



(Original Signature of Member)

117TH CONGRESS
2D SESSION

H. R. _____

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.

IN THE HOUSE OF REPRESENTATIVES

Mr. KILMER introduced the following bill; which was referred to the Committee on _____

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).