I

118TH CONGRESS
2D SESSION

H. R. 7722

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

MARCH 19, 2024

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

---

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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Blue Ocean Energy Innovation Act of 2024''.

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

(a) IN GENERAL.—The Secretary of Energy shall establish and carry out a program, to be known as the ''Integrated Blue Economy and Blue Energy Technologies Program'', under which the Secretary of Energy shall provide funding for research and development of blue energy technologies for purposes of—

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

(A) improving port and other maritime transportation infrastructure;

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

(C) operating ocean- and water-based tourism industries;

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

(3) improving performance of blue energy technologies;

(4) capturing, removing, and sequestering greenhouse gases, including carbon dioxide and methane;

(5) developing new blue energy technology market opportunities;

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

(7) supporting the development of a skilled, diverse, and inclusive blue economy workforce;

(8) remediating and improving coastal and aquatic ecosystems;

(9) addressing technical and development challenges that are unique to operating in marine and freshwater environments, including by—

(A) developing tools, sensors, and models to advance scientific understanding of metocean, geotechnical, geophysical, and biological conditions in marine and freshwater environments applicable to blue energy technologies;

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

(C) conducting feasibility analyses for energy storage and microgrid deployments;

(D) planning for power transmission and distribution;

(E) advancing technologies for anchoring and mooring systems;

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

(G) deploying energy storage and charging infrastructure; and

(H) developing advanced materials capable of enduring harsh environmental conditions; and

(10) supporting any other activities as identified by the Secretary.

(b) CROSSCUT BUDGET.—In carrying out the Integrated Blue Economy and Blue Energy Technologies Program, the Secretary of Energy shall prepare a crosscut budget based on the research and development activities conducted by relevant Department of Energy offices, including the following:

(1) The Office of Energy Efficiency and Renewable Energy.

(2) The Office of Science.

(3) The Office of Electricity.

(4) The Office of Cybersecurity, Energy Security, and Emergency Response.

(5) The Advanced Research Projects Agency—Energy.

(6) The Office of Clean Energy Demonstrations.

(7) The Office of Fossil Energy and Carbon Management.

(c) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated such sums as may be necessary to carry out this section for each of fiscal years 2024 through 2034.

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

SEC. 3. BLUE ECONOMY CENTER OF EXCELLENCE.

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

(b) LOCATION.—The Blue Economy Center of Excellence shall be co-located at an existing National Laboratory that—

(1) is working to develop blue energy technologies;

(2) hosts a blue energy technology research and development program;

(3) is able to investigate and resolve environmental and policy-related questions associated with the generation of blue energy technology; and

(4) has direct access to natural ocean-based resources and test sites.

(c) FACILITIES.—The Secretary of Energy may construct new facilities or expand and upgrade existing facilities to establish the Blue Economy Center of Excellence under subsection (a).

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated such sums as may be necessary to carry out this section and such amount is authorized to remain available until expended.

SEC. 4. INTERAGENCY COORDINATION, REPORTING, AND OVERSIGHT.

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

(1) other Federal agencies that share mission objectives with the Integrated Blue Economy and Blue Energy Technologies Program, including the Maritime Administration of the Department of Transportation, the National Science Foundation, the Economic Development Administration of the

Department of Commerce, the Bureau of Ocean Energy Management, the National Marine Fisheries Service, the United States Army Corps of Engineers, the Bureau of Reclamation, the National Oceanic and Atmospheric Administration, and the National Institute of Standards and Technology; and

(2) State and Tribal government agencies, institutions of higher education, nonprofit research institutions, and National Laboratories.

(b) ANNUAL BUDGET MATERIALS.—The Secretary of Energy shall include in the Department of Energy's annual budget materials submitted to the Office of Management and Budget pursuant to section 1105 of title 31, United States Code, a report on—

(1) with respect to the fiscal year preceding the fiscal year for which such budget materials are submitted, the amount of funds obligated and expended for research and development of blue energy technologies across all line offices and programs of the Department of Energy; and

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

SEC. 5. DEFINITIONS.

In this Act:

(1) BLUE ECONOMY.—The term ''blue economy'' means the sustainable use of ocean and aquatic resources to grow the economy, improve livelihoods, and create jobs in a manner that preserves the health of ocean and aquatic ecosystems.

(2) BLUE ENERGY TECHNOLOGY.—The term ''blue energy technology'' means any technology that—

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

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

(B) is located in an aquatic environment.

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

(4) NATIONAL LABORATORY.—The term ''National Laboratory'' has the meaning given such term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(5) RENEWABLE ENERGY RESOURCE.—The term ''renewable energy resource'' has the meaning

given such term in section 403 of the Energy Security Act (42 U.S.C. 7372).

○