

114TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To promote research, development, and demonstration of marine and hydrokinetic renewable energy technologies, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

Mr. WYDEN (for himself, Mr. MERKLEY, Mr. SCHATZ, and Mr. KING) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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## **A BILL**

To promote research, development, and demonstration of marine and hydrokinetic renewable energy technologies, 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 “Marine and  
5 Hydrokinetic Renewable Energy Act of 2015”.

1 **SEC. 2. DEFINITION OF MARINE AND HYDROKINETIC RE-**  
2 **NEWABLE ENERGY.**

3 Section 632 of the Energy Independence and Security  
4 Act of 2007 (42 U.S.C. 17211) is amended in the matter  
5 preceding paragraph (1) by striking “electrical”.

6 **SEC. 3. MARINE AND HYDROKINETIC RENEWABLE ENERGY**  
7 **RESEARCH AND DEVELOPMENT.**

8 Section 633 of the Energy Independence and Security  
9 Act of 2007 (42 U.S.C. 17212) is amended to read as  
10 follows:

11 **“SEC. 633. MARINE AND HYDROKINETIC RENEWABLE EN-**  
12 **ERGY RESEARCH AND DEVELOPMENT.**

13 “The Secretary, in consultation with the Secretary of  
14 the Interior, the Secretary of Commerce, and the Federal  
15 Energy Regulatory Commission, shall carry out a program  
16 of research, development, demonstration, and commercial  
17 application to accelerate the introduction of marine and  
18 hydrokinetic renewable energy production into the United  
19 States energy supply, giving priority to fostering acceler-  
20 ated research, development, and commercialization of  
21 technology, including programs—

22 “(1) to assist technology development to im-  
23 prove the components, processes, and systems used  
24 for power generation from marine and hydrokinetic  
25 renewable energy resources;

1           “(2) to establish critical testing infrastructure  
2 necessary—

3           “(A) to cost effectively and efficiently test  
4 and prove marine and hydrokinetic renewable  
5 energy devices; and

6           “(B) to accelerate the technological readi-  
7 ness and commercialization of those devices;

8           “(3) to support efforts to increase the efficiency  
9 of energy conversion, lower the cost, increase the  
10 use, improve the reliability, and demonstrate the ap-  
11 plicability of marine and hydrokinetic renewable en-  
12 ergy technologies by participating in demonstration  
13 projects;

14           “(4) to investigate variability issues and the ef-  
15 ficient and reliable integration of marine and  
16 hydrokinetic renewable energy with the utility grid;

17           “(5) to identify and study critical short- and  
18 long-term needs to create a sustainable marine and  
19 hydrokinetic renewable energy supply chain based in  
20 the United States;

21           “(6) to increase the reliability and survivability  
22 of marine and hydrokinetic renewable energy tech-  
23 nologies;

24           “(7) to verify the performance, reliability, main-  
25 tainability, and cost of new marine and hydrokinetic

1 renewable energy device designs and system compo-  
2 nents in an operating environment;

3 “(8) to coordinate and avoid duplication of ac-  
4 tivities across programs of the Department and  
5 other applicable Federal agencies, including National  
6 Laboratories and to coordinate public-private col-  
7 laboration in all programs under this section;

8 “(9) to identify opportunities for joint research  
9 and development programs and development of  
10 economies of scale between—

11 “(A) marine and hydrokinetic renewable  
12 energy technologies; and

13 “(B) other renewable energy and fossil en-  
14 ergy programs, offshore oil and gas production  
15 activities, and activities of the Department of  
16 Defense; and

17 “(10) to support in-water technology develop-  
18 ment with international partners using existing co-  
19 operative procedures (including memoranda of un-  
20 derstanding)—

21 “(A) to allow cooperative funding and  
22 other support of value to be exchanged and le-  
23 veraged; and

24 “(B) to encourage the participation of  
25 international research centers and companies

1           within the United States and the participation  
2           of United States research centers and compa-  
3           nies in international projects.”.

4 **SEC. 4. NATIONAL MARINE RENEWABLE ENERGY RE-**  
5                   **SEARCH, DEVELOPMENT, AND DEMONSTRA-**  
6                   **TION CENTERS.**

7           Section 634 of the Energy Independence and Security  
8 Act of 2007 (42 U.S.C. 17213) is amended by striking  
9 subsection (b) and inserting the following:

10           “(b) PURPOSES.—A Center (in coordination with the  
11 Department and National Laboratories) shall—

12                   “(1) advance research, development, demonstra-  
13 tion, and commercial application of marine and  
14 hydrokinetic renewable energy technologies;

15                   “(2) support in-water testing and demonstra-  
16 tion of marine and hydrokinetic renewable energy  
17 technologies, including facilities capable of testing—

18                           “(A) marine and hydrokinetic renewable  
19 energy systems of various technology readiness  
20 levels and scales;

21                           “(B) a variety of technologies in multiple  
22 test berths at a single location; and

23                           “(C) arrays of technology devices; and

24                   “(3) serve as information clearinghouses for the  
25 marine and hydrokinetic renewable energy industry

1 by collecting and disseminating information on best  
2 practices in all areas relating to developing and  
3 managing marine and hydrokinetic renewable energy  
4 resources and energy systems.”.

5 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

6 Section 636 of the Energy Independence and Security  
7 Act of 2007 (42 U.S.C. 17215) is amended by striking  
8 “2008 through 2012” and inserting “2016 through  
9 2019”.