

117TH CONGRESS  
2D SESSION

# H. R. 6680

To establish the Integrated Blue Economy and Blue Energy Technologies Program, and a Blue Economy Center of Excellence, to support research and development of blue energy technologies.

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## IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 9, 2022

Mr. KILMER (for himself and Mr. NEWHOUSE) introduced the following bill;  
which was referred to the Committee on Science, Space, and Technology

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## A BILL

To establish the Integrated Blue Economy and Blue Energy Technologies Program, and a Blue Economy Center of Excellence, to support research and development of blue energy technologies.

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 “Blue Energy Innova-  
5 tion Act of 2022”.

1 **SEC. 2. INTEGRATED BLUE ECONOMY AND BLUE ENERGY**  
2 **TECHNOLOGIES PROGRAM.**

3 (a) IN GENERAL.—The Secretary of Energy shall es-  
4 tablish and carry out a program, to be known as the “Inte-  
5 grated Blue Economy and Blue Energy Technologies Pro-  
6 gram”, under which the Secretary of Energy shall provide  
7 funding for research and development of blue energy tech-  
8 nologies for purposes of—

9 (1) decarbonizing activities that contribute to  
10 the blue economy, including—

11 (A) improving port and other maritime  
12 transportation infrastructure;

13 (B) producing marine algae for use as a  
14 biofuel, and for other applications; and

15 (C) operating ocean- and water-based tour-  
16 ism industries;

17 (2) increasing blue energy generation capacity  
18 while reducing the cost to produce such energy;

19 (3) improving performance of blue energy tech-  
20 nologies;

21 (4) capturing, removing, and sequestering  
22 greenhouse gases, including carbon dioxide and  
23 methane, generated or emitted in an aquatic envi-  
24 ronment;

25 (5) developing new blue energy market opportu-  
26 nities;

1           (6) promoting job creation in the blue economy  
2           and blue energy sectors;

3           (7) supporting the development of a skilled, di-  
4           verse, and inclusive blue economy and blue energy  
5           workforce;

6           (8) remediating and improving coastal and  
7           aquatic ecosystems; and

8           (9) addressing technical and development chal-  
9           lenges that are unique to operating in marine and  
10          freshwater environments, including by—

11                (A) developing tools, sensors, and models  
12                to collect and represent baseline information on  
13                metocean, geotechnical, geophysical, and bio-  
14                logical conditions in marine and freshwater en-  
15                vironments;

16                (B) advancing social science related to  
17                community and industry engagement to inform  
18                future development;

19                (C) conducting feasibility analyses for en-  
20                ergy storage and microgrid deployments;

21                (D) planning for power transmission and  
22                distribution;

23                (E) advancing technologies for anchoring  
24                and mooring systems;

1 (F) addressing challenges of integrating  
2 with the bulk-power system, especially in deep  
3 water environments;

4 (G) deploying energy storage and charging  
5 infrastructure; and

6 (H) developing advanced materials capable  
7 of enduring harsh environmental conditions.

8 (b) CROSSCUT BUDGET.—In carrying out the Inte-  
9 grated Blue Economy and Blue Energy Technologies Pro-  
10 gram, the Secretary of Energy shall prepare a crosscut  
11 budget based on the research and development activities  
12 conducted by relevant Department of Energy offices, in-  
13 cluding the following:

14 (1) The Office of Energy Efficiency and Renew-  
15 able Energy.

16 (2) The Office of Science.

17 (3) The Office of Electricity.

18 (4) The Office of Cybersecurity, Energy Secu-  
19 rity, and Emergency Response.

20 (5) The Advanced Research Projects Agency—  
21 Energy.

22 (6) The Office of Clean Energy Demonstra-  
23 tions.

24 (c) AUTHORIZATION OF APPROPRIATIONS.—

1           (1) IN GENERAL.—There is authorized to be  
2           appropriated \$75,000,000 for each of fiscal years  
3           2022 through 2032 to carry out this section.

4           (2) SUPPLEMENT AND NOT SUPPLANT.—The  
5           amounts authorized to be appropriated under this  
6           subsection shall supplement, and not supplant, any  
7           other amounts made available to the Department of  
8           Energy.

9   **SEC. 3. BLUE ECONOMY CENTER OF EXCELLENCE.**

10          (a) ESTABLISHMENT.—The Secretary of Energy  
11          shall establish a Blue Economy Center of Excellence to  
12          support the Integrated Blue Economy and Blue Energy  
13          Technologies Program established in section 2.

14          (b) LOCATION.—The Blue Economy Center of Excel-  
15          lence shall be co-located at an existing National Labora-  
16          tory that—

17                (1) is working to develop blue energy tech-  
18                nologies;

19                (2) hosts a blue energy research and develop-  
20                ment program;

21                (3) is able to investigate and resolve environ-  
22                mental and policy-related questions associated with  
23                the generation of blue energy; and

24                (4) has direct access to natural ocean-based re-  
25                sources and test sites.

1 (c) FACILITIES.—The Secretary of Energy may con-  
2 struct new facilities or expand and upgrade existing facili-  
3 ties to establish the Blue Economy Center of Excellence  
4 under subsection (a).

5 (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
6 authorized to be appropriated \$90,000,000 to carry out  
7 this section and such amount is authorized to remain  
8 available until expended.

9 **SEC. 4. INTERAGENCY COORDINATION, REPORTING, AND**  
10 **OVERSIGHT.**

11 (a) COORDINATION.—In carrying out this Act, the  
12 Secretary of Energy shall coordinate with—

13 (1) other Federal agencies that share mission  
14 objectives with the Integrated Blue Economy and  
15 Blue Energy Technologies Program, including the  
16 Maritime Administration of the Department of  
17 Transportation, the National Science Foundation,  
18 the Economic Development Administration of the  
19 Department of Commerce, the Bureau of Ocean En-  
20 ergy Management, the National Marine Fisheries  
21 Service, the United States Army Corps of Engineers,  
22 the Bureau of Reclamation, the National Oceanic  
23 and Atmospheric Administration, and the National  
24 Institute of Standards and Technology; and

1           (2) State and Tribal government agencies, insti-  
2           tutions of higher education, nonprofit research insti-  
3           tutions, and National Laboratories.

4           (b) ANNUAL BUDGET MATERIALS.—The Secretary of  
5           Energy shall include in the Department of Energy’s an-  
6           nual budget materials submitted to the Office of Manage-  
7           ment and Budget pursuant to section 1105 of title 31,  
8           United States Code, a report on—

9           (1) with respect to the fiscal year preceding the  
10          fiscal year for which such budget materials are sub-  
11          mitted, the amount of funds obligated and expended  
12          for research and development of blue energy tech-  
13          nologies across all line offices and programs of the  
14          Department of Energy; and

15          (2) the projected expenditures necessary to fill  
16          any gaps in funding for research and development of  
17          blue energy technologies across all line offices and  
18          programs of the Department of Energy.

19   **SEC. 5. DEFINITIONS.**

20          In this Act:

21          (1) BLUE ECONOMY.—The term “blue econ-  
22          omy” means the sustainable use of ocean and aquat-  
23          ic resources to grow the economy, improve liveli-  
24          hoods, and create jobs in a manner that preserves  
25          the health of ocean and aquatic ecosystems.

1           (2) BLUE ENERGY TECHNOLOGY.—The term  
2           “blue energy technology” means any technology  
3           that—

4                   (A)(i) derives or generates energy from a  
5                   renewable energy resource; or

6                   (ii) captures, removes, and sequesters  
7                   greenhouse gases; and

8                   (B) is located in an aquatic environment.

9           (3) BULK-POWER SYSTEM.—The term “bulk-  
10          power system” has the meaning given such term in  
11          section 215(a) of the Federal Power Act (16 U.S.C.  
12          824o(a)).

13          (4) NATIONAL LABORATORY.—The term “Na-  
14          tional Laboratory” has the meaning given such term  
15          in section 2 of the Energy Policy Act of 2005 (42  
16          U.S.C. 15801).

17          (5) RENEWABLE ENERGY RESOURCE.—The  
18          term “renewable energy resource” has the meaning  
19          given such term in section 403 of the Energy Secu-  
20          rity Act (42 U.S.C. 7372).

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