(aa) fuel fabrication; and

(bb) fuel transport;

(ii) the potential sources and fuel forms available to provide uranium for the program under subsection (a)(1);

(iii) options to coordinate the program under subsection (a)(1) with the operation of the versatile, reactor-based fast neutron source under section 16279a of this title (as added by section 2003);

(iv) the ability of uranium producers to provide materials for advanced nuclear reactor fuel;

(v) any associated legal, regulatory, and policy issues that should be addressed to enable—

(I) implementation of the program under subsection (a)(1); and

(II) the establishment of an industry capable of providing HA-LEU; and

(vi) any research and development plans to develop criticality benchmark data under subsection (a)(2)(A), if needed.

(3) Alternate fuels report

Not later than 180 days after December 27, 2020, the Secretary shall, after consulting with relevant entities, including National Laboratories, institutions of higher education, and technology developers, submit to Congress a report identifying any and all options for providing nuclear material, containing isotopes other than the uranium-235 isotope, such as uranium-233 and thorium-232 to be used as fuel for advanced nuclear reactor research, development, demonstration, or commercial application purposes.

(c) Authorization of appropriations

There are authorized to be appropriated to carry out research, development, demonstration, and transportation activities in this section—

(1) \$31,500,000 for fiscal year 2021;

(2) \$33,075,000 for fiscal year 2022;

(3) \$34,728,750 for fiscal year 2023;

(4) \$36,465,188 for fiscal year 2024; and

(5) \$38,288,447 for fiscal year 2025.

(d) Definitions

In this section:

(1) Commission

The term "Commission" means the Nuclear Regulatory Commission.

(2) Demonstration project

The term "demonstration project" has the meaning given such term in section 16279a of this title.

(3) **HA-LEU**

The term "HA-LEU" means high-assay low-enriched uranium.

(4) High-assay low-enriched uranium

The term "high-assay low-enriched uranium" means uranium having an assay greater than 5.0 weight percent and less than 20.0 weight percent of the uranium-235 isotope.

(5) High-enriched uranium

The term "high-enriched uranium" means uranium with an assay of 20.0 weight percent or more of the uranium-235 isotope.

(6) Secretary

The term "Secretary" means the Secretary of Energy.

(Pub. L. 116-260, div. Z, title II, §2001, Dec. 27, 2020, 134 Stat. 2453.)

Editorial Notes

References in Text

The American Medical Isotopes Production Act of 2012, referred to in subsec. (a)(2)(D)(vii), is subtitle F (§3171 et seq.) of title XXXI of div. C of Pub. L. 112–239, Jan. 2, 2013, 126 Stat. 2211. For complete classification of this Act to the Code, see Short Title of 2013 Amendment note set out under section 2011 of this title and Tables.

Section 16279a of this title (as added by section 2003), referred to in subsec. (b)(2)(D)(iii), is section 16279a of this title as added by section 2003 of div. Z of Pub. L. 116–260.

CODIFICATION

Section was enacted as part of the Energy Act of 2020, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

PART F-FOSSIL ENERGY

§16291. Fossil energy

(a) Establishment

(1) In general

The Secretary shall carry out research, development, demonstration, and commercial application programs in fossil energy, including activities under this part, with the goal of improving the efficiency, effectiveness, and environmental performance of fossil energy production, upgrading, conversion, and consumption.

(2) Objectives

The programs described in paragraph (1) shall take into consideration the following objectives:

(A) Increasing the energy conversion efficiency of all forms of fossil energy through improved technologies.

(B) Decreasing the cost of all fossil energy production, generation, and delivery.

(C) Promoting diversity of energy supply.

(D) Decreasing the dependence of the United States on foreign energy supplies.

(E) Improving United States energy security.

(F) Decreasing the environmental impact of energy-related activities, including technology development to reduce emissions of carbon dioxide and associated emissions of heavy metals within coal combustion residues and gas streams resulting from fossil fuel use and production.

(G) Increasing the export of fossil energyrelated equipment, technology, including emissions control technologies, and services from the United States.

(H) Decreasing the cost of emissions control technologies for fossil energy production, generation, and delivery.

(I) Significantly lowering greenhouse gas emissions for all fossil fuel production, generation, delivery, and utilization technologies. (J) Developing carbon removal and utilization technologies, products, and methods that result in net reductions in greenhouse gas emissions, including direct air capture and storage, and carbon use and reuse for commercial application.

(K) Improving the conversion, use, and storage of carbon oxides produced from fossil fuels.

(L) Reducing water use, improving water reuse, and minimizing surface and subsurface environmental impact in the development of unconventional domestic oil and natural gas resources.

(3) Priority

In carrying out the objectives described in subparagraphs (F) through (K) of paragraph (2), the Secretary shall prioritize activities and strategies that have the potential to significantly reduce emissions for each technology relevant to the applicable objective and the international commitments of the United States.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out fossil energy research, development, demonstration, and commercial application activities, including activities authorized under this part—

(1) \$611,000,000 for fiscal year 2007;

(2) \$626,000,000 for fiscal year 2008; and

(3) \$641,000,000 for fiscal year 2009.

(c) Allocations

From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 16292^{1} of this title—

(A) \$367,000,000 for fiscal year 2007;

(B) \$376,000,000 for fiscal year 2008; and

(C) \$394,000,000 for fiscal year 2009.

(2) For activities under section 16294 of this title—

(A) \$20,000,000 for fiscal year 2007;

(B) \$25,000,000 for fiscal year 2008; and

(C) \$30,000,000 for fiscal year 2009.

(3) For activities under section 16296 of this title—

(A) \$1,500,000 for fiscal year 2007; and

(B) 450,000 for each of fiscal years 2008 and 2009.

(4) For the Office of Arctic Energy under section 7144d of this title \$25,000,000 for each of fiscal years 2007 through 2009.

(d) Extended authorization

There are authorized to be appropriated to the Secretary for the Office of Arctic Energy established under section 7144d of this title \$25,000,000 for each of fiscal years 2010 through 2012.

(e) Limitations

(1) Uses

None of the funds authorized under this section may be used for Fossil Energy Environmental Restoration or Import/Export Authorization.

(2) Institutions of higher education

Of the funds authorized under subsection (c)(2), not less than 20 percent of the funds appropriated for each fiscal year shall be dedicated to research and development carried out at institutions of higher education.

(Pub. L. 109-58, title IX, §961, Aug. 8, 2005, 119 Stat. 889; Pub. L. 116-260, div. Z, title IV, §4001, Dec. 27, 2020, 134 Stat. 2527.)

Editorial Notes

References in Text

This part, referred to in subsecs. (a)(1) and (b), was in the original "this subtitle", meaning subtitle F (§§ 961-968) of title IX of Pub. L. 109-58, Aug. 8, 2005, 119 Stat. 889, which enacted this part and provisions set out as notes under section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as a note under section 1902 of Title 30. For complete classification of subtitle F to the Code, see Tables.

Section 16292 of this title, referred to in subsec. (c)(1), relating to coal and related technologies program, was repealed and a new section 16292 of this title, relating to carbon capture technology program, was enacted by Pub. L. 116–260, div. Z, title IV, §4002(a), Dec. 27, 2020, 134 Stat. 2528.

Amendments

2020—Subsec. (a). Pub. L. 116-260, §4001(5), designated second sentence of par. (1), as redesignated, as par. (2), inserted heading, and substituted "The programs described in paragraph (1) shall" for "Such programs".

Pub. L. 116-260, §4001(4), designated existing provisions of subsec. (a) as par. (1), substituted "Establishment" for "In general" in subsec. heading, and inserted par. (1) heading. Pub. L. 116-260, §4001(3), added subpars. (G) to (L) and

Pub. L. 116–260, §4001(3), added subpars. (G) to (L) and struck out former subpar. (G), as redesignated, which read as follows: "Increasing the export of fossil energyrelated equipment, technology, and services from the United States."

Pub. L. 116-260, §4001(2), in subpar. (F), as redesignated, inserted ", including technology development to reduce emissions of carbon dioxide and associated emissions of heavy metals within coal combustion residues and gas streams resulting from fossil fuel use and production" before period at end.

Pub. L. 116-260, §4001(1), redesignated pars. (1) to (7) of subsec. (a) as subpars. (A) to (G), respectively, and realigned margins.

Subsec. (a)(3). Pub. L. 116-260, §4001(6), added par. (3).

§16291a. Property interests

That for all programs funded under Fossil Energy appropriations in this and subsequent Acts, the Secretary may vest fee title or other property interests acquired under projects in any entity, including the United States.

(Pub. L. 113-76, div. D, title III, Jan. 17, 2014, 128 Stat. 165.)

Editorial Notes

CODIFICATION

Section was enacted as part of the Energy and Water Development and Related Agencies Appropriations Act, 2014, and also as part of the Consolidated Appropriations Act, 2014, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

Statutory Notes and Related Subsidiaries

DEFINITIONS

For definition of "this [Act]", referred to in text, see section 3 of Pub. L. 113-76, set out as a note under section 1 of Title 1, General Provisions.

¹See References in Text note below.