

116TH CONGRESS  
2D SESSION

# H. R. 8258

To direct the Secretary of energy to conduct an advanced fuel cycle research, development, demonstration, and commercial application program, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 15, 2020

Mr. LEVIN of California introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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## A BILL

To direct the Secretary of energy to conduct an advanced fuel cycle research, development, demonstration, and commercial application program, 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 “Spent Nuclear Fuel  
5 Solutions Research and Development Act”.

1 **SEC. 2. USED NUCLEAR FUEL RESEARCH, DEVELOPMENT,**  
2 **DEMONSTRATION, AND COMMERCIAL APPLI-**  
3 **CATION.**

4 (a) IN GENERAL.—The Secretary shall conduct an  
5 advanced fuel cycle research, development, demonstration,  
6 and commercial application program that improves fuel  
7 cycle performance and supports a variety of options for  
8 used nuclear fuel storage, use, and disposal, including ad-  
9 vanced nuclear reactor concepts, while minimizing envi-  
10 ronmental and public health and safety impacts, includ-  
11 ing—

- 12 (1) dry cask storage;
- 13 (2) consolidated interim storage;
- 14 (3) deep geological storage and disposal, includ-  
15 ing mined repository, and other technologies;
- 16 (4) used nuclear fuel transportation;
- 17 (5) integrated waste management systems;
- 18 (6) vitrification;
- 19 (7) fuel recycling and transmutation tech-  
20 nologies, including advanced reprocessing tech-  
21 nologies and plutonium uranium redox extraction  
22 technologies;
- 23 (8) advanced materials to be used in para-  
24 graphs (1) through (7); and
- 25 (9) other areas as determined by the Secretary.

1 (b) REQUIREMENTS.—In carrying out the program  
2 under this subsection, the Secretary shall—

3 (1) ensure all activities and designs incorporate  
4 state of the art safeguards technologies and tech-  
5 niques to reduce risk of proliferation;

6 (2) consult with the Administrator of the Na-  
7 tional Nuclear Security Administration to integrate  
8 safeguards and security by design;

9 (3) consider the potential benefits and other im-  
10 pacts of those activities for civilian nuclear applica-  
11 tions, environmental health and safety, and national  
12 security, including consideration of public consent;  
13 and

14 (4) consider the economic viability of all activi-  
15 ties and designs.

16 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
17 are authorized to be appropriated to the Secretary to carry  
18 out the program under this section—

19 (1) \$91,875,000 for fiscal year 2021;

20 (2) \$96,468,750 for fiscal year 2022;

21 (3) \$101,292,188 for fiscal year 2023;

22 (4) \$106,356,797 for fiscal year 2024; and

23 (5) \$111,674,637 for fiscal year 2025.

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