

117TH CONGRESS
1ST SESSION

H. R. 5555

To establish a manufacturing cluster program, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 12, 2021

Mr. DELGADO (for himself and Mr. RODNEY DAVIS of Illinois) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science, Space, and Technology, and Armed Services, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To establish a manufacturing cluster program, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; SENSE OF CONGRESS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Manufacturing American Dynamism in Entrepreneur-
6 ship and Harnessing Education to Retool Employees Act”
7 or the “MADE HERE Act”.

8 (b) SENSE OF CONGRESS.—It is the sense of Con-
9 gress that—

1 (1) a strong domestic manufacturing base is a
2 national security priority and advances in manufac-
3 turing technology, workforce development, and sup-
4 ply chains contribute to the resilience of the defense
5 industrial base;

6 (2) the manufacturing workforce is aging with
7 no new generation rising up to replace them;

8 (3) the median age of manufacturing workers is
9 above average and rising at a higher rate than the
10 general workforce;

11 (4) this is a national security threat, as well as
12 a threat to the economic prosperity of the United
13 States;

14 (5) there is a shortage of manufacturing and
15 technology educators;

16 (6) there are many workers with some technical
17 or manufacturing skills who are unemployed or un-
18 deremployed because they lack the right skills or
19 certifications to work in advanced manufacturing;

20 (7) such workers include former employees of
21 low-skilled manufacturing plants that have closed, as
22 well as veterans leaving military service;

23 (8) many manufacturing businesses are using
24 legacy equipment with cyber vulnerabilities and do

1 not have recently trained employees to bring newer
2 equipment online;

3 (9) strengthening the innovation pipeline from
4 fundamental research to technology development to
5 entrepreneurial training can lead to new products,
6 processes, and business models for manufacturers;
7 and

8 (10) expanding the creation and utilization of
9 manufacturing clusters for technology, economic,
10 and workforce development is critical for the future
11 of American competitiveness.

12 **SEC. 2. DEFINITIONS.**

13 In this Act:

14 (1) The term “covered agency” means each of
15 the following Federal agencies:

16 (A) The National Institute of Standards
17 and Technology.

18 (B) The Department of Energy.

19 (C) The Department of Defense.

20 (2) The term “Director” means the Director of
21 the Office of Science and Technology Policy.

22 (3) The term “eligible manufacturing cluster”
23 means a manufacturing cluster that consists of—

1 (A) entities with physical presence in the
2 United States and with majority United States
3 ownership; and

4 (B) at least two of the following:

5 (i) Institutions of higher education.

6 (ii) High schools.

7 (iii) Service member and veteran edu-
8 cation programs carried out by the Sec-
9 retary of Defense.

10 (iv) Private sector companies, includ-
11 ing small- and medium-sized manufactur-
12 ers.

13 (v) Nonprofit organizations, including
14 Labor organizations.

15 (vi) State and local government agen-
16 cies.

17 (vii) Federally funded entities includ-
18 ing the Manufacturing USA Institutes and
19 Manufacturing Extension Partnership, na-
20 tional laboratories, and FFRDC's.

21 (viii) Other entities at the discretion
22 of the Director.

23 (4) The term “manufacturing cluster” means a
24 geographic concentration of companies and institu-
25 tions within a particular field of manufacturing that

1 engage or propose to engage collaboratively in work-
2 force development, technology development, supply
3 chain sourcing, and other activities.

4 **SEC. 3. INTERAGENCY ENTITY.**

5 (a) IN GENERAL.—The Director shall establish or
6 designate an interagency entity (hereinafter referred to as
7 the “entity”) to oversee and coordinate the activities of
8 manufacturing cluster programs at Federal agencies. The
9 entity shall be chaired by the Director of the Office of
10 Science and Technology Policy, the Director of the Na-
11 tional Institute of Standards and Technology, the Sec-
12 retary of Energy, and the Secretary of Defense.

13 (b) MEMBERS.—The entity established under sub-
14 section (a) shall be appointed by representatives of Fed-
15 eral entities and may include representatives of the fol-
16 lowing (or successor entities):

17 (1) The Office of Advanced Manufacturing of
18 the National Institute of Standards and Technology.

19 (2) The Office of the Undersecretary of Defense
20 for Acquisition and Sustainment of the Department
21 of Defense.

22 (3) The Office of the Under Secretary of De-
23 fense for Research and Engineering of the Depart-
24 ment of Defense.

1 (4) The Advanced Manufacturing Office of the
2 Office of Energy Efficiency and Renewable Energy
3 of the Department of Energy.

4 (5) The Center for Devices and Radiological
5 Health of the Food and Drug Administration.

6 (6) The Office of Innovation and Entrepreneur-
7 ship of the Economic Development Administration of
8 the Department of Commerce.

9 (7) The National Science Foundation.

10 (8) The Workforce Investment Boards of the
11 Department of Labor.

12 (9) Not fewer than five State Workforce Invest-
13 ment Boards from geographically diverse regions of
14 the United States.

15 (10) The Office of Career, Technical, and Adult
16 Education of the Department of Education.

17 (11) The Transition Assistance Program of the
18 Department of Veterans Affairs.

19 (12) Representatives of additional entities, as
20 the Director may specify.

21 (c) COORDINATION.—In convening the entity, the Di-
22 rector of OSTP is encouraged to consider overlap and co-
23 ordination with existing committees, subcommittees, or
24 other groups under the National Science and Technology

1 Council such as the Committee on Technology Advanced
2 Manufacturing Subcommittee.

3 (d) DUTIES.—The duties of the entity are the fol-
4 lowing:

5 (1) Developing specific goals and priorities for
6 manufacturing cluster programs based on the Na-
7 tional Strategic Plan for Advanced Manufacturing.

8 (2) Providing guidance to agencies relating to
9 the competitive selection process and selection cri-
10 teria for manufacturing clusters.

11 (3) Facilitating coordination among manufac-
12 turing cluster programs throughout the Federal
13 Government.

14 (4) Providing guidance to, and facilitating best
15 practices sharing among, Federal agencies hosting
16 manufacturing cluster programs on mentoring,
17 training, courses, and other resources provided to
18 clusters.

19 (e) REPORTS.—Beginning one year after the date of
20 the enactment of this Act and triennially thereafter, the
21 entity shall submit to the appropriate committees of Con-
22 gress a report on all manufacturing cluster programs car-
23 ried out pursuant to this Act. Such report shall include—

24 (1) an overview of the activities of the manufac-
25 turing clusters; and

1 (2) an assessment of the progress of such clus-
 2 ters in advancing the goals and priorities developed
 3 by the entity.

4 (f) APPLICATION OF THE FEDERAL ADVISORY COM-
 5 MITTEE ACT.—The Federal Advisory Committee Act (5
 6 U.S.C. App.) shall not apply with respect to the entity.

7 (g) SUNSET.—The entity shall terminate on Decem-
 8 ber 31, 2031.

9 **SEC. 4. MANUFACTURING CLUSTER PROGRAMS.**

10 (a) IN GENERAL.—The head of each covered agency
 11 shall establish a manufacturing cluster program under
 12 which the head of such covered agency, over three distinct
 13 phases described in subsection (d), awards resources and
 14 grants to, or enter cooperative agreements with eligible
 15 manufacturing clusters.

16 (b) SELECTION.—

17 (1) SELECTION CRITERIA.—

18 (A) IN GENERAL.—The head of each cov-
 19 ered agency shall, taking into account guidance
 20 issued by the entity established under section 3,
 21 establish selection criteria for the selection of
 22 resource and grant recipients under the manu-
 23 facturing cluster program established by such
 24 agency. Such criteria shall include—

1 (i) the collaborativeness of the pro-
2 posal, as evidenced by whether the pro-
3 posed activities inherently benefit from col-
4 laboration between two or more member
5 entities in a cluster, such as shared train-
6 ing programs or facilities, collaborative re-
7 search, development, and demonstration,
8 or shared supply chain development;

9 (ii) the innovativeness of the idea, as
10 determined by the review panel under
11 paragraph (2);

12 (iii) the ability of the cluster to carry
13 out the proposal;

14 (iv) the impact of the proposed activ-
15 ity on the local, regional, and national
16 manufacturing economy and workforce;

17 (v) the sustainability and long-term
18 impact of the proposed cluster; and

19 (vi) the degree to which the proposal
20 aims to leverage, coordinate with, and is
21 strategically aligned with ongoing efforts,
22 such as—

23 (I) voluntary education programs
24 of the Department of Defense under

1 part 68 of title 32, Code of Federal
2 Regulations;

3 (II) Manufacturing USA Insti-
4 tutes;

5 (III) Manufacturing Extension
6 Partnerships initiatives, including the
7 State Policy Academy;

8 (IV) the Investing in Manufac-
9 turing Communities Partnership sites;

10 (V) the Manufacturing Tech-
11 nology Program of the Department of
12 Defense established under section
13 2521 of title 10, United States Code;

14 (VI) State workforce investment
15 programs; and

16 (VII) additional criteria as speci-
17 fied by the Director.

18 (B) MATCHING FUNDS.—The selection cri-
19 teria established under subparagraph (A) may
20 include the amount of matching funds available.
21 Proposals shall not be required to include the
22 provision of matching funds by the cluster re-
23 ceiving the grant involved.

24 (2) REVIEW PANEL.—

1 (A) IN GENERAL.—The head of each cov-
2 ered agency shall each appoint a review panel,
3 to be comprised of not fewer than 9 individuals
4 that are experts in advanced manufacturing, to
5 evaluate manufacturing cluster proposals based
6 on the criteria set by such head of a covered
7 agency under paragraph (1)(A) and to rec-
8 ommend eligible manufacturing clusters to such
9 head of each covered agency for selection for
10 each phase of the program.

11 (B) OUTSIDE ENTITY.—The head of each
12 covered agency may contract with an outside
13 entity to administer a competitive selection
14 process based on the criteria established by the
15 head of each covered agency under paragraph
16 (1)(A).

17 (c) USE OF FUNDS.—An eligible manufacturing clus-
18 ter may use grant funds under paragraphs (2) and (3)
19 of subsection (d) to—

20 (1) develop and deploy training and educational
21 programs and facilities to benefit multiple cluster
22 members;

23 (2) fund efforts with respect to supply chain
24 sourcing and innovation;

1 (3) fund collaborative research, development,
2 and demonstration;

3 (4) develop shared infrastructure or resources
4 for production, transportation, cybersecurity, and
5 workforce development among members of the cluster;
6

7 (5) convene workshops and other forums to improve alignment among participants in the regional
8 manufacturing economy; and

9
10 (6) strengthen ties and relationships within the
11 cluster and assess the impact of the cluster on the
12 region.

13 (d) PROGRAM PHASES.—

14 (1) PHASE 1.—

15 (A) IN GENERAL.—For the first phase of
16 the program (referred to in this section as
17 “Phase 1”), the head of each covered agency
18 shall select eligible manufacturing clusters for
19 an award described in subparagraph (C) for the
20 purpose of assisting such eligible manufacturing
21 clusters in the development of a detailed implementation plan for each proposal submitted
22 under subparagraph (B).
23

1 (B) APPLICATION.—An eligible manufac-
2 turing cluster applying for Phase 1 shall submit
3 an application containing a description of—

4 (i) the members of the cluster;

5 (ii) the needs of the local, regional,
6 and national manufacturing economy and
7 workforce that the cluster intends to ad-
8 dress;

9 (iii) a proposal for activities described
10 in subsection (c) to address such needs;
11 and

12 (iv) a plan for transition of manufac-
13 turing cluster activities to the private sec-
14 tor.

15 (C) AWARD.—The head of each covered
16 agency may provide an eligible manufacturing
17 cluster selected for an award under Phase 1
18 mentoring, training, and courses to cover topics
19 including—

20 (i) problem selection and curation;

21 (ii) iterative refinement based on feed-
22 back from potential beneficiaries to ensure
23 plans are tailored to regional needs or
24 problem;

25 (iii) development of effective teams;

- 1 (iv) validation of the repeatability and
- 2 scalability of the plan; and
- 3 (v) other entrepreneurial best prac-
- 4 tices.

5 (2) PHASE 2.—

6 (A) IN GENERAL.—For the second phase
7 of the program (referred to in this section as
8 “Phase 2”), the head of each covered agency
9 shall select eligible manufacturing clusters for
10 an award described in subparagraph (C) for the
11 purpose of implementing the plan submitted
12 under subparagraph (B).

13 (B) APPLICATION.—An eligible manufac-
14 turing cluster applying for Phase 2 shall submit
15 an application containing—

16 (i) a description of—

17 (I) the members of the cluster;

18 (II) the needs of the local, re-
19 gional, and national manufacturing
20 economy and workforce that the clus-
21 ter intends to address; and

22 (III) a proposal for activities de-
23 scribed in subsection (c) to address
24 such needs;

1 (ii) with respect to Phase 1, a descrip-
2 tion of mentoring and training activities
3 and an analysis of whether such use was
4 successful; and

5 (iii) a detailed implementation plan
6 for such proposal.

7 (C) AWARD.—

8 (i) IN GENERAL.—The head of each
9 covered agency may award an eligible man-
10 ufacturing cluster selected for an award
11 under phase 2—

12 (I) a grant of not more than
13 \$3,000,000 over a 3-year period to
14 execute the plan described in subpara-
15 graph (B)(ii); and

16 (II) mentoring, training, and
17 courses described in paragraph (1)(C)
18 that the head of such agency deter-
19 mines appropriate to assist in the exe-
20 cution of such plan.

21 (3) PHASE 3.—

22 (A) IN GENERAL.—For the third phase of
23 the program (referred to in this section as
24 “Phase 3”), the head of each covered agency
25 shall select eligible manufacturing clusters for

1 an award described in subparagraph (C) for the
2 purpose of continuing the activities of the cluster
3 under Phase 2.

4 (B) APPLICATION.—

5 (i) TIMING.—Not earlier than 2 years
6 after the date on which an eligible manufacturing
7 cluster receives funds under
8 Phase 2, such eligible manufacturing cluster
9 may apply for Phase 3.

10 (ii) CONTENT.—To apply for Phase 3,
11 an eligible manufacturing cluster shall submit
12 a report containing a description of the
13 activities of such cluster under Phase 2
14 and the impacts of such activities, including—
15

16 (I) a list of the organizations and
17 individuals served by such activities;

18 (II) facilities built or dedicated;

19 (III) technologies, curricula, and
20 educational programs developed;

21 (IV) extent of coordination with
22 existing Federal, State, and local government
23 resources;

24 (V) extent of coordination with
25 private sector entities; and

1 (VI) the success of Phase 2 and
2 an assessment of whether the award
3 would enable new development and
4 success.

5 (C) AWARD.—The head of each covered
6 agency may award an eligible manufacturing
7 cluster selected for an award under Phase 3—

8 (i) a grant of not more than
9 \$10,000,000 over a 5-year period to con-
10 tinue the activities of the eligible manufac-
11 turing cluster under Phase 2; and

12 (ii) mentoring, training, and courses
13 described in paragraph (1)(C) that the
14 head of such agency determines appro-
15 priate to assist in the execution of such ac-
16 tivities.

17 (e) REPORT.—For each eligible manufacturing clus-
18 ter selected for Phase 1, Phase 2, and Phase 3, the rel-
19 evant head of each covered agency shall make public a re-
20 port describing—

21 (1) the members of the eligible manufacturing
22 cluster;

23 (2) a description of the proposed activities;

1 (3) a description of how the proposed activities
2 meet the country's strategic needs for advanced
3 manufacturing; and

4 (4) if applicable, a description of the activities
5 of the cluster under the prior phase of the program.

6 (f) MENTOR, TRAINING, AND COURSE RESOURCES.—

7 (1) CONTRACT AUTHORITY.—The head of each
8 covered agency may enter into a memorandum of
9 understanding with another Federal agency or con-
10 tract with an entity outside the Federal Government
11 to carry out the mentoring, training, and courses
12 under each phase of the program.

13 (2) COSTS.—The head of each covered agency
14 shall cover the cost of participation in mentoring,
15 training, and courses, including necessary travel ex-
16 penses, for each applicant selected under each phase
17 of the program.

18 (3) LIMITATIONS.—The head of each covered
19 agency may restrict the number of individuals from
20 each cluster selected under this paragraph that are
21 allowed to participate in mentoring, training, and
22 courses under each phase of the program to not
23 fewer than 3 individuals.

24 (g) FUNDING.—

1 (1) NONFEDERAL FUNDS.—An eligible manu-
2 facturing cluster receiving a grant under a manufac-
3 turing cluster program established pursuant to this
4 section may accept in-kind and financial contribu-
5 tions from private sector entities, nonprofit organiza-
6 tions, and State and local governments.

7 (2) ASSESSMENT.—Upon the completion of
8 Phase 3 by an eligible manufacturing cluster, the
9 relevant head of a covered agency shall conduct an
10 assessment of the impact of the cluster’s activities
11 on the regional manufacturing economy and assess
12 the degree to which the cluster advanced the coun-
13 try’s strategic needs for advanced manufacturing.
14 The head of such covered agency may decide, based
15 on such assessment, to continue funding the cluster
16 for an additional 5 years or terminate funding.

17 (3) TERMINATION.—If the head of a covered
18 agency decides to terminate funding for an eligible
19 manufacturing cluster, at any phase—

20 (A) that cluster may continue to operate
21 on other sources of Federal or non-Federal
22 funding; and

23 (B) upon that the head of the covered
24 agency involved shall initiate a new multi-phase
25 selection process for an eligible manufacturing

1 cluster to replace it, focused on needs identified
2 in the most recent National Strategic Plan for
3 Advanced Manufacturing.

4 (4) AUTHORIZATION OF APPROPRIATIONS.—

5 (A) IN GENERAL.—There are authorized to
6 be appropriated to carry out this Act—

7 (i) to the Director of the National In-
8 stitute of Standards and Technology,
9 \$10,000,000 for fiscal year 2022,
10 \$20,000,000 for each of fiscal years 2023
11 through 2030, \$10,000,000 for fiscal year
12 2031;

13 (ii) to the Secretary of Energy,
14 \$10,000,000 for fiscal year 2022,
15 \$20,000,000 for each of fiscal years 2023
16 through 2030, \$10,000,000 for fiscal year
17 2031; and

18 (iii) to the Secretary of Defense,
19 \$10,000,000 for fiscal year 2022,
20 \$20,000,000 for each of fiscal years 2023
21 through 2030, \$10,000,000 for fiscal year
22 2031.

23 (B) TRANSFER OF FUNDS.—Amounts
24 available to the head of each covered agency for
25 programs and activities consistent with the pur-

1 poses of the manufacturing cluster programs
2 established pursuant to this section may be
3 transferred to carry out such manufacturing
4 cluster programs. The amount of funds author-
5 ized to be appropriated under subparagraph (A)
6 for a fiscal year shall be increased by any
7 amounts so transferred.

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