

116TH CONGRESS  
2D SESSION

# S. 3191

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

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## IN THE SENATE OF THE UNITED STATES

JANUARY 14, 2020

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

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## 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”.

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

8 It is the sense of Congress that—

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

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

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

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

23          (5) in order for the United States to maintain  
24          its global economic edge, Federal investment must  
25          be made in research and development efforts focused

1 on industries of the future, such as artificial intel-  
2 ligence, quantum information science, biotechnology,  
3 and next generation wireless networks and infra-  
4 structure, advanced manufacturing, and synthetic bi-  
5 ology.

6 **SEC. 3. REPORT ON FEDERAL RESEARCH AND DEVELOP-**  
7 **MENT FOCUSED ON INDUSTRIES OF THE FU-**  
8 **TURE.**

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

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

18 (1) An assessment of the current baseline of in-  
19 vestments in civilian research and development in-  
20 vestments of the Federal Government in the indus-  
21 tries of the future.

22 (2) A plan to double such baseline investments  
23 in artificial intelligence and quantum information  
24 science by fiscal year 2022.

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

4           (4) A plan to leverage investments described in  
5       paragraphs (1), (2), and (3) in industries of the fu-  
6       ture to elicit complimentary investments by non-Fed-  
7       eral entities to the greatest extent practicable.

8           (5) Proposed legislation to implement such  
9       plans.

10 **SEC. 4. INDUSTRIES OF THE FUTURE COORDINATION**  
11 **COUNCIL.**

12       (a) ESTABLISHMENT.—

13           (1) IN GENERAL.—The President shall establish  
14       or designate a council to advise the Director of the  
15       Office of Science and Technology Policy on matters  
16       relevant to the Director and the industries of the fu-  
17       ture.

18           (2) DESIGNATION.—The council established or  
19       designated under paragraph (1) shall be known as  
20       the “Industries of the Future Coordination Council”  
21       (in this section the “Council”).

22       (b) MEMBERSHIP.—

23           (1) COMPOSITION.—The Council shall be com-  
24       posed of members from the Federal Government as  
25       follows:

1 (A) One member appointed by the Direc-  
2 tor.

3 (B) One member appointed by the Director  
4 of the Office of Management and Budget.

5 (C) A chairperson of the Select Committee  
6 on Artificial Intelligence of the National Science  
7 and Technology Council.

8 (D) A chairperson of the Subcommittee on  
9 Advanced Manufacturing of the National  
10 Science and Technology Council.

11 (E) A chairperson of the Subcommittee on  
12 Quantum Information Science of the National  
13 Science and Technology Council.

14 (F) Such other members as the President  
15 considers appropriate.

16 (2) CHAIRPERSON.—The member appointed to  
17 the Council under paragraph (1)(A) shall serve as  
18 the chairperson of the Council.

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

21 (1) To provide the Director with advice on ways  
22 in which in the Federal Government can ensure the  
23 United States continues to lead the world in devel-  
24 oping emerging technologies that improve the quality  
25 of life of the people of the United States, increase

1 economic competitiveness of the United States, and  
2 strengthen the national security of the United  
3 States, including identification of the following:

4 (A) Investments required in fundamental  
5 research and development, infrastructure, and  
6 workforce development of the United States  
7 workers who will support the industries of the  
8 future.

9 (B) Actions necessary to create and fur-  
10 ther develop the workforce that will support the  
11 industries of the future.

12 (C) Actions required to leverage the  
13 strength of the research and development eco-  
14 system of the United States, which includes  
15 academia, industry, and nonprofit organiza-  
16 tions.

17 (D) Ways that the Federal Government  
18 can consider leveraging existing partnerships  
19 and creating new partnerships and other multi-  
20 sector collaborations to advance the industries  
21 of the future.

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

24 (d) COORDINATION.—The Council shall coordinate  
25 with and utilize relevant existing National Science and

1 Technology Council committees to the maximum extent  
2 feasible in order to minimize duplication of effort.

3 (e) SUNSET.—The Council shall terminate on the  
4 date that is 6 years after the date of the enactment of  
5 this Act.

