117TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
117–254

REGIONAL INNOVATION ACT OF 2021

FEBRUARY 28, 2022.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Ms. JOHNSON of Texas, from the Committee on Science, Space, and Technology, submitted the following

R E P O R T

together with

MINORITY VIEWS

[To accompany H.R. 4588]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 4588) to amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish a regional technology and innovation hub program, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

CONTENTS

29–006

I. AMENDMENT

The amendment is as follows:
Strike all after the enacting clause and insert the following:

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. 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 Environment 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 103 of the Community Development Banking and Financial Institutions Act of 1994 (12 U.S.C. 4702).

"(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);

"(G) National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801));

"(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 technology 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 regional 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 technologies by private sector, academic, nonprofit, 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, Na-

tional 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, including 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 activities 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 tech-

nology 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 interim 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 conducted by the Secretary under paragraph (1)(C) during 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 cooperative agreements under subsection (e) for the period of fiscal years 2022 through 2026;

"(2) $2,000,000,000 to award grants and cooperative agreements under subsection (f) for the period of fiscal years 2022 and 2023; and

"(3) $4,800,000,000 to award grants and cooperative 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 under subsection (d)(1) of section 28 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 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-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3723) from an eligible consortium whom the Secretary considers suitable for designation under subsection (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 regional 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, 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 fromrural, 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 Secretary 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 Innovation 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);

"(D) the Defense Manufacturing Communities Support Program under section 846 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2501 note);

"(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 practitioners, 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 subsection (c), the Secretary shall be given access to all information, data, or reports that the Secretary determines necessary to carry out this Section by any Federal agency upon written request and subject to any statutory or regulatory 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 fiscal years 2022 through 2026.

II. Purpose of the Bill

The purpose of the bill is to authorize the Department of Commerce and the Department of Energy to create regional innovation programs related to their respective missions from FY22 to FY26. Through support for regional innovation initiatives and development of U.S. analytical assessment capabilities for critical technologies, this legislation would boost both U.S. competitiveness and shared prosperity from U.S. advanced technology industries.

III. Background and Need for the Legislation

The Federal government has long played a supportive role in regional innovation, both directly and indirectly, through funding research at universities, location of Federal R&D facilities, co-funding construction of research parks, and its purchase power (i.e., military procurement). Congress created authorities and programs in the *America COMPETES Act in 2007* (P.L. 110–69) and *the America COMPETES Reauthorization of 2010* (P.L. 111–358) to boost regional and local innovation economies across the United States. Most notably, in the 2010 Act (P.L. 111–358) the Committee on Science, Space, and Technology led the authorization for a new Regional Innovation Program (Sec. 603), now known as Build to Scale, and a new Office of Innovation and Entrepreneurship (Sec. 601) at the Economic Development Administration (EDA).

However, in recent decades, U.S. high-tech industries and the economic growth they bring have become increasingly concentrated in a relatively small number of cities and regions. As economic growth has become more concentrated, so too have Federal R&D dollars. The discrepancy in the gains from science and technology funding and the industries of the future have also played a role in deepening social and economic disparities across the United States. There is a renewed focus among policymakers about reinvesting in the U.S. research enterprise to boost competitiveness. As part of this discussion, policymakers are considering proposals to improve and expand Federal regional innovation initiatives and to help build capacity in science and technology in diverse regions across the country.

Additionally, inadequate data and analytic capacity has weakened U.S. decision-making regarding critical technologies, supply chains, and infrastructure. While existing surveys, such as the Annual Survey of Manufactures, provide yearly glimpses of U.S. capabilities, these surveys are not helpful when tracking supply chains during a rapidly evolving crisis, such as the COVID–19 pandemic. Existing surveys also fail to adequately track critical technology development and federal investments across different geographic regions of the country. As a result, U.S. policymakers in the Executive and Legislative branches of government lack a mechanism to understand the full scope of Federal R&D investments and how these investments impact U.S. innovation and competitiveness in regions across the country.

IV. Committee Hearings

Pursuant to House rule XIII, clause 3(c)(6), the following hearings as having been used to develop or consider the legislation:

On July 17, 2020, the Subcommittee on Energy held a hearing entitled, "From Lab to Market: Accelerating our Progress toward Economic Recovery and a Clean Energy Future." The purpose of the hearing was to examine technology transfer activities at the Department of Energy (DOE) and their potential contributions to economic recovery from the current COVID–19 pandemic, including regional clean energy innovation initiatives. The hearing witnesses included Ms. Jetta Wong, President, JLW Advising and Former Director, Office of Technology Transitions, U.S. Department of Energy; Ms. Jennifer States, Director for Blue Economy, DNV GL and Project Director, Washington Maritime Blue; Ms. Farah Benahmed, Climate and Energy Policy Advisor, Third Way; Dr. Emily Reichert, Chief Executive Officer, Greentown Labs; and Dr. Lee Cheatham, Director of Technology Deployment and Outreach, Pacific Northwest National Laboratory.

On April 15, 2021, the Science, Space, and Technology Committee held a hearing entitled, "Reimagining Our Innovation Future." The purpose of the hearing was to examine the current outlook for U.S. leadership in science and technology and discuss how new investments and new, inclusive models of partnership in science and technology can be leveraged to ensure continued leadership and address economic, security, environmental, public health, and other societal challenges from the local to the global level. The hearing witnesses included Mr. Norm Augustine; Dr. Frances H. Arnold, Linus Pauling Professor of Chemical Engineering, Bioengineering and Biochemistry at the California Institute of Technology; The Honorable Ernest J. Moniz, President and Chief Executive Officer of the Energy Futures Initiative and Former Secretary of the U.S. Department of Energy; and Dr. Farnam Jahanian, President of Carnegie Mellon University.

On June 9, 2021 the Research and Technology Subcommittee held a hearing entitled, "Building Regional Innovation Economies." The purpose of this hearing is to explore the role of the Department of Commerce, and particularly the Economic Development Agency (EDA), in supporting the development of regional innovation economies, and the opportunities for and challenges to expanding this role, including in partnership with Federal science agencies. Hearing witnesses include Mr. Dan Berglund, President and CEO, SSTI; Professor Erica R.H. Fuchs, Department of Engineering and Public Policy, Carnegie Mellon University; Ms. Paula Nas, Director, Office of Economic Development, University of Michigan-Flint; Hon. Elizabeth Hutt Pollard, Secretary of Science and Innovation, State of Oklahoma.

V. Committee Consideration and Votes

On July 21, 2021, Representative Susan Wild (D–PA), Representative Jim Baird (R–IN), Representative Jamaal Bowman (D–NY), Representative Anthony Gonzalez (R–OH), and Representative Ro Khanna (D–CA), introduced H.R. 4588, the *Regional Innovation Act of 2021*. The bill was referred to the House Committee on Science, Space, and Technology.

On July 27, 2021, the Full Committee on Science, Space, and Technology met to consider the bill. Chairwoman Johnson offered an amendment that made technical changes to the bill and added minor clarifying language in response to stakeholder feedback and

Committee Member priorities. *The amendment was agreed to on a voice vote.* Mr. Bowman offered an amendment to add community development financial institutions, minority depository institutions, and cooperatives to the list of eligible entities for the program, as well as a focus for local procurement of goods and services. *The amendment was agreed to on a voice vote.* Ms. Stansbury offered an amendment to add a program for data collection and analysis of technology and innovation sectors critical to realizing national objectives at the Department of Commerce. The amendment was agreed to on a voice vote.

VI. Summary of Major Provisions of the Bill

Establishes a program at the Department of Commerce to create regional technology and innovation hubs across the country which would bring together consortia consisting of local and state governments, universities, industry, labor organizations, and other groups to promote innovation and shared prosperity in a region. Supports grants and cooperative agreements to create regional innovation strategies or to implement those strategies. Implementation funds can be used for workforce, entrepreneurship, and technology development, as well as infrastructure-related activities to develop regions into innovation economies.

Establishes a program at the Department of Energy to provide funding to consortia consisting of local and state energy offices, economic development organizations, and other relevant entities, such as universities, to develop and execute plans to link economic development with clean energy innovation activities.

Establishes a data analytics program at the Department of Commerce focused on critical technologies, innovation, and production capacity.

VII. Section-by-Section Analysis (By Title and Section)

Sec. 1. Short title; Table of Contents

Sec. 2. Regional innovation capacity

This section amends the Stevenson-Wydler Technology Innovation Act of 1980 to include a regional technology and innovation hub program at the Department of Commerce.

(a) Definitions—Provides definitions used in this section.

(b) Regional Technology and Innovation Hub Program—Requires the Secretary of Commerce to establish a regional technology and innovation hubs program consisting of strategy development and strategy implementation grants or cooperative agreements and describes the purposes of the program.

(c) Eligible Consortia—Provides direction regarding eligibility for the program.

(d) Designation of Regional Technology and Innovation Hubs—Requires the Secretary to use a competitive process to designate not fewer than 10 eligible consortia as regional hubs, and provides direction regarding geographic distribution and inclusion of underserved communities.

(e) Strategy Development Grants and Cooperative Agreements—provides direction for strategy development grants, in-

cluding requirements for geographic distribution, use of funds, and cost-share.

(f) Strategy Implementation Grants and Cooperative Agreements—provides direction for strategy implementation grants; describes allowable uses of funds; establishes two tiers of awards and a maximum allowable grant size of $150 million for tier 1 and 15% of the total program for tier 2; establishes cost-share requirements based on tier and type of consortium.

(g) Applications—Requires the Secretary to establish specific application requirements.

(h) Considerations for Designation and Award of Strategy Implementation Grants and Cooperative Agreements—Provides guidance to the Secretary regarding selection criteria.

(i) Coordination and Collaboration—Requires the Secretary to ensure coordination among Hubs and between the program and other relevant Federal programs, including MEP and Manufacturing USA.

(j) Performance Measurement, Transparency, and Accountability—Requires the Secretary to develop performance, transparency and accountability criteria for recipients and reporting requirements for the program.

(k) Authorization of Appropriations—Authorizes nearly $7 billion for the program from fiscal years 2022 through 2026.

(l) Administration—Allows the Secretary to use funds for program administration.

Sec. 3. Regional clean energy innovation program

This section amends the Energy Independence and Security Act of 2007 to authorize a Regional Clean Energy Innovation Program at DOE to establish regional partnerships that promote the economic development of diverse geographic areas of the United States by supporting clean energy innovation. Awards are capped at $10 million over 5 years and requires a cost-share of 50% in years 3, 4, and 5, of the grant, with an optional renewal for an additional 5 years. This section also authorizes grants in the amount of $2 million for government entities, in partnership with other entities, to conduct planning activities to setup a regional clean energy innovation partnership.

Sec. 4. Critical technology and innovation analytics program

This section directs the Secretary of Commerce to create a program of data collection and analysis of technology and innovation sectors critical to realizing national objects, such as national security, economic prosperity, and social welfare. The section authorizes the Secretary of Commerce to access data across the Federal government and to coordinate these activities with Federal statistical agencies, as appropriate. This section authorizes $100 million for the program from fiscal years 2022 through 2026.

VIII. COMMITTEE VIEWS

Underserved Communities—The Committee encourages the Secretary of Commerce to adopt a definition for the term "underserved communities" to include communities that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life. The Committee intends for the term "under-

served communities" to encompass both underserved populations, in particular racial and ethnic minority communities, including those living in low-income, formerly redlined areas, and underserved geographies, such as Tribal Lands and rural communities.

Leading Technology Centers—The Committee intends the Secretary of Commerce to exclude "leading technology centers" from consideration for grants and cooperative agreements awarded under Section 2. The Committee encourages the Secretary of Commerce to develop a definition of "leading technology centers" based on the innovation capacity and advanced technology industries of a region or locality, using metrics such as the amount of Federal and non-Federal resources flowing into that region or locality. The Committee expects the Secretary of Commerce to offer clear guidance on the definition and metrics used to establish it. The Committee does not intend "leading technology centers" to include mid-level technology centers.

Leveraging Critical Technology Expertise—The Committee notes that relevant expertise in critical technologies and innovation is spread across many different agencies and programs, including the National Institute of Standards and Technology, the National Science Foundation, and more. The Committee encourages the Secretary of Commerce to leverage the critical technology expertise of individuals across the federal science and technology enterprise, including through the use of detailees or other intergovernmental exchange programs.

Interagency Coordination—The Committee encourages the Secretary of Commerce to work with the heads of other relevant agencies, including the Office of Science and Technology Policy at the White House, the Department of Labor, the Department of Housing and Urban Development, the Department of Transportation, and the Small Business Association, to consider a holistic approach to the creation of regional technology and innovation hubs under Section 2, addressing related challenges such as access to high-speed internet and housing, as well as the creation of regional transportation systems.

IX. Cost Estimate

Pursuant to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

X. Congressional Budget Office Cost Estimate

U.S. Congress,
Congressional Budget Office,
Washington, DC, February 24, 2022.

Hon. Eddie Bernice Johnson,
Chairwoman, Committee on Science, Space, and Technology,
House of Representatives, Washington, DC.

Dear Madam Chairwoman: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 4588, the Regional Innovation Act of 2021.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jon Sperl.

Sincerely,

PHILLIP L. SWAGEL,
Director.

Enclosure.

At a Glance

H.R. 4588, Regional Innovation Act of 2021

As ordered reported by the House Committee on Science, Space, and Technology on July 27, 2021

By Fiscal Year, Millions of Dollars	2022	2022-2026	2022-2031
Direct Spending (Outlays)	*	*	*
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	*	*	*
Spending Subject to Appropriation (Outlays)	10	3,731	7,202

		Mandate Effects	
Statutory pay-as-you-go procedures apply?	Yes	Contains intergovernmental mandate?	No
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	< $5 billion	Contains private-sector mandate?	No

* = between zero and $500,000.

The bill would:

- Authorize appropriations for the Department of Commerce and Department of Energy
- Require the two departments to award grants to regional consortia to promote economic development and technological innovation
- Require the Department of Commerce to collect and analyze data related to technology and production capacity in critical sectors, and to perform other activities in support of technology research

Estimated budgetary effects would mainly stem from:

- Spending of amounts authorized to be appropriated in the act for grants and activities administered by the two departments

Bill summary: H.R. 4588 would authorize appropriations for programs at the Departments of Commerce (DOC) and Energy (DOE) related to economic development and technological innovation.

Estimated Federal cost: The estimated budgetary effect of H.R. 4588 is shown in Table 1. The costs of the legislation fall within budget functions 270 (energy), 370 (commerce and housing credit), and 450 (community and regional development).

TABLE 1.—ESTIMATED BUDGETARY EFFECTS OF H.R. 4588

	By fiscal year, millions of dollars—					
	2022	2023	2024	2025	2026	2022–2026
Increases in Spending Subject to Appropriation						
DOC Regional Technology and Innovation Hubs:						
Authorization [a]	2,000	0	4,800	0	0	6,800

TABLE 1.—ESTIMATED BUDGETARY EFFECTS OF H.R. 4588—Continued

	By fiscal year, millions of dollars—					
	2022	2023	2024	2025	2026	2022–2026
Estimated Outlays	0	160	650	1,200	1,470	3,480
DOC Critical Technology and Innovation Analytics Program:						
Authorization [b]	100	0	0	0	0	100
Estimated Outlays	4	8	16	20	22	70
DOC Strategy Development Grants:						
Authorization [b]	50	0	0	0	0	50
Estimated Outlays	3	12	19	13	3	50
DOE Regional Clean Energy Partnerships:						
Authorization	50	50	50	50	50	250
Estimated Outlays	3	13	27	40	47	130
GAO Evaluations:						
Estimated Authorization	*	*	*	*	*	1
Estimated Outlays	*	*	*	*	*	1
Total Changes:						
Estimated Authorization	2,200	50	4,850	50	50	7,201
Estimated Outlays	10	193	712	1,273	1,542	3,731

Enacting the bill would increase direct spending by less than $500,000 in every year and over the 2022–2031 period.

Components may not sum to totals because of rounding; DOC = Department of Commerce, DOE = Department of Energy, GAO = Government Accountability Office; * = between zero and $500,000.

[a] The bill would authorize the appropriation of $2 billion over the 2022–2023 period and $4.8 billion over the 2024–2026 period but does not specify how much would be authorized in each year. This estimate shows the full amount in the first year of each period.

[b] The bill would authorize the appropriation of $100 million and $50 million over the 2022–2026 period for two DOC programs but does not specify how much would be authorized in each year. This estimate shows the full amount in 2022.

Basis of estimate: For this estimate, CBO assumes that the legislation will be enacted in fiscal year 2022 and that the amounts specified in the bill will be appropriated. Estimated outlays are based on historical spending patterns for similar programs and activities. Assuming the appropriation of those amounts, CBO estimates that implementing the bill would cost $3.7 billion over 2022–2026 period and $7.2 billion over the 2022–2031 period.

Department of Commerce: H.R. 4588 would authorize appropriations for two new programs that would be administered by DOC. Those authorizations would be for a period of fiscal years and the bill does not specify the amounts for any year in those periods. This estimate shows the total authorized amount in the first fiscal year of each period.

Under the bill, DOC would administer a Regional Technology and Innovation Hub Program under which the agency would award grants to private entities, nonprofit and labor organizations, institutions of higher education, and state and local governments that participate in regional consortia focused on economic development and technology innovation. In addition, DOC would administer a program to collect and analyze data related to technology innovation and production capacity in critical sectors.

Over the 2022–2026 period, the bill would authorize the following amounts for the Department of Commerce:

- $6.8 billion ($2.0 billion over the 2022–2023 period and $4.8 billion over the 2024–2026 period) for grants to eligible entities participating in innovation hubs to cover the costs of infrastructure projects and activities related to workforce, business, and technology development;
- $100 million to collect data, develop analytic capabilities, and support technology research in industry sectors critical to national objectives, such as national security, economic prosperity, and social welfare; and

- $50 million for grants to leading hub entities to develop strategies, plans, and studies, as well as to facilitate necessary changes to local zoning codes and other laws.

Department of Energy: H.R. 4588 also would authorize the appropriation of $50 million annually over the 2022–2026 period, totaling $250 million, for DOE to establish a regional clean energy innovation program. Under the program, DOE would award grants to groups of state and local governments, institutions of higher education, and other entities to form regional partnerships and accelerate the innovation and commercial application of clean energy technologies.

Government Accountability Office: H.R. 4588 would require the Government Accountability Office to evaluate the effectiveness of the Regional Clean Energy Innovation Program and report to the Congress every three years. Based on the cost of similar activities, CBO estimates that conducting those evaluations would cost $1 million over the 2022–2026 period and $2 million over the 2022–2031 period.

Pay-As-You-Go considerations: The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. Sections 2 and 3 of H.R. 4588 would authorize DOC and DOE, respectively, to accept funding from other federal agencies to support grants and other activities required under the bill. Those provisions could affect direct spending if DOC or DOE receives previously appropriated amounts that otherwise are not expected to be spent within the 2022–2031 period under current law. CBO estimates that the net changes in outlays that are subject to those pay-as-you-go procedures would be less than $500,000 in every year and over the 2022–2031 period.

Increase in long-term deficits: CBO estimates that enacting H.R. 4588 would not increase on-budget deficits by more than $5 billion in any of the four consecutive 10-year periods beginning in 2032.

Mandates: None.

Estimate prepared by: Federal costs: Aaron Krupkin (Department of Energy), David Hughes and Jon Sperl (Department of Commerce); Mandates: Rachel Austin.

Estimate reviewed by: Justin Humphrey, Chief, Finance, Housing, and Education Cost Estimates Unit; Susan Willie, Chief, Natural and Physical Resources Cost Estimates Unit; H. Samuel Papenfuss, Deputy Director of Budget Analysis; Theresa Gullo, Director of Budget Analysis.

XI. Federal Mandates Statement

H.R. 4588 contains no unfunded mandates.

XII. Committee Oversight Findings and Recommendations

The Committee's oversight findings and recommendations are reflected in the body of this report.

XIII. Statement on General Performance Goals and Objectives

The goals and objectives of H.R. 4588 is to authorize the Department of Commerce and the Department of Energy to create re-

gional innovation programs related to their respective missions for fiscal years (FY) 2022, 2023, 2024, 2025 and 2026. Through support for regional innovation initiatives and development of U.S. analytical assessment capabilities for critical technologies, this legislation would boost both U.S. competitiveness and shared prosperity from our advanced technology industries.

XIV. Federal Advisory Committee Statement

H.R. 4588 does not authorize an advisory committee.

XV. Duplication of Federal Programs

Pursuant to clause 3(c)(5) of rule XIII of the Rules of the House of Representatives, the Committee finds that no provision of H.R. 4588 establishes or reauthorizes a program of the federal government known to be duplicative of another federal program, including any program that was included in a report to Congress pursuant to section 21 of Public Law 111–139 or the most recent Catalog of Federal Domestic Assistance.

XVI. Earmark Identification

Pursuant to clause 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 4588 contains no earmarks, limited tax benefits, or limited tariff benefits.

XVII. Applicability to the Legislative Branch

The Committee finds that H.R. 4588 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

XVIII. Statement on Preemption of State, Local, or Tribal Law

This bill is not intended to preempt any state, local, or tribal law.

XIX. Changes in Existing Law Made by the Bill, as Reported

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, and existing law in which no change is proposed is shown in roman):

STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980

* * * * * * *

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 Environment 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 103 of the Community Development Banking and Financial Institutions Act of 1994 (12 U.S.C. 4702).

(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);

(G) National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801));

(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 technology 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 eligi-

ble 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 regional 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 technologies by private sector, academic, nonprofit, 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, including 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 elemen-

tary 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 activities 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 effec-

tiveness 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 tech-

nology 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 interim 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 conducted by the Secretary under paragraph (1)(C) during 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 cooperative agreements under subsection (e) for the period of fiscal years 2022 through 2026;

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

(3) $4,800,000,000 to award grants and cooperative 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.

SEC. [28.] *29.* STEM APPRENTICESHIP PROGRAMS.

(a) IN GENERAL.—The Secretary of Commerce may carry out a grant program to identify the need for skilled science, technology, engineering, and mathematics (referred to in this section as "STEM") workers and to expand STEM apprenticeship programs.

(b) ELIGIBLE RECIPIENT DEFINED.—In this section, the term "eligible recipient" means—

(1) a State;

(2) an Indian tribe;

(3) a city or other political subdivision of a State;

(4) an entity that—

(A) is a nonprofit organization, an institution of higher education, a public-private partnership, a science or research park, a Federal laboratory, or an economic development organization or similar entity; and

(B) has an application that is supported by a State, a political subdivision of a State, or a native organization; or

(5) a consortium of any of the entities described in paragraphs (1) through (5).

(c) NEEDS ASSESSMENT GRANTS.—The Secretary of Commerce may provide a grant to an eligible recipient to conduct a needs assessment to identify—

(1) the unmet need of a region's employer base for skilled STEM workers;

(2) the potential of STEM apprenticeships to address the unmet need described in paragraph (1); and

(3) any barriers to addressing the unmet need described in paragraph (1).

(d) APPRENTICESHIP EXPANSION GRANTS.—The Secretary of Commerce may provide a grant to an eligible recipient that has con-

ducted a needs assessment as described in subsection (c)(1) to develop infrastructure to expand STEM apprenticeship programs.

ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

* * * * * * *

TITLE IX—INTERNATIONAL ENERGY PROGRAMS

* * * * * * *

Subtitle C—Miscellaneous Provisions

* * * * * * *

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, 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 fromrural, 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 Secretary 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 Innovation 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);

(D) the Defense Manufacturing Communities Support Program under section 846 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2501 note);

(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 encour-

age 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.

* * * * * * *

XX. PROCEEDINGS OF THE COMMITTEE MARKUP

MARKUPS: H.R. 4609, THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY FOR THE FUTURE ACT OF 2021; H.R. 3858, THE NATIONAL SCIENCE AND TECHNOLOGY STRATEGY ACT OF 2021; H.R. 4588; THE REGIONAL INNOVATION ACT OF 2021; H.R. 4606, THE ENERGIZING TECHNOLOGY TRANSFER ACT, AND H.R. 4599, THE STEEL UPGRADING PARTNERSHIPS AND EMISSIONS REDUCTION ACT OR SUPER ACT OF 2021

MARKUP

BEFORE THE

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

JULY 27, 2021

Serial No. CP: 117–7

Printed for the use of the Committee on Science, Space, and Technology

Available via the World Wide Web: http://science.house.gov

MARKUPS: H.R. 4609, THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY FOR THE FUTURE ACT OF 2021; H.R. 3858, THE NATIONAL SCIENCE AND TECHNOLOGY STRATEGY ACT OF 2021; H.R. 4588; THE REGIONAL INNOVATION ACT OF 2021; H.R. 4606, THE ENERGIZING TECHNOLOGY TRANSFER ACT, AND H.R. 4599, THE STEEL UPGRADING PARTNERSHIPS AND EMISSIONS REDUCTION ACT OR SUPER ACT OF 2021

MARKUP

BEFORE THE

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

JULY 27, 2021

Serial No. CP: 117–7

Printed for the use of the Committee on Science, Space, and Technology

Available via the World Wide Web: http://science.house.gov

U.S. GOVERNMENT PUBLISHING OFFICE
45–196PDF WASHINGTON : 2021

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

HON. EDDIE BERNICE JOHNSON, Texas, *Chairwoman*

ZOE LOFGREN, California
SUZANNE BONAMICI, Oregon
AMI BERA, California
HALEY STEVENS, Michigan,
Vice Chair
MIKIE SHERRILL, New Jersey
JAMAAL BOWMAN, New York
MELANIE A. STANSBURY, New Mexico
BRAD SHERMAN, California
ED PERLMUTTER, Colorado
JERRY McNERNEY, California
PAUL TONKO, New York
BILL FOSTER, Illinois
DONALD NORCROSS, New Jersey
DON BEYER, Virginia
CHARLIE CRIST, Florida
SEAN CASTEN, Illinois
CONOR LAMB, Pennsylvania
DEBORAH ROSS, North Carolina
GWEN MOORE, Wisconsin
DAN KILDEE, Michigan
SUSAN WILD, Pennsylvania
LIZZIE FLETCHER, Texas

FRANK LUCAS, Oklahoma,
Ranking Member
MO BROOKS, Alabama
BILL POSEY, Florida
RANDY WEBER, Texas
BRIAN BABIN, Texas
ANTHONY GONZALEZ, Ohio
MICHAEL WALTZ, Florida
JAMES R. BAIRD, Indiana
DANIEL WEBSTER, Florida
MIKE GARCIA, California
STEPHANIE I. BICE, Oklahoma
YOUNG KIM, California
RANDY FEENSTRA, Iowa
JAKE LaTURNER, Kansas
CARLOS A. GIMENEZ, Florida
JAY OBERNOLTE, California
PETER MEIJER, Michigan
VACANCY
VACANCY

C O N T E N T S

Tuesday, July 27, 2021

H.R. 4609, THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY FOR THE FUTURE ACT OF 2021

H.R. 3858, THE NATIONAL SCIENCE AND TECHNOLOGY STRATEGY ACT OF 2021

H.R. 4588, THE REGIONAL INNOVATION ACT OF 2021

H.R. 4606, THE ENERGIZING TECHNOLOGY TRANSFER ACT

H.R. 4599, THE STEEL UPGRADING PARTNERSHIPS AND EMISSIONS REDUCTION ACT OR SUPER ACT OF 2021

TUESDAY, JULY 27, 2021

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, D.C.

The Committee met, pursuant to notice, at 10:01 a.m., in room 2318 of the Rayburn House Office Building, Hon. Eddie Bernice Johnson [Chairwoman of the Committee] presiding.

Chairwoman JOHNSON. Good morning. The Committee will come to order, and, without objection, the Chair is authorized to declare recess at any time. Pursuant to Committee Rules and House Rule 11, the Chair now set—to postpone roll call votes at any time. Today the Committee is meeting virtually and in person. I want to announce a couple of reminders to the Members about the conduct of the meeting. First, Members attending remotely should keep their video feed on as long as they're present in the meeting, and Members are responsible for their own microphones. Please also keep your microphones muted until you are speaking. And, finally, if Members have documents they wish to submit to the record, please e-mail them to the Committee Clerk, whose e-mail address was circulated prior to the meeting. Pursuant to notice, the Com-

mittee meets to consider the following measures. H.R. 4609, the *National Institute of Standards and Technology for the Future Act of 2021*, H.R. 3858, the *National Science and Technology Strategy Act of 2021*, H.R. 4588, the *Regional Innovation Act of 2021*, and H.R. 4606, the *Emerging Technology Transfer Act*, and finally, H.R. 4599, the *Steel Upgrading Partnerships and Emissions Reduction Act*, or *SUPER Act, of 2021*.

Good morning, and welcome to today's markup of five excellent bipartisan bills. All of these bills will help to ensure that our Nation remains a leader in innovation. Importantly, these bills also help to ensure that the whole Nation participates in the innovation economy, and that the whole Nation reaps the economic fruits of that participation. The first bill we will take up today is Representative Stevens and Waltz's *National Institute of Standards and Technology for the Future Act*, and I'm proud to co-sponsor this bill, and I want to thank my colleagues on both sides of the aisle for their thoughtful engagement and enthusiastic support for this critical agency.

The *NIST for the Future Act* is a comprehensive 5 year reauthorization for the agency. These accounts fund important measures, measurements, and technology research, as well as NIST's (National Institute of Standards and Technology's) instrumental manufacturing programs. The bill would also support NIST's infrastructure needs at a time when many of its buildings are in poor to critical condition. In total, the legislation authorizes $7.9 billion over 5 years, allowing for growth that is both ambitious and sustainable. These investments are necessary to support a critical Federal agency charged with helping to advance U.S. competitiveness and innovation.

The next bill that we will consider is H.R. 3858, the *National Science and Technology Strategy Act of 2021*. I want to thank Representative Waltz and Ross for their work on this legislation. This bill directs the White House Office of Science and Technology Policy, or OSTP, to undertake a comprehensive review of the Nation's innovation landscape. The bill also directs OSTP to use this analysis to develop a national science and technology strategy.

The next bill that we will be considering is H.R. 4588, the *Regional Innovation Act of 2021*. I want to thank my colleagues, Representative Wild and Baird, for their important work on this legislation. Over the last 2 decades, much of the science and technology funding and capacity in this country has been concentrated in a few cities and regions. This bill would establish programs at both the Commerce and Energy Departments to address this imbalance. It would create more shared prosperity from our Federal R&D (research and development) dollars by creating regional technology and innovation hubs across the country.

And next we will consider H.R. 4606, the *Emerging Technology Transfer Act*. This bill is an updated version of a bipartisan bill that I and Representative Fleischmann introduced last year. It authorizes programs and funding to support the Department of Energy (DOE) technology transfer activities. These activities are critical to bringing the fruits of our public investment in clean energy research, development, and demonstration projects into the hands of America's communities. The bill also includes provisions to sup-

port the next generation of innovators, inventors, and entrepreneurs, and I want to thank Congresswoman Ross and Congressman Meijer for leading this important piece of legislation.

The last bill on the roster today is the *Steel Upgrading Partnerships and Emissions Reduction Act*, which is sponsored by Representative Gonzalez and Representative Lamb. This bill authorizes a program at the Department of Energy to advance technologies that will help reduce emissions from the steel manufacturing sector, allowing American steel manufacturers access to advanced and innovative technologies will ensure that the domestic steel manufacturing industry will remain competitive through the 21st century.

I look forward to a productive markup today, and I now recognize our Ranking Member, Mr. Lucas, for his opening remarks.

[The prepared statement of Chairwoman Johnson follows:]

Good morning, and welcome to today's markup of 5 excellent bipartisan bills. All of these bills will help to ensure that our Nation remains a leader in innovation. Importantly, these bills also help to ensure that the whole Nation participates in that innovation economy, and that the whole Nation reaps the economic fruits of that participation.

The first bill we will take up today is Representatives Stevens' and Waltz's *National Institute of Standards and Technology for the Future Act*. I am proud to cosponsor this bill, and I want to thank my colleagues on both sides of the aisle for their thoughtful engagement and enthusiastic support for this critical agency. The *NIST for the Future Act* is a comprehensive 5 year reauthorization for the agency.

These accounts fund important measurement and technology research, as well as NIST's extramural manufacturing programs. The bill would also support NIST's infrastructure needs at a time when many of its buildings are in poor to critical condition. In total, the legislation authorizes $7.9 billion over 5 years, allowing for growth that is both ambitious and sustainable. These investments are necessary to support a critical federal agency charged with helping to advance U.S. competitiveness and innovation.

The next bill that we will consider is H.R. 3858, the *National Science and Technology Strategy Act of 2021*. I want to thank Representatives Waltz and Ross for their work on this legislation. This bill directs the White House Office of Science and Technology Policy, or OSTP, to undertake a comprehensive review of the Nation's innovation landscape. The bill also directs OSTP to use this analysis to develop a national science and technology strategy.

The next bill that we will be considering is H.R. 4588, the *Regional Innovation Act of 2021*. I want to thank my colleagues, Representatives Wild and Baird, for their important work on this legislation. Over the last few decades, much of the science and technology funding and capacity in this country has been concentrated in a few cities and regions. This bill would establish programs at both the Commerce and Energy Departments to address this imbalance. It will create more shared prosperity from our federal R&D dollars by creating regional technology and innovation hubs across the country.

Next we will consider H.R. 4606, the *Energizing Technology Transfer Act*. This bill is an updated version of a bipartisan bill that I and Representative Fleischmann introduced last year.It authorizes programs and funding to support Department of Energy technology transfer activities. These activities are critical to bringing the fruits of our public investments in clean energy research, development, and demonstration projects into the hands of America's communities. The bill also includes provisions to support the next generation of inventors and entrepreneurs, and I want to thank Congresswoman Ross and Congressman Meijer for leading this important piece of legislation.

The last bill on the roster today is the *Steel Upgrading Partnerships and Emissions Reduction Act* which is sponsored by Representative Gonzalez and Representative Lamb. This bill authorizes a program at the Department of Energy to advance technologies that will help reduce emissions from the steel manufacturing sector.

Allowing American steel manufacturers access to advanced and innovative technologies will ensure that the domestic steel manufacturing industry will remain competitive through the 21st Century.

I look forward to a productive markup today.

Mr. LUCAS. Thank you, Chairwoman Johnson, for holding today's markup. The bills we're considering today are a continuation of the important and bipartisan work we've been doing on American scientific competitiveness. Last month the House overwhelmingly passed our legislation to redouble our investments in the National Science Foundation and the Department of Energy Office of Science. These bills are the cornerstones of our blueprint to buildup America's research and technology enterprise. Today we're filling out the blueprint with the rest of the elements needed to shore up the Nation's technological success. First among those is reauthorizing the National Institute of Standard and Technology.

NIST is the most important government agency that most Americans have never heard of. As industry's laboratory, NIST's work to promote U.S. innovation supports roughly half of our gross domestic product. NIST gives businesses the measurement science, standards, and guidance they need to produce exceptional products that can be globally competitive. The *NIST for the Future Act* invests in the emerging technologies needed to drive progress, including cybersecurity, quantum sciences, artificial intelligence (AI), and advanced manufacturing. It also prioritizes scientific and technical research services, expands our support for American manufacturers, and upgrades outdated NIST facilities. Finally, it prioritizes our participation and leadership in international standard-setting bodies. As new technologies grow and spread, it's critical that we are able to influence the standards and specifications that guide their development. This investment in NIST will go far to support American competitiveness, and expand the resources available to American businesses. I want to thank Chairwoman Johnson, Chairwoman Stevens, and Ranking Member Walsh for working with me on this important bill.

Next we'll consider the *National Science and Technology Strategic Act* by Representative Waltz. This bill creates a strategic whole of government approach to research and development, ensuring better coordination between Federal agencies, and a more strategic plan for achieving U.S. research and development goals. Additionally, the bill requires the President to submit an annual report to Congress on national research priorities and activities, as well as global trends in science and technology, including potential threats to U.S. scientific leadership. A competitive, strategic approach to American research and development is more important now than ever, especially as we pass legislation to increase our investments in our Federal scientific enterprise. This bill ensures we are regularly reviewing and updating our research priorities so we're maximizing taxpayer dollars, and investing in the most critical areas of technological advancement.

Following that, we'll debate H.R. 4588, the *Regional Innovation Act*. This bill establishes innovation hubs across the country, ensuring technological development isn't limited solely to the coasts. I talk a lot about the value of taking advantage of talent across America, and giving diverse communities a chance to contribute to

important scientific work. This bill guarantees that we build out our technological capacity as we are driving innovation in geographically diverse areas, with at least 1/3 of the newly created regional innovation hubs in rural or underserved areas.

Next up is H.R. 4606, the *Energizing Technology Transfer Act.* This legislation is an important complement to the *DOE Science for the Future Act* because it helps turn the discoveries we make from basic research into useful technologies that private—the private sector can commercialize. Finally, we'll consider H.R. 4599, the *Steel Upgrading Partnerships and Emissions Reduction Act*, or the *SUPER Act*, for short. This bill is from Representatives Anthony Gonzalez and Conor Lamb, will support R&D into clean steel production use. This will help reduce carbon emissions, while supporting American manufacturing and production.

Together, these five bills address key components of American competitiveness. They were all developed with extensive stakeholder input through a bipartisan process. They're all intended to catalyze our scientific growth. The threat we face from China is real, and growing every day. It threatens American jobs, cybersecurity, and national security. But our plan to ensure our competitiveness is not about top-down planning, like the Communist Chinese Party (CCP). It's about coordinating our own strengths, bringing together all Federal agencies, and all sectors of the U.S. innovation economy together, to coordinate and ensure that the oxen are pulling the cart in the same direction.

The bills we're considering today, along with the *NSF for the Future Act*, and *DOE Science for the Future Act*, represent a thoughtful vision for American science and technology development that is strategic, comprehensive, and, importantly, workable. I'm very proud of the work this Committee and our staff has done, and I'd like to thank all my colleagues, particularly Chairwoman Johnson, for the work that went into these bills. I'm eager to mark them up today and pass them out of Committee. I believe we have a strong starting point for a competitive legislative package on American competitiveness, and I look forward to finalizing our policies into law. And with that, I yield back, Madam Chair.

[The prepared statement of Mr. Lucas follows:]

Thank you, Chairwoman Johnson, for holding today's markup. The bills we're considering today are a continuation of the important and bipartisan work we've been doing on American scientific competitiveness.

Last month, the House overwhelmingly passed our legislation to redouble our investment in the National Science Foundation and the Department of Energy Office of Science. These bills are the cornerstones of our blueprint to build up America's research and technology enterprise. Today we're filling out that blueprint with the rest of the elements needed to shore up our nation's technological success. First among those is reauthorizing the National Institute of Standards and Technology (NIST).

NIST is the most important government agency that most Americans have never heard of. As "industry's laboratory," NIST's work to promote U.S. innovation supports roughly half of our gross domestic product. NIST gives businesses the measurement science, standards, and guidance they need to produce exceptional products that can be globally competitive.

The *NIST for the Future Act* invests in the emerging technologies needed to drive progress, including cybersecurity, quantum sciences, artificial intelligence, and advanced manufacturing. It also prioritizes scientific and technical research services, expands our support for American manufacturers, and upgrades outdated NIST facilities. Finally, it prioritizes our participation and leadership in international standards-setting bodies. As new technologies grow and spread, it's critical that we

are able to influence the standards and specifications that guide their development. This investment in NIST will go far to support American competitiveness and expand the resources available to American businesses. I want to thank Chairwoman Johnson, Chairwoman Stevens, and Ranking Member Waltz for working with me on this important bill.

Next up we'll consider the *National Science and Technology Strategy Act* led by Ranking Member Waltz. This bill creates a strategic, whole-of-government approach to research and development, ensuring better coordination between federal agencies and a more strategic plan for achieving U.S. research and development goals. Additionally, the bill requires the President to submit an annual report to Congress on national research priorities and activities, as well as global trends in science and technology, including potential threats to U.S. scientific leadership. A comprehensive, strategic approach to American research and development is more important now than ever, especially as we pass legislation to increase our investments in our federal scientific enterprise. This bill ensures we are regularly reviewing and updating our research priorities so we're maximizing taxpayer dollars and investing in the most critical areas for technological advancement.

Following that, we'll debate H.R. 4588, the *Regional Innovation Act*. This bill establishes innovation hubs across the country, ensuring technological development isn't limited solely to the coasts. I talk a lot about the value of taking advantage of talent across America and giving diverse communities a chance to contribute to important scientific work. This bill guarantees that as we build out our technical capacity, we are driving innovation in geographically diverse areas, with at least one-third of the newly created regional innovation hubs in rural or under-served areas.

Next up is H.R. 4606, the *Energizing Technology Transfer Act*. This legislation is an important complement to the *DOE Science for the Future Act* because it helps turn the discoveries we make from basic research into useful technologies that the private sector can commercialize.

Finally, we'll consider H.R. 4599, the *Steel Upgrading Partnerships and Emissions Reduction Act*, or the SUPER Act for short. This bill, from Representatives Anthony Gonzalez and Conor Lamb, will support R&D into clean steel production and use. This will help reduce carbon emissions while supporting American manufacturing and production.

Together, these five bills address key components of American competitiveness. They were all developed with extensive stakeholder input through a bipartisan process, and they're all intended to catalyze our scientific growth.

The threat we face from China is real and growing every day. It threatens American jobs, cybersecurity, and national security. But our plan to ensure our competitiveness is not about top-down planning, like the Chinese Community Party. It's about coordinating our own strengths—bringing together all federal agencies, and all sectors of the U.S. innovation economy together to coordinate and ensure the oxen are pulling the cart in the same direction. The bills we are considering today, along with the *NSF for the Future Act* and *DOE Science for the Future Act*, represent a thoughtful vision for American science and technology development that is strategic, comprehensive, and—importantly—workable.

I'm very proud of the work this Committee and our staff have done. I'd like to thank all of my colleagues—particularly Chairwoman Johnson—for the work that went into these bills. I'm eager to mark them up today and pass them out of Committee. I believe we have a strong starting point for a comprehensive legislative package on American competitiveness, and I look forward to finalizing our policies into law.

Next we will now consider H.R. 4588, the *Regional Innovation Act of 2021*, and the Clerk will report the bill.

The CLERK. H.R. 4588, 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.

[The bill follows:]

.....

(Original Signature of Member)

117TH CONGRESS
1ST SESSION

H. R. _____

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

Ms. WILD introduced the following bill; which was referred to the Committee on _____

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. 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 Environment 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 same meaning given to the term 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 an 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 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)).

"(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, nonprofit or-

ganizations, 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, in order—

"(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;

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

"(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) financial institutions and investment funds;

"(E) primary and secondary educational institutions, including career and technical education schools;

"(F) National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801));

"(G) Federal laboratories;

"(H) Manufacturing extension centers;

"(I) Manufacturing USA institutes;

"(J) transportation planning organizations;

"(K) a cooperative extension services; and

"(L) 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 technology 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 nec-

essary 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 regional 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 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 capital networks and consortia to attract necessary private funding to businesses and entrepreneurs in the region.

"(iv) The development of networks for business and entrepreneur mentorship.

"(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 technologies by private sector, academic, nonprofit, and other entities.

"(iv) Activities to provide or ensure access to capital for new business formation and business expansion, including by attracting new private, public, and philan-

thropic investment and by establishing regional venture and loan funds.

"(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 subparagraph (j).

"(C) FLEXIBLE APPROACH.—In renewing a grant or cooperative agreement under subparagraph (B), the Secretary and 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 rep-

resentation 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, and creating new economic opportunities for economically disadvantaged and underrepresented populations.

"(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, Manu-

facturing 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 to commercialize new technologies and improve the resiliency 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, including community colleges, historically Black colleges and universities, Tribal colleges and universities, and minority serving institutions, labor organizations, and 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 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 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 housing stock and housing policies;

"(B) local and regional transportation systems;

"(C) Hhigh speed internet access; and

"(D) primary and secondary education.

"(10) 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.

"(11) 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 activities 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 manu-

facturing 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;

"(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 in, 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 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;

"(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 interim 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 conducted by the Secretary under paragraph (1)(C) during 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 cooperative agreements under subsection (e) for the period of fiscal years 2022 through 2026;

"(2) $2,000,000,000 to award grants and cooperative agreements under subsection (f) for the period of fiscal years 2022 and 2023; and

"(3) $4,800,000,000 to award grants and cooperative 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 under subsection (d)(1) of section 28 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 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 applica-

tion under subsection (g) of section 28 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3723) from an eligible consortium whom the Secretary considers suitable for designation under subsection (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 regional 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 per-

form 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) an organization focused on clean energy technology innovation or entrepreneurship;

"(J) a business accelerator or incubator;

"(K) a private sector entity or group of entities, including a trade or industry association;

"(L) an economic development organization;

"(M) a manufacturing facility or organization;

"(N) a clean energy incubator or accelerator;

"(O) a multi-institutional collaboration; or

"(P) any other entity that the Secretary determines to be relevant.

"(3) DEPARTMENT.—The term 'Department' means the Department of Energy.

"(4) PROGRAM.—The term 'program' means the Regional Clean Energy Innovation Program authorized in subsection (b).

"(5) The term 'Secretary' means the Secretary of the Department of Energy.

"(b) IN GENERAL.—The Secretary shall establish a Regional Clean Energy Innovation Program, a research, 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 sustaining activities of the regional clean energy innovation partnership after funds received under this program have been expended; and

"(H) 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 fromrural, 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 Secretary 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;

"(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 Innovation 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);

"(D) the Defense Manufacturing Communities Support Program under section 846 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2501 note); and

"(E) the Office of Economic Adjustment at the Department of Defense.

"(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.".

Chairwoman JOHNSON. Without objection, the bill is considered as read, and open to amendments. Does anyone wish to be recognized to speak on the underlying bill?

Ms. WILD. I do, Madam Chair.

Chairwoman JOHNSON. Ms. Wild.

Ms. WILD. Thank you, Madam Chair. Last week I was joined by my Science Committee colleagues, Representatives Baird, Bowman, and Gonzalez, in introducing H.R. 4588, the *Regional Innovation Act of 2021*. This bipartisan bill is an important piece of the Science Committee's contribution to a larger competitiveness package that will create good paying jobs across the country in communities like mine, Pennsylvania 7.

In recent decades our high-tech industries, and the economic growth they bring, have become increasingly concentrated in a relatively small number of cities and regions. A 2019 report from the Brookings Institute found that nearly a third of the total high paying technology jobs in the U.S. are concentrated in just 16 counties. In the 4 decades since 1980 the top 10 metro areas in the country saw their earnings grow by nearly 60 percent more than everywhere else in the country.

For the United States to remain globally competitive, we must address this geographic imbalance in economic growth. By promoting shared prosperity in the gains from science and technology funding, and the industries of the future, we can also address some of the root causes of the increasing social and economic disparities in our country. And, by looking to the skills and creativity of researchers, entrepreneurs, and workers in areas like the Greater Lehigh Valley, my home district, we can secure our Nation's leadership in pressing needs like semiconductors, cybersecurity, and advanced manufacturing with a Made in America approach.

A number of our Federal agencies have long been supporting programs to boost the innovation capacity of cities and regions across the country. However, as economic growth has become more concentrated, so too have Federal R&D dollars. I was pleased to see President Biden include a bold new initiative in the American Jobs Plan to expand the geographic diversity of U.S. innovation. The Senate included a thoughtfully developed authorization for this proposal in the *U.S. Innovation and Competitiveness Act*. The legislation we are considering today builds upon the Senate proposal, with a bigger focus on inclusion and shared prosperity in underserved communities across the Nation.

H.R. 4588 would authorize a program at the Department of Commerce to designate and support regional technology and innovation hubs across the country. It would use a merit-based competitive process to bring together consortia consisting of local and State governments, universities, industry, labor organizations, and other groups to promote innovation in a region tailored to that region's strengths and opportunities. The program would include funding for both planning and implementation of regional strategies. The legislation focuses on four types of activities, workforce development, technology maturation, entrepreneurship support, and infrastructure. Importantly, the legislation ensures that voices that have often been left behind in the innovation economy have a real

seat at the table for both planning and implementation. A total of $6.85 billion over 5 years is authorized for this program.

H.R. 4588 would also create a Regional Clean Energy Innovation Program at the Department of Energy to link regional economic development with clean energy innovation activities. A total of $250 million over 5 years is authorized for this program. The legislation ensures that the programs at the two agencies are well coordinated with each other, and with Federal programs focused on manufacturing. I want to thank the many individuals and organizations who provided thoughtful input to this legislation. I also want to thank my colleagues for the good amendments they will offer today to further strengthen the bill. I urge my colleagues to support this bipartisan bill, and I yield back. Thank you.

Chairwoman JOHNSON. Thank you. Any further requests for time? Mr. Baird.

Mr. BAIRD. Hello, and good morning, Chairwoman Johnson, the Ranking Member Lucas, and all the other Members of this Committee. Last week I was proud to join my colleagues and introduce H.R. 4588, the Regional Innovation Act, which is a bipartisan effort to support regional innovation hubs all across the United States. And in order to strengthen America's status as a world leader in innovation, we must invest in the future and eliminate economic roadblocks that stand in the way of progress.

Our legislation establishes a new grant program within the Economic Development Association for regional innovation to create planning grants for innovation hubs and Phase 1 and 2 awards to create innovation ecosystem hubs. These would exist in a partnership with State, local, and regional governments, and educational institutions like Purdue University, in creating and sustaining research hubs. I've recently spent time back home in my district visiting with Hoosiers who are excelling in their innovations and their ideas. Programs like this would benefit them, and so many others, who would receive connections and support from these hubs, even while they're located in rural America.

The State of Indiana has earned a national reputation for its innovation, and I'm proud to introduce legislation that supports the continuation of Hoosier ingenuity and domestic advancement across the United States. And with that, I yield back.

Chairwoman JOHNSON. Thank you. Any further requests for time? Ms. Stevens? Ms. Stevens is recognized.

Ms. STEVENS. Madam Chair, I move to strike the last word.

Chairwoman JOHNSON. You're recognized.

Ms. STEVENS. Thank you. I'd like to take a few moments to applaud my colleagues, Congresswoman Wild and Congressman Baird, for their leadership on our *Regional Innovation Act of 2021*. This is a step in the right direction for our country, and will exercise some of the existing assets and programmatic activities within the Department of Commerce to ensure that we are developing, and innovating, and promoting intentional regional economic development strategies across this country.

As a former EDA (Economic Development Administration) official, and someone who has seen similar programs in action, and has also helped to work with on the ground stakeholders, I know the importance of these programs all too well, and both of my col-

leagues were right to talk about their home region, their home district. In Michigan we share a very similar story with our regional assets, and as stakeholders back home heard about the coming of this legislation, they started e-mailing and saying how can we get qualified to become a regional innovation hub for our technology, our advanced manufacturing, for automotive, and the diversification that comes within this industry?

And so I do urge my colleagues to all come together and support this legislation. It is bipartisan. It is certainly syncing up with the moment we find ourselves in, a lot of the fact-finding that we got from stakeholders around this country, which is saying, hey, we don't want to leave people behind. We don't want to overlook any of the innovation capacity potential of this country. And by making it competitive, right—it's not top down, it's bottom up—this really will position our country for success, and allow us to compete globally, and to continue to create the jobs of today and tomorrow.

So, again, with that, I really do want to applaud Congresswoman Wild for her leadership, and Congressman Baird for his, and urge my colleagues to vote yes. Thank you, and I yield back.

Chairwoman JOHNSON. Thank you very much. Any further requests to time? We will now proceed with amendments. The first amendment on the roster is a manager's amendment being offered by myself. The Clerk will report the amendment.

The CLERK. Amendment No. 1, amendment to H.R. 4588 offered by Ms. Johnson.

[The amendment of Chairwoman Johnson follows:]

AMENDMENT TO H.R. 4588

OFFERED BY Ms . Johnson

Page 2, in the table of contents, strike the item relating to section 2 and insert the following:

Sec. 2. Regional Innovation Capacity.

Page 3, beginning line 3, strike "has the same meaning given to the term" and insert "has the meaning given the term "part B institution' ".

Page 4, line 13, strike "(7) MINORITY SERVING INSTITUTION" and insert "(7) Minority-serving institution".

Page 4, line 14, strike the quotation mark after "institution".

Page 4, line 20, strike "section 371" and insert "section 371(a)".

Page 6, beginning on line 10, strike ", in order".

Page 6, line 25, insert "and" after the semicolon.

Page 7, strike line 4.

Page 8, line 4, strike "Minority Serving Institutions" and insert "minority-serving institutions".

Page 9, beginning line 8, amend subparagraph (E) to read as follows:

(E) 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 (20 U.S.C. 2302));

Page 11, beginning line 2, strike "minority serving institutions" and insert "minority-serving institutions".

Page 16, line 12, insert "local and" before "regional businesses".

Page 16, line 19, insert "local and regional" before "capital".

Page 16, line 23, insert "local and regional" before "networks".

Page 18, line 1, insert "local and" before "regional venture".

Page 19, line 12, insert "the" before "eligible".

Page 19, line 9, strike "subparagraph" and insert "subsection".

Page 24, line 7, insert "and sustainability" before "of domestic supply chains".

Page 24, line 17, strike "minority serving institutions" and insert "minority-serving institutions".

Page 25, line 20, insert "affordable" before "housing stock".

Page 25 line 24, strike "Hhigh speed" and insert "high speed".

Page 28, line 17, strike "in".

Page 30, line 19, insert "and sustainability" before "of a supply chain".

Page 36, strike lines 10 and 11.

Page 36, line 12, strike "(4)" and insert "(3)".

Page 36, strike lines 15 and 16.

☒

Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading. Without objection, so ordered. And I recognize myself for 5 minutes to explain the amendment.

This manager's amendment makes several technical and conforming changes to the bill. It also adds necessary context to certain terms used throughout the bill. I urge my colleagues to support this amendment. Is there further discussion? Ms. Bonamici.

Ms. BONAMICI. Thank you, Chairwoman Johnson. I move to strike the last word.

Chairwoman JOHNSON. You're recognized for 5 minutes.

Ms. BONAMICI. Thank you. Many of the effects of the climate crisis are regional, which is why we need regional solutions. In Northwest Oregon, for example, we recognize the tremendous potential of marine energy, but those same resources are not accessible in landlocked States. Regions differ in energy resources, markets, and innovation ecosystems. Federally funded research and development has not always reflected State and regional capabilities and market needs.

To successfully deploy clean energy resources on a massive scale no later than mid-century, and to reduce greenhouse gas emissions, we must harness and align local, State, tribal, regional, and national solutions. Federal investment should help connect regional governments with academia, businesses, and clean energy stakeholders to help clean energy innovation in the post-research stage thrive on a regional scale and meet market needs.

In 2016 the National Academies of Sciences, Engineering, and Medicine released a report highlighting the value of regional partnerships to advance clean energy development and commercialization. The report called for Regional Energy Innovation and Development Institutes, or REIDIs, and, as the reports states, to spur the development of both early stage innovations and innovations that show appropriate promise. As part of Mission Innovation the Obama Administration had proposed funding to support regional clean energy innovation partnerships. Last year I introduced my *Regional Clean Energy Innovation Act* to build on these recommendations. I look forward to working with Congresswoman Wild, and Chairwoman Johnson, and all of our colleagues to incorporate some of the provisions from my bill in the *Regional Innovation Act of 2021* as it advances as part of the larger competitiveness package.

Our transition to a clean energy economy will require a coordinated and sustained Federal investment in innovation, and I'm pleased that this Committee is taking an important step in advancing those goals with this bill today. I'd like to thank Congresswoman Wild, Chairwoman Johnson, Ranking Member Lucas, and Representative Baird for their leadership. I urge my colleagues to support this bill. I look forward to working with them as it moves forward, and I yield back the balance of my time.

Chairwoman JOHNSON. Thank you. Any further discussion? If there's no further discussion, the vote occurs on the amendment. All those in favor say aye. Those opposed, say no. The ayes have it, and the amendment is agreed to.

The next amendment on the roster is an amendment offered by the gentleman from New York, Mr. Bowman. He's recognized to offer his amendment.

Mr. BOWMAN. Madam Chair, I have an amendment at the desk.

Chairwoman JOHNSON. The Clerk will report the amendment.

The CLERK. Amendment No. 2, amendment to H.R. 4588 offered by Mr. Bowman of New York.

[The amendment of Mr. Bowman follows:]

AMENDMENT TO H.R. 4588

OFFERED BY MR. BOWMAN OF NEW YORK

Page 5, after line 14, add the following:

"(12) COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION.—The term 'community development financial institution' has the meaning given in section 103 of the Community Development Banking and Financial Institutions Act of 1994 (12 U.S.C. 4702).

"(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.".

Page 5, line 24, insert "worker cooperative membership associations, state or local employee ownership and cooperative development centers," after "labor organizations,"

Page 9, after line 5, insert the following (and redesignate subsequent subparagraphs accordingly):

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

Page 9, line 7, strike "funds" and insert "funds, including community development financial institutions and minority depository institutions".

Page 16, after line 24, insert the following:

"(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.".

Page 17, line 22, insert "and cooperative" after "business".

Page 17, line 23, insert "or preservation of existing businesses through conversion to employee ownership and cooperatives," after "expansion,".

Page 18, line 2, strike "funds" and insert "funds, community development financial institutions, and minority depository institutions".

Page 23, line 21, strike "populations" and insert "populations, promoting employee and worker ownership, and advancing models of local and cooperative economic development that build and retain wealth in the region".

Page 24, line 6, insert "and cooperatives, and employee-owned businesses and cooperatives" after "businesses".

Page 24, line 18, strike "and workforce development programs" and insert "worker cooperative membership associations, state or local employee ownership and coop-

erative development centers, and workforce development programs,".

Page 25, beginning on line 5, strike "organizations" and insert "organizations, community development financial institutions and minority depository institutions,".

Page 25, after line 12, insert the following (and redesignate subsequent paragraphs accordingly):

"(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.".

Page 27, line 19, strike "hub" and insert "hub, and relevant interagency initiatives such as the Interagency Working Group for Cooperative Development".

Page 31, line 3, strike "formation" and insert "formation, including the number of businesses created or preserved through employee ownership and cooperative development;".

Page 35, after line 20, insert the following (and redesignate subsequent subparagraphs accordingly):

"(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;".

Page 40, after line 14, insert the following (and redesignate subsequent subparagraphs accordingly):

"(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;".

Page 43, beginning on line 16, strike "partnership" and insert "partnership, including those created or preserved through employee ownership and cooperative development".

Page 45, line 11, strike "and".

Page 45, line 13, strike the period and insert "; and".

Page 45, after line 13, insert the following:

"(F) Rural Development at the United States Department of Agriculture.".

Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading. Without objection, so ordered. I recognize the gentleman for 5 minutes to explain his amendment.

Mr. BOWMAN. Thank you, Madam Chair. I want to begin by thanking Representatives Wild and Baird for introducing this incredibly important piece of legislation. As we tackle the challenges of the 21st century, our collective innovation and ingenuity can take us to new heights as a nation, and there is no doubt that in the process we will create jobs and build wealth in every community in the United States. But we also need to be intentional about how and where we support the research and industries that are going to set us up for success. We need to devote special attention to unlocking the brilliant potential of communities that have been left behind, whether it's small rural communities that are suffering from depopulation and neglect, or formerly redlined parts of our cities that are struggling with disinvestment.

The *Regional Innovation Act of 2021* is based on that understanding, and it will allow us to create technology hubs across the country that serve the needs of all people, and the planet we share. At the same time, each one will be designed to meet the unique local needs of its community. An innovation hub would be transformative for districts like mine, New York 16th, where pockets of poverty are as high as 30 percent, and where we also have a growing network of green energy entrepreneurs of color.

Building community wealth is a key goal of this bill, and my amendment seeks to reinforce that goal in a few different ways. If we want to democratize our economy, and create new industries in a way that brings everyone in, one of the best ways to do so is to put employees in the driver's seat by giving them ownership and decisionmaking stakes in the companies where they invest their time and talent. My amendment encourages that model, as well as cooperative business in general.

We should also seize the opportunity to create entire ecosystems of small business around these technology hubs so that the hubs are genuine anchors of their communities. My amendment clarifies that local procurement is a crucial tool in this regard, and that mission-oriented financial institutions like CDFIs (community development financial institutions) and minority lenders can play an important role in supporting such business ecosystems.

Finally, in offering this amendment, I am pleased to find common ground with my colleagues across the aisle, as well as those who represent rural communities. From rural electric co-ops to farmer cooperatives, some of the most exciting examples of economic democracy come from rural parts of the country, and my amendment highlights that expertise. I urge and encourage my colleagues to support this amendment. Thank you, and I yield back.

Chairwoman JOHNSON. Thank you. Any further discussion on the amendment? Hearing none, the vote then occurs on the amendment. All those in favor say aye. Those opposed say no. The ayes have it, and the amendment is agreed to.

The next amendment on the roster is an amendment offered by the gentlelady from New Mexico, and she is recognized to offer her amendment. Ms. Stansbury.

Ms. STANSBURY. Thank you, Madam Chair. I have an amendment at the desk.

Chairwoman JOHNSON. Clerk will report the amendment.

The CLERK. Amendment No. 3, amendment to H.R. 4588 offered by Ms. Stansbury.

[The amendment of Ms. Stansbury follows:]

AMENDMENT TO H.R. 4588

OFFERED BY MS. STANSBURY

Page 47, after line 7, insert the following:

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 practitioners, 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) and 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;

(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 subsection (c), the Secretary shall be given access to all information, data, or reports that the Secretary determines necessary to carry out this Section by any Federal agency upon written request and subject to any statutory or regulatory 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 fiscal years 2022 through 2026.

Page 2, in the table of contents, after the matter relating to section 4, insert the following:

Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading. Without objection, so ordered. I recognize the gentlelady for 5 minutes to explain her amendment.

Ms. STANSBURY. Thank you, Madam Chair. I want to start by thanking Representatives Wild and Baird for this important bill to boost the innovation capacities of cities and regions across the country. Initiatives such as these are essential to advancing U.S. competitiveness, however, I am concerned that the United States lacks the fundamental data infrastructure and analytical capacity to ensure that the critical technology investments, such as those in this bill, really realize our national goals and potential.

As this Committee heard from Dr. Erica Fuchs during her testimony during a Research and Technology Subcommittee hearing in June, inadequate data and analytic capacity has weakened our decisionmaking regarding critical technologies, supply chains, and infrastructure. While existing surveys, such as the annual survey of manufacturers, provide yearly glimpses of U.S. capabilities, these surveys are not hopeful when tracking supply chains during a rapidly evolving crisis, such as the COVID–19 pandemic. We also lack the mechanisms to track the flow of capital into and out of communities across the country, and most of all we lack a full picture of the Nation's R&D initiatives. This amendment ensures and establishes a new data analytics program at the Department of Commerce focused on critical technology, innovation, and production capacity.

The program would serve as a Federal clearinghouse for the collection, analysis, and dissemination of data, and, furthermore, it would support national policy and decisionmaking in the public and private sector to ensure that the U.S. remains the global leader in technology and innovation sectors. This amendment authorizes $100 million over 5 years to accomplish this task, and give the Secretary flexibility to integrate it into existing data capabilities at the Department, rather than creating duplicative administrative functions.

The need for intellectual foundations, data infrastructure, and analytics to support technology decisionmaking is growing. The opportunities to leverage these technologies to address our needs as a nation, and the challenges, is also growing. Developing such a data and analytics capacity will support the Regional Innovation Initiative authorized in the underlying bill, and it will support science and technology investments across the Federal Government. If the U.S. is to remain competitive, we must analyze and understand the factors that enable our competitiveness, and I urge my colleagues to support this amendment. And with that, Madam Chair, I yield back. Thank you.

Chairwoman JOHNSON. Thank you very much. Any further requests for time on this amendment? There's no further discussion, the vote occurs on the amendment. All those in favor say aye. Opposed say no. The ayes have it, and the amendment is agreed to.

If there are no further amendments, a reporting quorum is being present, I move that the Committee on Science, Space, and technology report H.R. 4588, as amended, to the House, with the recommendation that the bill be approved. Those in favor of the mo-

tion will signify by saying aye. Those opposed say no. The ayes have it, and the bill is reported favorably.

Without objection, the motion to reconsider is laid on the table, and I ask unanimous consent that staff be authorized to make any necessary technical and conforming changes to the bill. Without objection, so ordered. Members will have 2 subsequent calendar days in which to submit supplementary, minority, or additional views on the measure.

XXI. MINORITY VIEWS

It is the additional view of the minority that the activities authorized in this Act should be funded through the annual appropriations process, and that funding those activities should be balanced with the other innovation priorities of the Economic Development Administration (EDA) and the other agencies and programs of the Department of Commerce. The minority also recognizes that additional administrative capacity at the EDA will likely be required to carry out a new program of this size and scope, and that the Department should appropriately staff the EDA and scale up the programs to ensure they are adequately managed and effectively carried out.

REP. FRANK LUCAS,
Ranking Member.

○