-serving institutions, labor organizations, worker cooperative membership associations, state or local employee ownership and cooperative development centers, workforce development programs, and other related activities authorized by the Secretary, to support the development of a skilled technical workforce for the regional technology and innovation hub.

“(6) How the eligible consortium will improve or expand science, technology, engineering, and mathematics education programs and opportunities in the identified region in elementary and secondary school and higher education institutions located in the identified region.

“(7) How the eligible consortium plans to develop partnerships with venture development organizations, community development financial institutions and minority depository institutions, and sources of private investment in support of private sector activity, including launching new or expanding existing companies.

“(8) How the eligible consortium plans to organize the activities of regional partners across sectors
in support of a regional technology and innovation hub.

“(9) How the eligible consortium plans to procure as many goods, services, food, and supplies as is practicable from locally-owned, employee-owned, minority-owned, and women-owned businesses and cooperatives in conducting hub activities, and how individual consortium members, as applicable, plan to do the same.

“(10) How the consortium plans to collaborate with local and community development financial institutions and minority depository institutions to expand the supply of such procurement options, including by creating business plans and plans for financing businesses and cooperatives that do not yet exist, and how the consortium plans to encourage entities created as a result of hub activities to follow such practices.

“(11) How the eligible consortium will ensure that growth in technology and innovation sector produces opportunity across the identified region, including for economically disadvantaged, minority, and rural populations, including consideration of how the eligible consortium takes into account the relevant impact of regional status and plans for—
“(A) available affordable housing stock and housing policies;

“(B) local and regional transportation systems;

“(C) high speed internet access; and

“(D) primary and secondary education.

“(12) How much the regions educational institutions are committed to aligning their activities, including research and education, as appropriate, to a region’s economic strengths and areas of focus.

“(13) The likelihood efforts served by the consortium will be sustained once Federal support ends.

“(i) CoORDINATION AND CoLLABORATION.—

“(1) COORDINATION WITH REGIONAL INNOVATION PROGRAM.—The Secretary shall ensure the activities under this section do not duplicate activities or efforts under section 27.

“(2) COORDINATION AMONG HUBS.—The Secretary shall ensure eligible consortia that receive a grant or cooperative agreement under this section coordinate and share best practices for regional economic development.

“(3) COORDINATION WITH PROGRAMS OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.—The Secretary shall coordinate the activi-
ties of regional technology and innovation hubs designated under this section, the Hollings Manufacturing Extension Partnership, and the Manufacturing USA Program, as the Secretary considers appropriate, to maintain the effectiveness of a manufacturing extension center or a Manufacturing USA institute.

“(4) COORDINATION WITH DEPARTMENT OF ENERGY PROGRAMS.—The Secretary shall, in collaboration with the Secretary of Energy, coordinate the activities and selection of regional technology and innovation hubs designated under this section, as the Secretaries consider appropriate, to maintain the effectiveness of activities at the Department of Energy and the National Laboratories.

“(5) INTERAGENCY COLLABORATION.—In designating regional technology and innovation hubs under subsection (d) and awarding grants or cooperative agreements under subsection (f), the Secretary—

“(A) shall collaborate with Federal departments and agencies whose missions contribute to the goals of the regional technology and innovation hub, and relevant interagency initiatives such as the Interagency Working Group for Cooperative Development;
“(B) shall consult with the Director of the National Science Foundation for the purpose of ensuring that the regional technology and innovation hubs are aligned with relevant science, technology, and engineering expertise; and

“(C) may accept funds from other Federal agencies to support grants, cooperative agreements, and activities under this section.

“(j) PERFORMANCE MEASUREMENT, TRANSPARENCY, AND ACCOUNTABILITY.—

“(1) METRICS, STANDARDS, AND ASSESSMENT.— For each grant and cooperative agreement awarded under subsection (f) for a regional technology and innovation hub, the Secretary shall—

“(A) in consultation with the regional technology and innovation hub, develop metrics, which may include metrics relating to domestic job creation, patent awards, increases in research funding, business formation and expansion, and participation of individuals or communities historically underrepresented in STEM, to assess the effectiveness of the activities funded in making progress toward the purposes set forth under subsection (b)(1);
“(B) establish standards for the performance of the regional technology and innovation hub that are based on the metrics developed under subparagraph (A); and

“(C) prior to any award made under a subsequent performance period in subsection (f) and every 2 years thereafter until Federal financial assistance under this section for the regional technology and innovation hub is discontinued, conduct an assessment of the regional technology and innovation hub to confirm whether the performance of the regional technology and innovation hub is meeting the standards for performance established under subparagraph (B) of this paragraph.

“(2) final reports by recipients of strategy implementation grants and cooperative agreements.—

“(A) in general.—The Secretary shall require each eligible consortium that receives a grant or cooperative agreement under subsection (f) for activities of a regional technology and innovation hub, as a condition of receipt of such grant or cooperative agreement, to submit to the Secretary, not later than 120 days after the last
day of the term of the grant or cooperative agreement, a report on the activities of the regional technology and innovation hub supported by the grant or cooperative agreement.

“(B) CONTENTS OF REPORT.—Each report submitted by an eligible consortium under subparagraph (A) shall include the following:

“(i) A detailed description of the activities carried out by the regional technology and innovation hub using the grant or cooperative agreement described in subparagraph (A), including the following:

“(I) A description of each project the regional technology and innovation hub completed using such grant or cooperative agreement.

“(II) An explanation of how each project described in subclause (I) achieves a specific goal under this section in the region of the regional technology and innovation hub with respect to—

“(aa) the resiliency and sustainability of a supply chain;
“(bb) research, development, and deployment of a critical technology;

“(cc) workforce training and development;

“(dd) domestic job creation;

“(ee) entrepreneurship and company formation, including the number of businesses created or preserved through employee ownership and cooperative development;

“(ff) commercialization;

“(gg) access to private capital; or

“(hh) participation of individuals or communities historically underrepresented in STEM.

“(ii) A discussion of any obstacles encountered by the regional technology and innovation hub in the implementation of the regional technology and innovation hub and how the regional technology and innovation hub overcame those obstacles.
“(iii) An evaluation of the success of the projects of the regional technology and innovation hub using the performance standards and measures established under paragraph (1), including an evaluation of the planning process and how the project contributes to carrying out the regional innovation strategy of the regional technology and innovation hub.

“(iv) The effectiveness of the regional technology and innovation hub in ensuring that, in the region of the regional technology and innovation hub, growth in technology and innovation sectors produces broadly shared opportunity across the region, including for economic disadvantaged and underrepresented populations and rural areas.

“(v) Information regarding such other matters as the Secretary may require.

“(3) INTERIM REPORTS BY RECIPIENTS OF GRANTS AND COOPERATIVE AGREEMENTS.—In addition to requiring submittal of final reports under paragraph (2)(A), the Secretary may require a regional technology and innovation hub described in
such paragraph to submit to the Secretary such in-
terim reports as the Secretary considers appropriate.

“(4) ANNUAL REPORTS TO CONGRESS.—Not less
frequently than once each year, the Secretary shall
submit to the appropriate committees of Congress an
annual report on the results of the assessments con-
ducted by the Secretary under paragraph (1)(C) dur-
ing the period covered by the report.

“(k) AUTHORIZATION OF APPROPRIATIONS.—There is
authorized to be appropriated to the Secretary—

“(1) $50,000,000 to award grants and coopera-
tive agreements under subsection (e) for the period of
fiscal years 2022 through 2026;

“(2) $2,000,000,000 to award grants and coopera-
tive agreements under subsection (f) for the period of
fiscal years 2022 and 2023; and

“(3) $4,800,000,000 to award grants and coopera-
tive agreements under subsection (f) for the period of
fiscal years 2024 through 2026.

“(l) ADMINISTRATION.—The Secretary may use funds
made available to carry out this section for administrative
costs under this section.”.

(b) INITIAL DESIGNATIONS AND AWARDS.—

(1) COMPETITION REQUIRED.—Not later than 1
year after the date of the enactment of this section,
subject to the availability of appropriations, the Secretary of Commerce shall commence a competition
3723) as added by subsection (a).

(2) DESIGNATION AND AWARD.—Not later than 1
year after the date of the enactment of this section, if
the Secretary has received at least 1 application
under subsection (g) of section 28 of the Stevenson-
3723) from an eligible consortium whom the Sec-
retary considers suitable for designation under sub-
section (d)(1) of such section, the Secretary shall—

(A) designate at least 1 regional technology
and innovation hub under subsection (d)(1) of
such section; and

(B) award a grant or cooperative agreement
under subsection (f)(1) of such section to each re-
gional technology and innovation hub designated
pursuant to subparagraph (A) of this paragraph.

SEC. 3. REGIONAL CLEAN ENERGY INNOVATION PROGRAM.

Subtitle C of title IX of the Energy Independence and
Security Act of 2007 is amended by adding at the end the
following:
“SEC. 936. REGIONAL CLEAN ENERGY INNOVATION PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) REGIONAL CLEAN ENERGY INNOVATION PARTNERSHIP.—The term ‘regional clean energy innovation partnership’ means a group of one or more persons, including a covered consortium, who perform a collection of activities that are coordinated by such covered consortium to carry out the purposes of the program under subsection (c) in a region of the United States.

“(2) COVERED CONSORTIUM.—The term ‘covered consortium’ means an individual or group of individuals in partnership with a government entity, including a State, local, or tribal government or unit of such government, and at least 2 or more of the following additional entities—

“(A) an institution of higher education or a consortium of institutions of higher education;

“(B) a workforce training provider, including vocational schools and community colleges;

“(C) a private sector entity;

“(D) a nonprofit organization;

“(E) a community group;

“(F) a labor group;

“(G) a National Laboratory;
“(H) a venture development organization;
“(I) a community development financial institution or minority depository institution;
“(J) a worker cooperative membership association or state or local employee ownership or cooperative development center;
“(K) an organization focused on clean energy technology innovation or entrepreneurship;
“(L) a business accelerator or incubator;
“(M) a private sector entity or group of entities, including a trade or industry association;
“(N) an economic development organization;
“(O) a manufacturing facility or organization;
“(P) a clean energy incubator or accelerator;
“(Q) a multi-institutional collaboration; or
“(R) any other entity that the Secretary determines to be relevant.

“(3) PROGRAM.—The term ‘program’ means the Regional Clean Energy Innovation Program authorized in subsection (b).
“(b) IN GENERAL.—The Secretary shall establish a Regional Clean Energy Innovation Program, a research, de-
Development, demonstration, and commercial application program designed to enhance the economic, environmental, and energy security of the United States and accelerate the pace of innovation of diverse clean energy technologies through the formation or support of regional clean energy innovation partnerships that—

“(1) account for the diverse domestic energy resources available throughout the United States;

“(2) are responsive to the needs of industry, workforce, policy landscape, and clean energy innovation capabilities of the region in which such partnership is located;

“(3) enhance and accelerate clean energy innovation;

“(4) are located in diverse geographic regions of the United States, including United States territories; and

“(5) maximize the opportunities for cooperation between institutes of higher education, industry, State and local governments, and nonprofit research institutions with shared areas of energy expertise.

“(c) PURPOSES OF THE PROGRAM.—The purposes of the Program established under subsection (b) are to—
“(1) improve the competitiveness of United States’ clean energy technology research, development, demonstration, and commercial application; and

“(2) support the development of tools and technologies best suited for use in diverse regions of the United States, including in rural, tribal, and low-income communities.

“(d) REGIONAL CLEAN ENERGY INNOVATION PARTNERSHIPS.—

“(1) IN GENERAL.—The Secretary shall competitively award grants to covered consortia to establish or support regional clean energy innovation partnerships that achieve the purposes of the Program in subsection (c).

“(2) PERMISSIBLE ACTIVITIES.—Grants awarded under this subsection shall be used for activities determined appropriate by the Secretary to achieve the purposes of the Program in subsection (c), including—

“(A) facilitating the commercial application of clean energy products, processes, and services, including through research, development, demonstration, or technology transfer;

“(B) planning among participants of a regional clean energy innovation partnership to
improve the strategic and cost-effective coordination of the partnership;

“(C) improving stakeholder involvement in the development of goals and activities of a regional clean energy innovation partnership;

“(D) assessing different incentive mechanisms for clean energy development and commercial application in the region;

“(E) hosting events and conferences; and

“(F) establishing and updating roadmaps to measure progress on relevant goals, such as those relevant to metrics developed under subsection (g).

“(3) APPLICATIONS.—Each application submitted to the Secretary under paragraph (1) may include—

“(A) a list of members and roles of members of the covered consortia, as well as any other stakeholders supporting the activities of the regional clean energy innovation partnership;

“(B) a description of the proposed outcomes of the regional clean energy innovation partnership;

“(C) an assessment of the relevant clean energy innovation assets needed in a region to
achieve proposed outcomes, such as education and training programs, research facilities, infrastructure or site development, access to capital, manufacturing capabilities, or other assets;

“(D) a description of proposed activities that the regional clean energy innovation partnership plans to undertake and how the proposed activities will achieve the purposes described in subsection (c) and the proposed outcomes in subparagraph (B);

“(E) a description of the geographical region that will engage in the regional clean energy innovation partnership;

“(F) a plan for attracting additional funds and identification of funding sources from non-Federal sources to deliver the proposed outcomes of the regional clean energy innovation partnership;

“(G) a plan for partnering and collaborating with community development financial institutions and minority depository institutions, labor and community groups, worker cooperative membership associations, local and state employee ownership and cooperative development centers, and other local institutions in order to
promote employee, community, and public ownership in the clean energy sector, and advance models of local economic development that build and retain wealth in the region;

“(H) a plan for sustaining activities of the regional clean energy innovation partnership after funds received under this program have been expended; and

“(I) a proposed budget, including financial contributions from non-Federal sources.

“(4) CONSIDERATIONS.—In selecting covered consortia for funding under the Program, the Secretary shall, to the maximum extent practicable—

“(A) give special consideration to applications from rural, tribal, and low-income communities; and

“(B) ensure that there is geographic diversity among the covered consortia selected to receive funding.

“(5) AWARD AMOUNT.—Grants given out under this Program shall be in an amount not greater than $10,000,000, with the total grant award in any year less than that in the previous year.

“(6) COST SHARE.—For grants that are disbursed over the course of three or more years, the Sec-
retary shall require, as a condition of receipt of funds under this section, that a covered consortium provide not less than 50 percent of the funding for the activities of the regional clean energy partnership under this section for years 3, 4, and 5.

“(7) **Duration.**—Each grant under paragraph shall be for a period of not longer than 5 years.

“(8) **Renewal.**—A grant awarded under this section may be renewed for a period of not more than 5 years, subject to a rigorous merit review based on the progress of a regional clean energy innovation partnership towards achieving the purposes of the program in subsection (c) and the metrics developed under subsection (g).

“(9) **Termination.**—Consistent with the existing authorities of the Department, the Secretary may terminate grant funding under this subsection to covered consortia during the performance period if the Secretary determines that the regional clean energy innovation partnership is underperforming.

“(10) **Administrative Costs.**—The Secretary may allow a covered consortium that receives funds under this section to allocate a portion of the funding received to be used for administrative or indirect costs.
“(11) FUNDING.—The Secretary may accept funds from other Federal agencies to support funding and activities under this section.

“(e) PLANNING FUNDS.—The Secretary may competitively award grants in an amount no greater than $2,000,000 for a period not longer than 2 years to an entity consisting of a government entity, including a State, local, or tribal government or unit of such government or any entity listed under subsection (a)(2) to plan a regional clean energy innovation partnership or establish a covered consortium for the purpose of applying for funds under subsection (b).

“(f) INFORMATION SHARING.—As part of the program, the Secretary shall support the gathering, analysis, and dissemination of information on best practices for developing and operating successful regional clean energy innovation partnerships.

“(g) METRICS.—In evaluating a grant renewals under subsection (d)(8), the Secretary shall work with program evaluation experts to develop and make publicly available metrics to assess the progress of a regional clean energy innovation partnership towards achieving the purposes of the program in subsection (c). Such metrics may include—

“(1) the number and quality of—
“(A) new clean energy companies created in the region as a result of activities carried out under the regional clean energy innovation partnership, including those created or preserved through employee ownership and cooperative development;

“(B) new or expanded workforce development or training programs; and

“(C) support services provided to clean energy technology developers in the region;

“(2) changes in clean energy employment in the region as a result of activities carried out under the regional clean energy innovation partnership; and

“(3) the amount of capital investment in clean energy companies in the region as a result of activities carried out under the regional clean energy innovation partnership grant.

“(h) COORDINATION.—In carrying out the program, the Secretary shall coordinate with, and avoid unnecessary duplication of, the activities carried out under this section with the activities of—

“(1) other research entities of the Department, including the National Laboratories, the Office of Science, the Advanced Research Projects Agency-Energy, the Office of Technology Transitions, Energy In-
novation Hubs, and Energy Frontier Research Centers; and

“(2) relevant programs at other Federal agencies, including—

“(A) the Office of Innovation and Entrepreneurship under the Economic Development Administration, including the Regional Innovation Program under section 27 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3722);

“(B) the Hollings Manufacturing Extension Partnership Program under section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k);

“(C) the Manufacturing USA Program under section 34 of the National Institute of Standards and Technology Act (15 U.S.C. 278s);


“(E) the Office of Economic Adjustment at the Department of Defense; and

“(F) Rural Development at the United States Department of Agriculture.
“(i) CONFLICTS OF INTEREST.—In carrying out the program, the Secretary shall maintain conflict of interest procedures, consistent with the conflict of interest procedures of the Department.

“(j) EVALUATION BY COMPTROLLER GENERAL.—Not later than 3 years after the date of the enactment of this Act, and every 3 years thereafter, the Comptroller General shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate an evaluation on the operation of the program during the most recent 3-year period, including—

“(1) an assessment of the progress made towards achieving the purposes specified in subsection (c) based on the metrics developed under subsection (g);

“(2) the short-term and long-term metrics used to determine the success of the program under subsection (g), and any changes recommended to the metrics used;

“(3) the regional clean energy innovation partnerships established or supported by covered consortia that have received grants under subsection (d); and

“(4) any recommendations on how the program may be improved.
“(k) National Laboratories.—In supporting technology transfer activities at the National Laboratories, the Secretary shall encourage partnerships with entities that are located in the same region or State as the National Laboratory.

“(l) Security.—In carrying out the activities under this section, the Secretary shall ensure proper security controls are in place to protect sensitive information, as appropriate.

“(m) No Funds for Construction.—No funds provided to the Department of Energy under this section shall be used for construction.

“(n) Authorization of Appropriations.—There are authorized to be appropriated to the Secretary to carry out this section $50,000,000 for each of fiscal years 2022 through 2026.”.

Sec. 4. Critical Technology and Innovation Analytics Program.

(a) In General.—The Secretary of Commerce shall carry out a program of data collection and analysis of technology and innovation sectors critical to realizing national objectives, including national security, economic prosperity, and social welfare.

(b) Purpose.—The purpose of the program shall be—
(1) To serve as a central Federal clearinghouse for the collection, interpretation, analysis, and dissemination of objective data on the nation’s technology, innovation, and advanced manufacturing capacity;

(2) To improve assessment of the nation’s research, technology, and manufacturing assistance programs, including the regional innovation programs established in section 27 and 28 of the Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96–480; 15 U.S.C. 3701 et seq.);

(3) To assess U.S. competitiveness in technology and innovation sectors; and

(4) To support national policy and decision making in both the public and private sectors to ensure United States leadership in technology and innovation sectors critical to national security, economic prosperity and social welfare.

(c) ACTIVITIES.—In carrying out this section, the Secretary shall—

(1) collect, acquire, analyze, report, and disseminate data related to critical technology, innovation, and production capacity in the United States and other nations that is relevant and useful to practi-
tioners, researchers, policymakers, and the public, including data on—

(A) regional technology and innovation capacity, including research and development activity, entrepreneurship, intellectual property generation, company formation, advanced technology capital equipment investment, and technology transfer;

(B) supply chains, including domestic and international production capacity, inter-firm transactions, and resiliency for select end-products and their intermediate inputs;

(C) the skilled technical and production workforce required in different critical technology and innovation sectors;

(D) the participation of individuals and communities historically underrepresented in STEM; and

(E) any other area the Secretary determines appropriate;

(2) Request from any person or entity information, data, and reports as may be required to carry out the purposes of this Act;
(3) support research using the data it collects, and on methodologies in areas related to the activities carried out under the program; and

(4) conduct other activities deemed by the Secretary to be critical for the development of analytic capabilities, statistics, datasets, and metrics related to critical technologies and innovation.

(d) OTHER TRANSACTIONS AUTHORITIES.—In carrying out this section, the Secretary may enter into and perform such contracts, including cooperative research and development arrangements and grants and cooperative agreements or other transactions, as may be necessary in the conduct of the work of the program and on such terms as the Secretary considers appropriate.

(e) COORDINATION.—The Secretary shall collaborate with Federal statistical agencies, as appropriate, to carry out the purposes of this section, including by entering into cooperative data sharing agreements that comply with all laws and regulations applicable to the disclosure and use of data.

(f) CONSULTATION.—In conducting the activities required under subsection (c), the Secretary shall solicit input from relevant stakeholders on critical technology and sector needs, practices, and goals related to creating statistics, metrics, data sets, and modeling.
(g) ADMINISTRATION.—The Secretary may carry out
this program through existing programs and bureaus of the
Department of Commerce, as appropriate.

(h) ACCESS TO FEDERAL DATA.—In carrying out sub-
section (c), the Secretary shall be given access to all infor-
mation, data, or reports that the Secretary determines nec-
essary to carry out this Section by any Federal agency
upon written request and subject to any statutory or regu-
laratory restrictions.

(1) EXISTING INSTRUMENTS.—Where practicable,
the Secretary should incorporate data collection into
existing survey instruments.

(i) AUTHORIZATION OF APPROPRIATIONS.—There is
authorized to be appropriated to the Secretary $100,000,000
to conduct activities under this section for the period of fis-
cal years 2022 through 2026.