

Calendar No. 593

116TH CONGRESS
2D SESSION

S. 3191

[Report No. 116–300]

To increase the capacity of research and development programs of the Federal Government that focus on industries of the future, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 14, 2020

Mr. WICKER (for himself, Mr. GARDNER, Ms. BALDWIN, Mr. PETERS, and Ms. HASSAN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

NOVEMBER 17, 2020

Reported by Mr. WICKER, with amendments

[Omit the part struck through and insert the part printed in *italie*]

A BILL

To increase the capacity of research and development programs of the Federal Government that focus on industries of the future, 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.**

4 This Act may be cited as the “Industries of the Fu-
5 ture Act of 2020”.

1 **SEC. 2. SENSE OF CONGRESS ON INVESTMENT IN RE-**
2 **SEARCH AND DEVELOPMENT.**

3 It is the sense of Congress that—

4 (1) the United States must drive technological
5 breakthroughs through research and development in-
6 vestments across the Federal Government, academia,
7 and industry in order to promote scientific discovery,
8 economic competitiveness, and national security;

9 (2) the United States must identify key re-
10 search infrastructure investments that enable these
11 technological breakthroughs and establish the do-
12 mestic capabilities necessary for the United States
13 to lead in the industries of the future;

14 (3) the United States must encourage opportu-
15 nities for collaboration between the Federal Govern-
16 ment and the private sector so that through such
17 partnerships, all can benefit from each other's in-
18 vestment and expertise, ensuring United States lead-
19 ership in the industries of the future;

20 (4) the United States must encourage opportu-
21 nities for collaboration between the Federal Govern-
22 ment and the private sector so that through such
23 partnerships, all can benefit from each other's in-
24 vestment and expertise, ensuring United States lead-
25 ership in the industries of the future; and

1 (5) in order for the United States to maintain
 2 its global economic edge, Federal investment must
 3 be made in research and development efforts focused
 4 on industries of the future, such as artificial intel-
 5 ligence, quantum information science, biotechnology,
 6 and next generation wireless networks and infra-
 7 structure, advanced manufacturing, and synthetic bi-
 8 ology.

9 **SEC. 3. REPORT ON FEDERAL RESEARCH AND DEVELOP-**
 10 **MENT FOCUSED ON INDUSTRIES OF THE FU-**
 11 **TURE.**

12 (a) IN GENERAL.—Not later than 120 days after the
 13 date of the enactment of this Act, the Director of the Of-
 14 fice of Science and Technology Policy shall submit to Con-
 15 gress a report on research and development investments,
 16 infrastructure, and workforce development investments of
 17 the Federal Government that enable continued United
 18 States leadership in industries of the future.

19 (b) CONTENTS.—The report submitted under sub-
 20 section (a) shall include the following:

21 (1) *A definition, for purposes of this Act, of the*
 22 *term “industries of the future” that includes emerging*
 23 *technologies.*

24 (12) An assessment of the current baseline of
 25 investments in civilian research and development in-

1 vestments of the Federal Government in the indus-
 2 tries of the future.

3 (23) A plan to double such baseline investments
 4 in artificial intelligence and quantum information
 5 science by fiscal year 2022.

6 (34) A detailed plan to increase investments de-
 7 scribed in paragraph (1 2) in industries of the future
 8 to \$10,000,000,000 per year by fiscal year 2025.

9 (45) A plan to leverage investments described in
 10 paragraphs (1 2), (2 3), and (3 4) in industries
 11 of the future to elicit complimentary investments by
 12 non-Federal entities to the greatest extent prac-
 13 ticable.

14 (56) Proposed legislation to implement such
 15 plans.

16 **SEC. 4. INDUSTRIES OF THE FUTURE COORDINATION**
 17 **COUNCIL.**

18 (a) ESTABLISHMENT.—

19 (1) IN GENERAL.—The President shall establish
 20 or designate a council to advise the Director of the
 21 Office of Science and Technology Policy on matters
 22 relevant to the Director and the industries of the fu-
 23 ture.

24 (2) DESIGNATION.—The council established or
 25 designated under paragraph (1) shall be known as

1 the “Industries of the Future Coordination Council”
2 (in this section the “Council”).

3 (b) MEMBERSHIP.—

4 (1) COMPOSITION.—The Council shall be com-
5 posed of members from the Federal Government as
6 follows:

7 (A) One member appointed by the Direc-
8 tor.

9 (B) One member appointed by the Director
10 of the Office of Management and Budget.

11 (C) A chairperson of the Select Committee
12 on Artificial Intelligence of the National Science
13 and Technology Council.

14 (D) A chairperson of the Subcommittee on
15 Advanced Manufacturing of the National
16 Science and Technology Council.

17 (E) A chairperson of the Subcommittee on
18 Quantum Information Science of the National
19 Science and Technology Council.

20 (F) Such other members as the President
21 considers appropriate.

22 (2) CHAIRPERSON.—The member appointed to
23 the Council under paragraph (1)(A) shall serve as
24 the chairperson of the Council.

1 (c) DUTIES.—The duties of the Council are as fol-
2 lows:

3 (1) To provide the Director with advice on ways
4 in which in the Federal Government can ensure the
5 United States continues to lead the world in devel-
6 oping emerging technologies that improve the quality
7 of life of the people of the United States, increase
8 economic competitiveness of the United States, and
9 strengthen the national security of the United
10 States, including identification of the following:

11 (A) Investments required in fundamental
12 research and development, infrastructure, and
13 workforce development of the United States
14 workers who will support the industries of the
15 future.

16 (B) Actions necessary to create and fur-
17 ther develop the workforce that will support the
18 industries of the future.

19 (C) Actions required to leverage the
20 strength of the research and development eco-
21 system of the United States, which includes
22 academia, industry, and nonprofit organiza-
23 tions.

24 (D) Ways that the Federal Government
25 can consider leveraging existing partnerships

1 and creating new partnerships and other multi-
2 sector collaborations to advance the industries
3 of the future.

4 (2) To provide the Director with advice on mat-
5 ters relevant to the report required by section 4.

6 (d) COORDINATION.—The Council shall coordinate
7 with and utilize relevant existing National Science and
8 Technology Council committees to the maximum extent
9 feasible in order to minimize duplication of effort.

10 (e) SUNSET.—The Council shall terminate on the
11 date that is 6 years after the date of the enactment of
12 this Act.

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